

DEVELOPMENT OF THE ABLEIST MICROAGGRESSION SCALE AND  
ASSESSING THE RELATIONSHIP BETWEEN ABLEIST MICROAGGRESSIONS  
AND THE MENTAL HEALTH OF DISABLED ADULTS

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by

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### **Abstract**

Approximately 20% of U.S. residents are currently living with a disability. Ableism values a specific type of physical, mental and/or emotional capital as well as supports socially constructed expectations of ability, valuing these expectations over different types of ability and disability. One way in which ableism is perpetuated is through microaggressions, at the more interpersonal, or micro level. Microaggressions are everyday interactions that perpetuate inequalities and stereotypes against people who belong to marginalized communities. Experiencing multiple microaggressions has been referred to as death by a thousand paper cuts, indicating the severity of the sum total of these casual types of prejudice and oppression. Research demonstrates that experiences of identity-related microaggressions can negatively impact mental health outcomes, increase somatic symptoms, and increase negative affect. Informed by social dominance theory, critical race theory and stigmatization theory, this study explores how to measure ableist microaggressions by developing the Ableist Microaggression Scale, and follows this up with a survey using this same scale to better understand the relationship between experiences of ableist microaggressions and mental health outcomes among people with disabilities.

This mixed methods study consists of three phases. The first phase uses qualitative interviews with disabled stakeholders (people with disabilities, disability

researchers, and disability activists/advocates) to explore more of the nuances of ableist microaggressions, and to co-create items for the Ableist Microaggressions Scale. The second phase uses a quantitative cross-sectional survey of 984 U.S. adults and a split-sample exploratory factor analysis and principal components analysis to validate the Ableist Microaggression Scale (AMS-65). The final phase uses a second quantitative cross-sectional survey of 311 U.S. adults who identify as disabled or having a disability to examine the correlation between ableist microaggressions and mental health, as assessed by the Mental Health Inventory (MHI-18). Findings indicate that experiencing ableist microaggressions are negatively correlated with positive mental health outcomes, and that visibility of disabilities/impairments are correlated with experiencing ableist microaggressions. These findings can inform the work of social workers and other human service professionals when supporting disabled individuals, recognizing that their mental health may be related to these common and often unintentional oppressive interactions.

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## **Chapter One: Introduction**

Ableism, which is defined as the overarching act of prejudice and/or discrimination against people with disabilities and the devaluation of disability (Hehir, 2002), and able-bodied privilege, which is the set of unearned privileges held by individuals without disabilities (Rauscher & McClintock, 1996), are interconnected systems that maintain social stratification around ability. This valuing of certain abilities and learning styles over others, happens throughout society, and individuals who experience ableism in educational settings may experience negative education outcomes including not fitting in, dropping out of educational programs, and achieving lower grades than their able-bodied/neurotypical peers (Hutcheon & Wolbring, 2012; Marks, 1996). Others may experience issues with body image, a decrease in self-worth, and lower self-esteem (Reel & Bucciare, 2010), and young children with disabilities may experience lack of belonging, feeling unwelcome, and having trouble with making friends (Hodge & Runswick-Cole, 2013).

Social work prides itself as a field on engaging with diversity and cultural competency in many areas such as race/ethnicity, sexual orientation, and socioeconomic status. In working to reduce ableism happening in all areas of life, but especially in social work settings, this study supports the social work field's commitment to social justice, as specified in the National Association of Social Workers (NASW) Code of Ethics, to support people with disabilities in a similar manner as other marginalized populations

(NASW, 2008). Given how many people identify as having a disability or impairment, there is an overwhelming amount of value and contributions from this community to our society that is lost due to the ongoing discrimination disabled individuals face as a result of ableism. It is imperative that social workers better understand how the de-valuation of disability affects their clients and their communities, and work to create more a supportive and affirming society for this significant and marginalized population.

### **Disability**

The population of individuals with disabilities is one of the largest marginalized populations within the United States. In fact, during the 2010 United States Census, the United States Census Bureau (2012) reported that of respondents age 15 and above, 21.3% reported having a disability, with 14.8% of all respondents having a disability defined as being severe. This translates to approximately 62 million individuals in the United States having one or more types of disabilities (Disability Rights and Education Defense Fund, 2011). These findings together suggest that approximately one fifth of U.S. residents are currently living with a disability. It is likely this is an underestimate, given that disabilities and impairments such as chronic pain and chronic illness may be under-reported as they are not always viewed as disabilities by society. The General Social Survey lists prevalence of people with disabilities specifically by type of disability, which might lead to some duplication, as the total of the sub-sections of disabilities is higher than the percentage of all people with disabilities given by the U.S. Census. The survey found that of the respondents between 1972 and 2006, 16.4% had a physical disability, 5.2% had a vision based impairment, 5.6% had a hearing impairment,

4.6% had an emotional or mental disability and 9.1% had difficulty in learning or concentrating (The General Social Survey, n.d.).

### **Major Questions**

People with disabilities experience disparities in the areas of education, employment and health, and face ableism at various levels throughout society, from interpersonal interactions in their day-to-day life to systemic and institutionalized issues of ableism. It is likely that this ongoing experience of oppressions, and specifically the cumulative experiences of ableist microaggressions, has an impact on the mental health outcomes of disabled individuals. This study aims to explore how to measure the experiences of these ableist microaggressions, and then use this measure to examine whether higher levels of experiencing ableist microaggressions are connected to various mental health outcomes, specifically depression, anxiety, behavioral control, and affect. These findings will likely lead to further questions on how other outcomes experienced by people with disabilities, such as disparities in educational enrollment and completion, therapeutic alliance with counselors and therapists, resiliency, and rates of suicidal ideation, may be impacted by the mental health outcomes examined in this study. For a visual model of how ableist microaggressions, mental health outcomes and overall outcomes are proposed to be related, please see Appendix A.

## **Chapter Two: Review of the Literature and Theory**

### **Defining Disability**

In discussing a construct such as disability, it is crucial to define this term in the way that it will be used throughout this dissertation. However, although the act of defining something should be, in thought, quite simple, it can be very difficult in practice, with many potential definitions for the same word (Leonardi, Bickenbach, Ustun, Kostanjsek, Chatterji, & MHADIE Consortium, 2006). The term disability, and how to define it, has been discussed and debated throughout the ages, included internationally by the United Nations Convention on the Rights of People with Disabilities (United Nations Enable, 2006).

Scotch (1998) suggests that the struggle in finding a definition for disability is due to the difficulty in achieving a definition that is able to stand up to scrutiny on the following requirements. It must be a definition that can apply to all individuals, in a way that does not further segregate people with disabilities into sub-groups, such as “wheelchair users,” “people with chronic illness,” or “the visibly impaired”; it should also be a definition that can be used to describe people across a spectrum of levels of functioning. Additionally, such a definition of disability should allow for assessment of severity for the different types of disability, be adaptable enough for use in a variety of applications (e.g., clinical use, or running statistics), have the ability to describe all different types of disability, and also include a component that is able to recognize the

impact of environment and other identities on a person's disability/disabilities (Bickenbach, Chatterji, Badley, & Üstün, 1999). This final requirement makes the important point that a disability is not solely a physical, intellectual or development impairment of a person's body or mind, but also the product of the environment in which they exist, and that situation's expectations regarding ability (Üstün, Chatterji, Bickenbach, Kostanjsek, Schneider, 2003; World Health Organization, 2001).

Given these diverse requirements, there is no existing definition that encompasses all of these different pieces, nor is there a single definition that is consistently flexible to new current and future needs that may arise in defining disability. Because of the many definitions of disability, and the various needs for different definitions by different fields, this paper will explore several definitions, provide critiques of them, and finally, identify the definition that will be used throughout in order to better center the use of the word disability.

Some definitions were created with the purpose of identifying, counting, and/or monitoring certain populations as regards to how they are linked to employment, policies, and even governmental support structures like Social Security Disability Insurance (SSDI). The United States Census assesses whether someone in any given household has a disability based on the answers to six questions (Bureau of Labor Statistics, 2014): 1) Is anyone deaf or does anyone have serious difficulty hearing? 2) Is anyone blind or does anyone have serious difficulty seeing even when wearing glasses? 3) Because of a physical, mental, or emotional condition, does anyone have serious difficulty concentrating, remembering, or making decisions? 4) Does anyone have serious

difficulty walking or climbing stairs? 5) Does anyone have difficulty dressing or bathing?

6) Because of a physical, mental, or emotional condition, does anyone have difficulty doing errands alone such as visiting a doctor's office or shopping? This is an interesting method of defining disability for several reasons. Firstly, the person answering the questions may not be the person about whom the questions apply; this means that someone might indicate a family member has a disability even if that person does not identify as being disabled, or may not realize the extent of the impact an impairment has on a member of their household, and may answer no to all of the questions, even if the accurate answer should have been yes. Additionally, while these questions are fairly inclusive, they leave out some other factors that may indicate presence of an impairment or disability, even if the answers to these six specific questions are all no. Lastly, this idea of defining and assigning disability without ever using the language disability or taking an individual's identity and/or environment into account can be viewed as problematic based on the criteria that were laid out earlier. These criteria state that such a definition must apply to all individuals, does not further segregate people with disabilities into sub-groups, can used to describe people across types of functioning, should allow for assessment of severity for the different types of disability, is adaptable for use in a variety of applications have the ability to describe all different types of disability, and should recognize the impact of environment and other identities on a person's disability/disabilities.

The International Classification of Functioning, Disability and Health (ICF) offers forth the definition of disability as “the negative aspects of the interaction between an

individual (with a health condition) and that individual's contextual factors (personal and environmental factors)” (WHO, 2001). In some regards, this is a stronger definition with more of a policy-related bent, as it takes into account both the individual (and their impairment/s) along with the rest of society and the environment, offering a context in which disability exists. Other fields, such as gerontology, have suggested using the ICF (either as is written, or with modifications) as a definition for disability, in order to have uniformity in describing and defining disability across fields (Freedman, 2009). However, simply the use of the word “negative” in the ICF’s definition of disability raises concerns. Disabilities (including specific impairments) are not inherently problematic. Many individuals who would be considered as having a disability would argue that their disabled identity is positive or neutral in the lives, or even considered to be a strength (Cameron, 2014). Using this language places socially constructed judgment on disability, making it difficult to use this definition of disability in a way meets the previously discussed criteria (Leonardi, et. al., 2006; Scotch, 1988). Although these types of definitions may be necessary to support the creation of policy regarding disability services and support, their assessment of disability as problematic precludes them from being used as a universal definition for disability.

The United Nations Enable Convention (2006) uses the definition “persons with disabilities include those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.” While one of the stronger parts of this definition is that it includes the criteria of being able to participate in society on an

equal basis with able-bodied and neurotypical individuals, there is no engagement around context or society as a whole (focusing only on barriers), and how that may impact the experiences of those individuals with disabilities when interacting society. Additionally, the use of the phrase “long-term” serves to further segregate those with disabilities into short term (which would not “count” as being disabled by this definition, despite likely experiencing some of the same barriers) and long term. This time-specific criterion can be viewed as problematic, especially as it does not further define what is long term, and renders this definition as one that does not meet the standards suggested by Scotch (1988) and Leonardi et al. (2006).

Finally, the definition adopted by the World Health Organization in 2001, in conjunction with the definition adopted and used by the United Nations Enable convention in 2006, have been joined in tandem by Leonardi et al. (2006), and this will be the definition of disability used moving forward. They define disability as “a difficulty in functioning at the body, person, or societal levels, in one or more life domains, as experienced by an individual with a health condition in interaction with contextual factors.” This definition acknowledges the variety of disabilities and impairments that fall under the term of “disability,” the fact that difficulty in functioning may occur at many levels and severities, and places this within context, or the fact that different environments may have different expectations for and social constructions regarding ability, resulting in differential impact of disability on any individual. Moreover, as will be further discussed in the policy section, this definition of disability, while including the term “health,” does not refer to diagnoses as part of the definition, indicating that this

definition is moving away from the medical model of disability, and perhaps towards the social model of disability, impairments and ability expectations (Shakespeare, 2006; Union of the Physically Impaired Against Segregation, 1974).

### **Language Use**

On this note about language and definitions, it should be discussed that the terms used for people who fit the definition of having a disability have changed over time. More recently, terms that were made popular several decades ago such as handicapped, differently able, and mentally retarded, are now considered inappropriate for use regarding people with disabilities. In the 1990s and 2000s, there was a strong push for the concept of “person first language,” and the term “people with disabilities” was popularized (as were similar person first terms such as person in a wheelchair, person with autism, etc.) (Brown, 2010; Millington & Leierer, 1996). However, the language pendulum has begun to swing back, and disability activists are suggesting that since society and the environment/contexts in which a person lives are actually more “disabling” through valuing certain abilities over others than any specific impairment might be, the term “disabled person” or “disabled people” is more appropriate (Brueggemann, 2013; Collier, 2012; Davis, 2013). These advocates also make the point that we use identity adjectives to describe others; a Black man, a lesbian woman, a lower-income family, that it is odd linguistically to use person first language solely for disability related identities (Mackelprang & Salsgiver, 2015). Given that both groups have strong arguments for their nomenclature, and that people who fit the definition of disability are divided on the language they personally want used, this exam will use both

people with disabilities and disabled people interchangeably to honor all those whose identities fall into this realm. This follows the guidelines of disability studies in using the language preferred by the individual(s) being addressed, and honoring individual identity over linguistics (Mackelprang & Salsgiver, 2015).

More specifically regarding intellectual and development disabilities, there have been ongoing disagreements in language to be used. Individuals who have intellectual and development disabilities, which have been classified cognitive disabilities, mental retardation, and other such terms throughout history, are often still referred to as special needs students by educators, education researchers and even family members, despite this term being considered problematic by disabled individuals and disability rights activists (Mackelprang & Salsgiver, 2015). Other terms like “handicapped” are generally no longer in use today, but may be part of policy names from decades before. This dissertation will use the terms intellectual and developmental disabilities, physical disabilities (which includes mobility related disabilities, vision loss or impairment, hearing loss or impairment, or other disabilities/impairments specifically related to the physical body), learning disabilities and socio-emotional disabilities to specify mental health diagnoses and/or related disabilities. Additionally, it will switch between using the terms “people with disabilities” and “disabled people” in order to reflect the multiple terms used by the individuals in the community being studied.

Ableism values a specific type of physical, mental and/or emotional capital as well as supports socially constructed expectations of ability, valuing these expectations over different types of ability and disability (Loja, Costa, Hughes, & Menezes, 2013).

Mackelprang and Salsgiver (2015) describe ableism as targeting physical, emotional, and mental difference from the social norm, considering people with these differences to be a burden, object of pity and/or problem to society, as well as incapable of independence. They continue by demonstrating that ableism is manifested in society through institutionalization, education segregation, and policies/laws that restrict the ability of disabled individuals to work (Mackelprang & Salsgiver, 2015).

### **Ableism**

Ableism covers a wide range of behaviors, structural and cultural norms. Some examples of these may include buildings that are physically inaccessible to those in wheelchairs or with certain mobility impairments, inaccessible public transit, language that is ableist (such as lame, crazy, retarded), the difficulty in accessing SSDI and disability supportive services, many printed materials that are not available in braille or for electronic readers, a lack of ASL interpreters at public and private events, and even celebrating those with disabilities simply for being “brave” enough to function as members of society (Young, 2014).

While ableism occurs in all facets of society, one arena in which ableism is evident and impacts people with disabilities is in schools and other educational settings. Students who experience ableism in educational settings may have lower GPAs, find less affinity with their peer groups, may not complete their programs due to feeling as though classrooms have become hostile or at the least unsupportive environments, and are less likely to graduate at all levels from high school through graduate programs (Hutcheon & Wolbring, 2012; Marks, 1996; Schriener, 1990). This lack of education reduces job

opportunities and creates additional disparities for people with disabilities. People with disabilities also experience higher rates of poverty and chronic health issues than their able-bodied/neurotypical counterparts (Hehir, 2002; Roux, et.al, 2001; Storey, 2007). In other settings, ableism can occur by not including people with disabilities on committees and councils that have decision-making power, designing public and organizational spaces for individuals who are able-bodied/neurotypical (including issues of physical access), and through society valuing certain learning styles/abilities above others (Sternberg, 1997).

Another way in which ableism is perpetuated is through microaggressions, at the more interpersonal, or micro level. The concept of microaggressions first was coined regarding small-level (or micro) interactions of racism (Sue, 2010), and the concept has been expanded to include instances of sexism, transphobia, homophobia, xenophobia, and also ableism. Microaggressions are everyday interactions that perpetuate inequalities and stereotypes against people who belong to marginalized communities (Solórzano, Ceja & Yosso, 2000; Sue, 2010; Sue et al., 2007).

Microaggressions are the brief and commonplace daily verbal, behavioral and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory or negative racial, gender, sexual and religious slights and insults to the target person or group. (Sue, 2010, p. 6)

As a relatively new construct, there is little research on microaggressions as whole, including who perpetrates them, and their impact, especially over the long term. There is a demonstrated need for more research focusing on better understanding microaggressions of all types, their impact, and most importantly, how to reduce

microaggressions and how they may be negatively affecting a variety of marginalized communities.

Microaggressions can happen in three different ways, according to Sue et al., (2007). This first form is micro assaults; these are purposefully discriminatory actions such as avoidant behavior, name-calling, and other intentionally hurtful acts. Secondly, there are micro insults, which tend to be more subtle and may be unknown even to the person perpetrating them because they may contain hidden messages the insult a marginalized group. Finally, there are micro invalidations, that operate by negating or nullifying the thoughts, realities and/or feelings of someone who is part of group that experiences oppression.

Ableist microaggressions may include telling someone that they speak very well for a Deaf person, asking everyone to stand/requiring people to stand in line (with the assumption that everyone can stand), making a joke about how fast someone can go in their wheelchair (Storey, 2007), or telling someone they are “lucky” that they are able to bring their service dog to work with them. An ableist microassault might be directly telling someone that someone with a learning disability is going to fail out of college, while an ableist microinsult might be that the perpetrator never expected to find someone in a wheelchair to be sexy. Lastly, examples of ableist microinvalidation could be telling someone that they were only hired because they were disabled to meet an organizational quota, or telling people with disabilities that their experiences of ableism aren’t that bad. It is important to include ableist microaggressions in any discussion of ableism, as they are one way in which ableism is perpetuated that may not be obvious to other individuals,

and that may add up in impact over time. In fact, experiencing multiple microaggressions (around any marginalized identity) has been referred to in popular culture as death by a thousand paper cuts, indicating the severity of the sum total of these smaller, less explicit types of prejudice and oppression (Sue, 2010).

There are few studies that offer empirical evidence on ableist microaggressions. However, most recently, Bell conducted a qualitative study that examined and categorized the types of ableist microaggressions that occurred (2013). Bell detailed 13 themes related to ableist microaggressions; five of these themes were specific to how people with disabilities reacted to, responded to, or felt about ableist microaggressions. The remaining eight themes regarded the different types of microaggressions that are perpetuated against disabled people. These eight themes were: exclusion from the mainstream population, responses of astonishment from non-disabled others related to myths about disability, receiving the message from non-disabled others that disability or PWDs are inherently abnormal and undesirable, receiving the message from non-disabled others that disability and PWDs are burdensome, PWDs experience of non-disabled others who assume to “understand” or identify with the experiences of PWD, responses of pity and apologies from non-disabled others, experiences with non-disabled others’ odd or awkward avoidance behavior, and experiences with the intrusive behavior of non-disabled others who assume PWDs need assistance or lack ability. There is a need for more nuanced research exploring these themes, and assessing whether they hold true across various disabled communities.

Given the dearth of research on ableist microaggressions, it is important to move forward in learning more about how they occur, what types of ableist microaggressions are happening, and eventually, being able to measure these experiences of ableist microaggressions in order to better understand the relationship these experiences may have with the mental health, educational attainment, self-esteem, and other factors affecting disabled adults. However, the idea of measuring microaggressions at all is fairly new, and can be complicated. One issue in measuring microaggressions is whether you only measure the group that might be experiencing microaggression (people of color, disabled people, lesbian/gay/bisexual/queer individuals (LGBQ), etc.), or if you create scales that assess the entire population and use the more privileged group's scores as a method of content validity (for example, assuming that heterosexual people would score lower on a homophobic microaggression scale than their LGBQ counterparts). Moreover, while there are some scales that have been developed to measure different types of microaggressions, the construct of microaggressions themselves may be difficult to narrow down into a scale.

Because microaggressions are in fact micro, asking someone to remember how often something happened to them over a year, six-month period, or even during the past four weeks could result in inaccurate data. If some people experience several microaggressions in a certain setting (such as school), then asking them about the experiences in the past week may provide a snapshot of that week, but that person's experience might be different if they were on break that week versus in classes. It is also hard to define the line between microaggression and macro aggression at times; for

example, if someone uses the term psycho in general conversation (“my ex-partner is such a psycho”), that would likely be considered an ableist microaggression by most people. However, if someone yelled “you are such a psycho” at a person with a mental health diagnosis, it is difficult to assess if that is still ‘only’ a microaggression, or if it crosses the line into some form of verbal harassment. Therefore, while there are a few microaggression scales in existence, they are still being developed and refined as the extant research on microaggressions grows and shifts with more knowledge.

### **Microaggression Scales**

A scale to measure how much someone has experienced racial and ethnic microaggressions (Nadal, 2011) and other scales have been created that measure other experiences of microaggressions, such as the LGBT People of Color Microaggressions Scale (Balsam, Molina, Beadnell, Simoni, & Walters, 2011), the Asian American Racial Microaggressions Scale (Lin, 2011), and the Homonegative Microaggressions Scale, and qualitative research has been conducted (Wright & Wegner, 2012) about microaggressions against transgender individuals (Nadal, Skolnik, & Wong, 2012), lesbian, gay, and bisexual youth (Nadal et al., 2011), other non-heterosexual identified people (Platt & Lenzen, 2013), and people with disabilities (Bell, 2013; Keller & Galgay, 2010). Current research demonstrates that experiences of identity-related microaggressions can negatively impact mental health outcomes, increase somatic symptoms, and increase negative affect (Hwang & Goto, 2009; Nadal, Griffin, Wong, Hamit, & Rasmus, 2014; Ong, Burrow, Fuller-Rowell, Ja, & Sue, 2013). Although there has not been a study specifically examining the impact of ableist microaggressions on the

mental health outcomes of people with disabilities, Kellar & Galgay (2010) suggest that there is also such a connection in disabled communities.

Recently, a study was completed at the dissertation level that created an ableist microaggressions scale (Conover, 2015). This 32-item scale examines ableist microaggressions that have occurred throughout the lifetime, and is for use only by people with disabilities, as compared to people of all disability statuses. The other microaggression scales cited above assess experiences through different time frames, although most ask participants to recall experiences within the past month to the past year, and are divided regarding whether they are designed only for the population experiencing microaggressions, or for people of various identities.

### **Theoretical Frameworks**

Social dominance theory (Sidanius & Pratto, 1999) is the underlying framework for how ableism takes place in society, and how social power is divided and used to oppress others. By acknowledging these arbitrary set differences and how able-bodied/neurotypical groups and individuals are inherently holding power over those who are disabled, ableism perpetuates itself. Stigmatization theory (Goffman, 1963) is a direct result of this oppressive use of power, almost a symptom of the existence of social dominance. Because of the ableism that is created out of able-bodied and neurotypical individuals holding unearned power over people with disabilities, this latter group may feel social stigma, and even internalized stigma and internalized ableism as part of the impact of ableism (Campbell, 2008). Critical race theory (Crenshaw, Gotanda, Peller, & Thomas, 1995) both explains and continuously informs how ableism is enacted in

society. Ableism as a construct can be hard to pin down and explain, but by using critical race theory with an ableism specific lens, it is easier to understand the multiple components of ableism, how these separate pieces come together to support the larger perpetuation of ableism, and examine ableism both as a whole, and as smaller pieces of a larger issue. Additionally, critical race theory, with a critical ability theory approach, should be part of conversations about social change and policy reform, with the understanding that ableism, like racism, is not perpetuated solely through individuals' interpersonal interactions, but also from ideological and institutional positions as well (Chinook Fund, n.d.).

### **Social dominance theory**

The first theory to be incorporated is that of social dominance theory (Pratto, Sidanius & Levin, 2006; Sidanius & Pratto, 1999; Sidanius, Pratto, Laar, & Levin, 2004), which was developed in attempting to answer two overarching questions: *Why is it that members of certain social groups act to oppress and discriminate against members of other specific social groups*, and *Why is this oppression so engrained in every type of society/why is it so incredibly challenging to change this oppression?* Unlike many structural theories that aim to pin prejudice and discrimination to one root social cause, social dominance theory specifically includes both individual and structural factors working in tandem. Together, they create various practices of oppression based on social identity groups, perpetuating social dominance/subordination.

Originally, social dominance theory argued that societies with stable economies encompassed three distinctly different systems that enforced group-based hierarchy: 1) an

age system, in which those who are considered adults hold a high level of social capital and dominance over those who are considered children; 2) a gender system, in which men have disparate political and social power as compared to women; and 3) an arbitrary-set system, in which there are groups that are created on a capricious basis (i.e., with no correlation to the human life cycle) who have a large disparity in their access to social capital (Sidanius & Pratto, 1999). The groups that are named arbitrary-set groups can include social identity groups around race, class, religion, sexual orientation, gender presentation, nationality, etc.

The group hierarchy of social identity groups is formed by the impact of discrimination and prejudice from multiple sources, including institutions, individuals, and intergroup processes, coming together and reinforcing these arbitrary set differences. The various facets of discrimination engage together to allow the dominant groups to obtain and maintain power over subordinate groups. Together, these processes that create and enforce these power differentials continue to support the operationalization of oppression through social ideologies that are shared by those who are members of the dominant social groups (Pratto, Sidanius & Levin, 2006). Members of marginalized groups then see this as the status quo, and may reinforce this oppression by accepting it as evidence of difference, even if there is no such inherent power differential between the two groups.

It is through this concept of arbitrary-set groups that social dominance regarding ability fits in. Despite there being no evidence that certain abilities are “better” than others, being in the able-bodied/neurotypical group grants members unearned privilege

and results in the systemic oppression and subordinatization of people with disabilities. Due to how modern society places specific value on ability (specifically, physical, intellectual, and developmental abilities) over ability variation, impairment, or disability of any type, it is evident that social dominance theory can be used to inform the examination of the origin of and ongoing perpetuation of ableism (Kattari, 2015).

This study uses social dominance theory to explain the disproportionate social capital that people who are currently able-bodied/neurotypical hold as contrasted with disabled individuals (Kattari, 2015), and to understand how discrimination, prejudice and all types oppression become ingrained into interactions that occur regularly, systems of various types, and institutions, including educational settings, resulting in pervasive ableism. Given this framework, social dominance theory explains the unbalanced social capital that those seen as able-bodied/neurotypical have in society, and also demonstrates how discrimination, prejudice, and oppression become normalized, resulting in ableism that is interwoven through every aspect of society.

People in the dominant identity group of those who are able-bodied/neurotypical hold the majority of the cultural, social, political, and economic power. This power is then used to enact laws, reinforce norms, and define ideals in ways that are oppressive and destructive to people with disabilities. There are many ways in which these power differentials regarding disability are authorized in society. Despite the enacting of the Americans with Disabilities Act (ADA) in 1990 (United States Code, 2008), many exceptions are made on a regular basis that allow for public places to be inaccessible (United States Department of Justice Civil Rights Division, 2011). These exceptions

include all religious organizations and historical buildings. Moreover, even though the ADA policy states that employers must comply with ADA regulations around hiring, there are many companies and organizations that continue to maintain disability-based hostile work environments (Massengill, 2004). This further reduces access and opportunities for people with disabilities in the work force, perpetuating ableism systemically. Ableist language permeates every day usage, with words “crazy” and “lame” being used by people of all ages and backgrounds (Garland-Thomson, 2002). This use of oppressive language further serves to reinforce the privilege/oppression binary that separates able-bodied/neurotypical individuals from those with disabilities, and can be one way that ableism occurs frequently in educational settings (Kattari, 2015).

### **Critical race theory**

Critical race theory originated out of the work of scholars in the area of law (Crenshaw, Gotanda, Peller, & Thomas, 1995; Lynn & Dixson, 2013), and has been viewed as both a theoretical framework as well as an interpretive model to be used to understand racism (Monaghan, 1993; West, 1995). There are several components to CRT, including the foundational elements of opposition, justice, structuralism, and particularity, used to understand this critical approach to examining racism (Carrasco, 1997). Critical race theory, although beginning in the area of legal studies, has been used by many scholars to explain issues of racism and racial disparities in other settings (Closson, 2010; Gillborn, 2005; Ladson-Billings & Tate, 1995; Lynch, 2006;).

Within the framework of critical race theory, there are six tenets which are used to explain racism and how it is perpetuated (Crenshaw, Gotanda, Peller, & Thomas, 1995):

(a) racism is ordinary or ever present in society; (b) interest convergence; (c) the social construction of racism; (d) the importance of storytelling and creation of a counter-narrative; (e) the idea that different races are racialized and experience racism in different ways; and (f) intersectionality (Crenshaw, 1991). CRT is often used in discussions around legal issues and policies, frequently within conversations around laws and policy in education and how racism interplays in educational settings (Closson, 2010; Gillborn, 2005; Ladson-Billings & Tate, 1995; Lynch, 2006; Solórzano, Ceja & Yosso, 2000; Solórzano & Yosso, 2002). Because of its long-term connection to understanding how power, privilege and oppression are constructed and operationalized in educational settings, CRT is an excellent framework through which to examine and more deeply explore ableism within educational contexts.

CRT's key themes fit well with understanding ableism by creating a leading edge around disability/ability expectations theory; ableism IS ordinary and takes place regularly. When people modify environments to make them less ableist, this can be interest convergence such as avoiding lawsuits, needing to appease certain communities, etc. (Campbell, 2009). Ableism and the concept of ability expectations is socially constructed – who defines what is “ability” and what is “disability?” Storytelling and counter narratives of disabled people (including documentaries such as *Murderball*, *Sins Invalid*, and *Fixed*) are one way through which change can be created, as well as through sharing other stories about the impact of ableism on people with disabilities (Loja, Costa, Hughes, & Menezes, 2013). Different types of disabilities (cognitive/emotional/physical, invisible/visible, congenital/acquired, etc.) experience different types of ableism. Lastly,

intersectionality especially around class, race, and gender roles needs to be taken into account as they significantly shape the lived experiences of disability (Campbell, 2009; Crenshaw, 1991).

Currently, there is one published article that looks at the potential for connecting ableism into a CRT framework (Campbell, 2008), and this leads for the possibility of a discussion for the potential of CAT (critical ability theory) in the same vein as how critical Latino theory (LatCrit), queer critical theory, and others have modified CRT to inform their identity work. Weiss posits that many of the issues surrounding ableism and disability, such as the idea of disabled bodies being a “misfit” for society’s expectations of ability, are similar to how bodies of color are a “misfit” for society’s desires and expectations around race and skin color, arguing that critical race theory and disability studies are much more similar to one another than they are different (2015). Other scholars have suggested the use of critical race theory in supplementing the area of disability studies, rather than creating a new critical theory (Liasidou, 2013). Both sides of this debate are worth further examination.

### **Stigmatization theory**

If microaggressions represent one mechanism of how ableism occurs on a micro or interpersonal level, stigmatization is one mechanism through which ableism is perpetuated on a more macro level. Throughout history, experiences of people with disabilities have often been influenced by the social definition of disability as being different from the norm, which places significant stigma on those with disabilities (Susman, 1994). The stigma against people with disabilities is derived specifically from

the concept of disability as deviance (Goffmann, 1963); this mirrors various types of stigma in society put on people whose identities and bodies differentiate them from the social construction of what is normal.

Bagenstos (2000) argues that this stigma that exists against individuals with disabilities has led to and reinforced people with disabilities being viewed socially and legally as a “subordinated class,” therefore being targeted by microaggressions in addition to societal stigma from family, peers, social interactions and governmental policies. He argues that the assignment of disability as part of a group identity, regardless of whether or not there is actually a medical impairment, results in “systemic disadvantage and deprivation of opportunity” (p. 104). Stigmatization of people with disabilities plays a strong role in creating, perpetuating and reinforcing the role of ableism in society as a whole, and in education as well. Devaluation of disability and impairment impacts people with disabilities on many levels, and makes it difficult for there to be forward momentum around critical changes for these communities, due to the social stigma held against them (Shuttleworth & Kasnitz, 2004).

Additionally, people with disabilities may already struggle with feelings of isolation and issues with communication barriers, dependent on their location, disability, and how connected they are to other resources (Mackelprang & Salsgiver, 2015; Martz, 2004). Combining these challenges of being alone and disconnected from others with experiencing stigmatization from society viewing disability as a problem can lead disabled individuals to having a negative self-view of their own disabled status (Galvin, 2005). Other disabled individuals may be lead to believe that something they did caused

them to be disabled/impaired (Braddock & Parish, 2001), or may be told that their disability is representative of a character flaw, and that they themselves are to blame for their “condition”; this happens more frequently in relation to socio-emotional and mental health related disabilities (Janoff-Bulamn, 1992).

Not only is this view of disability as non-normative and problematic used by society to stigmatize those with disabilities, it can also be internalized by people with disabilities, resulting in what Goffman (1963) refers to as a “spoiled identity.” This is where a person with disabilities has internalized ableism, resulting in them feeling as though they are in fact less than able-bodied or neurotypical individuals, deserving of less opportunity, support and respect than those in the dominant group (Campbell, 2008). Galvin (2005) suggests that this can result in lower self-esteem and changed perception of oneself based on feeling stigmatized around disability. Ladieu-Leviton, Adler, and Dembo (1977) posited that the effect of this spoiled identity can result in lowered self-worth, and an individual with disabilities considering themselves not worthy of acceptance in society at a large.

All three of these theories, social dominance theory, critical race theory, and stigmatization theory, can be viewed together to better understand the larger picture of ableism, and how it exists in today’s society. For a visual of how these theories operate to explain ableism and its impact, see Appendix A. These theories undergird this study’s approach to better comprehending and measuring ableist microaggressions, as well as some of the symptoms of ableism in our society.

## **Chapter Three: Methods**

### **Study Design**

This was a three-phase, mixed-methods study to better understand and assess experiences of ableist microaggressions, and the impact of these experiences on the mental health of people with disabilities. The first component involved stake-holder qualitative interviews with disabled individuals, disability rights advocates, and disability researchers to discuss the different areas of ableist microaggressions that occur, and to create a list of potential questions in order to develop the Ableist Microaggressions Scale (AMS). This study aimed to answer the question, “What are the different ways in which ableist microaggressions occur?” The second phase involved using a cross-sectional survey to develop and validate the AMS. This answers the question, “How can the different levels of experiences of ableist microaggressions be measured?” Finally, the third phase of this study used another cross-sectional survey to examine the correlates of anxiety, depression, behavioral control, and positive affect of participants with the levels of ableist microaggressions someone has experienced. This answers the question, “What is the association between ableist microaggressions and mental health of people with disabilities?”

### **Phase I**

One key piece of Phase 1 was the co-creation of potential scale items alongside disability activists/advocates, disability researchers, and people with disabilities. In

developing a scale, an important piece is item generation (DeVellis, 2016; Hinkin, Tracey, & Enz, 1997). While the creation of many scales uses a few experts in the field to come up items to move forward along the scale development process, it was important to the Principal Investigator to ensure that multiple facets of the disabled community had the opportunity to share their thoughts, experience, and knowledge around ableist microaggressions. These qualitative interviews were used to explore the types of ableist microaggressions taking place, validating the themes that had emerged from Bell's 2013 study, and to co-create a list of potential scale items for use in the development and validation process that would occur during phase II.

### **Participants**

Participants were individuals who identified as having a disability, being a disability rights activist, or a disability researcher (and participants had the option to select more than one identity). The inclusion criteria were an age of 18 or older, residing in the United States, having access to email, and having an interest in engaging in dialogue about ableist microaggressions.

### **Recruitment and data collection**

Some of these participants were individuals the researcher had already spoken with regarding the creation of the AMS at disability-related conferences, and who expressed interest in sharing their insight. Additional subjects were recruited on the Society for Disability Studies and the Disability Research listservs. In recruiting participants, care was taken to select individuals representing a variety of ages, disability/impairment types, and across advocates, researchers, and disabled individuals.

Interviews took place via Skype and Google Hangout as per the participants' preference, and were digitally recorded and transcribed for coding. Please see Appendix B for the questions asked as part of this semi-structured interview. The questions were developed by the Principal Investigator and were discussed in community with other disabled-focused researchers. Items focused primarily on the concept of ableist microaggressions, how, where, and when they were perpetrated, and finally, whether the themed categories from Bell's 2013 qualitative study on ableist microaggressions held true for the participants, and if so, how they could be accessed via potential items on a survey.

Following all 13 interviews being conducted, a list of potential items was then developed based on inductive coding of the interviews. These potential items were then emailed via a survey on Qualtrics to all participants who had already been interviewed, along with the ability for them to rate each item on the four categories (see below). There was also space for participants to provide general feedback as to whether they thought the scale accurately would measure experiences of ableist microaggressions, whether they felt their initial thoughts were adequately included, whether the items felt accessible to the disability community, and any other feedback they had. This served both as member checking to ensure that the items selected from the interviews accurately represented the participants' thoughts, and also to pilot the potential items across different disabled individuals to assess how they were understood and received.

### **Analysis**

Transcripts were coded by hand by the Principal Investigator using inductive coding, and then coded again specifically to find emergent themes/constructs of ableist

microaggressions and to use these to guide potential items for use on the Ableist Microaggressions Scale. Using the participants' suggested questions, existing microaggression scales, and other items that emerged for the researcher during the coding process, an initial list of items for AMS development was created, and then sent to the interview participants to rate each potential item on these characteristics using a five-point scale: (a) whether it was clear and easy to understand, (b) whether it was relevant to this measure, (c) whether it was well formatted, and (d) whether it was free of bias. Any item that averaged less than 4.25 from the participants' feedback on any construct was then dropped for Phase II. All other participant feedback from this stage of the study was also incorporated into the survey portion of Phase II.

## **Phase II**

The overarching aim of this phase of the study was to take the items developed in the first phase, pilot them during a few cognitive interviews, and then use a cross-sectional U.S. wide survey of adults (both disabled and non-disabled) to gather data regarding these 110 items. These data were then used with psychometric theoretical analysis (DeVellis, 2016) to develop the Ableist Microaggression Scale (AMS-65), assess this scale for reliability, and validate this scale with evidence in support of content validity, construct validity, and convergent validity. Initially, there was a hypothesis for discriminant validity, but the data did not support this expectation.

### **Cognitive interviews**

Prior to recruiting for a survey in this phase, eight cognitive interviews were conducted to better understand how survey takers understood each of the questions and

constructs. These cognitive interviews are used to assess and improve small and medium size surveys to ensure that participants will be able to follow the flow of the survey, understand the instructions and items asked (Ryan, Gannon-Slater, & Culbertson, 2012). Using cognitive interviews to offer a small pilot run of the survey before it is sent out to the full group of participants can help refine the survey, resulting in stronger data as a result.

Each person was asked to take the survey via Qualtrics (before the survey was opened to other participants) and was then interviewed by the Principal Investigator. Two were undertaken in person, and when someone seemed to struggle with responding to an item, the researcher asked the respondent why they seemed to have hesitated. At the end of the cognitive interview session (both those online and those in person), each participant was asked about their thoughts as to which items were confusing, stood out, were too difficult to answer, etc. They also provided feedback on the formatting of the survey, and whether it was accessible to those with visual impairments.

### **Participants**

Participants for this stage of the study were 984 adults ages 18+, of all ability levels, living in the United States.

### **Recruitment and data collection**

Recruitment was conducted via social media, blog posts, and email listservs, with individuals forwarding, reposting and retweeting the call for participants, which is known as snowball sampling. Social media recruitment and particularly snowball sampling are considered especially helpful in accessing populations that may be outside of dominant

groups, and who may be hidden (Browne, 2005; Brickman Bhutta, 2012). Data were collected using a survey hosted on Qualtrics, a secure survey platform. The first page of the survey was informed consent, and all participants had to read this page and click their consent in order to move on to the survey itself. Please see Appendix C to view the informed consent language used in the survey. To ensure anonymity, the survey did not collect names, zip codes, IP addresses, or any other specific data that might identify individual participants (Sue & Ritter, 2011).

### **Measures**

This survey collected three types of data: demographic data, answers to the AMS questions, and information about what the participant thought the survey was about. This design is based on the development process of the Racial and Ethnic Microaggressions Scale (Nadal, 2011), as Nadal's previous work is well known and respected in the microaggressions research community. Additionally, the set-up of the scale items questions follows general psychometric design methods used and suggested by various scale development researchers (DeVellis, 2016; Hinkin, Tracey, & Enz, 1997).

Demographic data collected included: age range (*18 – 25, 26-35, 36-45, 46-55, 56-65, 65+*), racial/ethnic identity (*Asian/Pacific Islander, Black/African American, Latino, Middle Eastern, Multi-Racial, Native American/Alaskan Native/Indigenous, other – fill in the blank, White*), gender identity (*man, woman, transgender, genderqueer, intersex, other – fill in the blank*), sexual orientation (*asexual, bisexual, gay, heterosexual, lesbian, pansexual, queer, other – fill in the blank*), annual household income (*0 –\$5,000; \$5,001 - \$10,000; \$10,001 - \$20,000; \$20,001 - \$30,000; \$30,001 -*

*\$40,000; \$40,001 - \$50,000; \$50,001 - \$75,000; \$75,001 or more*), highest level of education completed (*did not finish high school, high school diploma/GED, some college, associate's/vocational degree, bachelor's degree, post graduate degree*), disability status (Do you consider yourself to have a disability or be disabled? *Yes/No*), disability type (*intellectual/developmental disability, learning disability, physical disability, socio-emotional disability/mental health, multiple types of disabilities*), and disability visibility (*how visible is/are your disability(ies)/impairment(s) to others, on a scale from 1-10, with 1 being not at all visible and 10 being completely visible*).

The scale questions about the potential items were asked using a 5-point rating scale, explaining that the next set of items to be rated are statements that may or may not apply to the participant's experiences. Participants were asked to rate how often they had experienced each statement over the past month. The scale was as follows:

1 = Never

2 = Rarely

3 = Some of the time

4 = Most of the Time

5 = Almost all of the time

It was further explained that these items use the term "disability status" to refer to identity around disability/impairments. Disability statuses may be one of the following: non-disabled person, person with disabilities, disabled person, blind person, neurotypical person, Deaf person, person with impairments, neuroatypical person, autistic person, able-bodied person, etc., but do not need to be limited to these identities. The goal of this

scale is for people of all disability statuses to be able to take it (rather than just people with disabilities/disabled people), so this term serves as a "catch-all" for all different individuals. Participants were asked to please answer each statement with their disability status in mind, recognizing that some people may experience some of these statements based on gender, race, sexual orientation, etc., and reminding them that these items are specifically asking about your experiences based on your disability status.

To establish evidence for convergent validity (Hinkin, Tracey, & Enz, 1997), a modified Sub-Scale I of the Discrimination and Stigma Scale (DISC) was used to establish whether the participant has experienced discrimination based on their abilities/impairments (Thornicroft, Brohan, Rose, Sartorius, Leese, & INDIGO Study Group, 2009). This sub-scale uses 22 questions inquiring about different experiences in which an individual may have experienced discrimination or stigma, with the answer options of *not at all*, *a little*, *moderately* and *a lot*. This tests the hypothesis that those whose experience discrimination based on their abilities/impairments more frequently in various facets of their lives will have higher scores on AMS, with these two scales' scores being more strongly correlated. See Appendix C for the list of questions asked as part of this sub-scale. In seeking evidence to establish divergent validity (Hinkin, Tracey, & Enz, 1997), a slightly modified version Self/Internalized Stigma sub-scale of the Stigma Scale for Chronic Illness (SSCI) was used (Rao, et al., 2009). This sub-scale contains 13 questions examining experiences of internalized stigma regarding ability/illness, with each question exploring the frequency of an experience, with answer options being *never*, *rarely*, *sometimes*, *often* and *always*. Because internalized stigma is

inherently different than actually lived experiences of microaggressions, there should not be a strong correlation between the scores on the AMS and on the SSCI Self/Internalized Stigma sub-scale. See Appendix C for the list of questions asked as part of this sub-scale.

The final section below the AMS questions was three open-ended question boxes for participants to type in their own responses. The questions were: (a) *What do you believe these questions were trying to measure*, (b) *What are 3-5 keywords of phrases you would use to label the experiences described previously*, and (c) *Were any of the questions confusing or difficult to understand (if so, please detail which ones)*. These questions allow the researcher to assess whether the items on the scale made sense to the participants, and also whether or not they measured what they were designed to measure. These questions were modeled off of those used on the development of the REMS (Nada, 2011).

In case of any emotional discomfort, the researcher had resources available at the beginning and end of the survey for counseling and support if the participant had interest in accessing to them.

While power analyses are not used for determining sample size in scale development, Tinsley and Tinsley (1987) state that they suggest 5-10 subjects per potential scale item up to 300 subjects, at which time the ratio can be relaxed, and Comfrey and Lee (1992) suggest that a sample of 300 is a “good,” while a sample of 500 is “very good” and a sample of 1,000 is “excellent.” Given that the initial sample was split in this phase, the goal was for each sample to be at least 300 (for a total of at least  $N$

= 700), which is in line with the recommendations of both Tinsley and Tinsley as well as Comfrey and Lee.

### **Analysis**

An initial statistical analysis examined the Cronbach's Alpha using SPSS for Windows (v.22), and the researcher removed the items that would have lowered this number. Exploratory factor analysis (EFA) was used to examine the factor structure of the AMS items (Hinkin, Tracey, & Enz, 1997). Once the researcher had a better understanding of the factors, which items loaded on which factors, and removed any items that loaded on multiple factors or did not load at a high enough level (below .45), the sample was split. Both split samples were then analyzed using a principal components analysis. Additionally, means were compared between participants with disabilities and those who were not disabled using an independent samples t-test (Howell, 2011), with the hypothesis that disabled participants would have more frequent experiences of ableist microaggressions.

The open responses from the participants were read, organized, and noted. All feedback on the items that were retained as part of the finalized AMS were examined to assess whether these items were either changed or removed for Part III. See Tables 5 and 6 for details.

### **Phase III**

The aim for this phase was to take the now developed and validated Ableist Microaggressions Scale (AMS-65) and use it on a new sample of adults, just those who identified as disabled, to assess whether there is a relationship between the experience of

ableist microaggressions and mental health outcomes of disabled adults. In order to do this, a new cross sectional survey was sent solely to disabled adults in the United States, confirmatory factor analysis was used to analyze the internal sub-scales, and both ANOVA and correlation analyses were used to examine the relationship between mental health outcomes and participant experiences of ableist microaggressions.

### **Participants**

Participants for this stage of the study were 311 adults ages 18+ residing in the United States, who self-identified as disabled, or as having one or more disability(ies)/impairment(s).

### **Recruitment and data collection**

Recruitment was conducted via disability specific groups on social media, disability focused email listservs, and via disability centers at colleges/universities. Even more so than Phase II, snowball sampling was used to reach a higher number of disabled participants, particularly in trying to access participants with disabilities and/or impairments who had not participated in the survey associated with Phase II. The used of snowball sampling is suggested in research that is targeting populations that are less visible or often left out of research due to their marginalized identities (Browne, 2005; Brickman Bhutta, 2012). Data were collected using a survey hosted on Qualtrics, a secure survey platform. The first page of the survey was informed consent, and all participants had to read this page and click their consent in order to move on to the survey itself. Please see Appendix C to view the informed consent language used in the survey. To

ensure anonymity, the survey did not collect names, zip codes, IP addresses, or any other specific data that might identify individual participants (Sue & Ritter, 2011).

### **Measures**

This survey collected three types of data; demographic data, the Ableist Microaggression Scale as developed in Phase II of this study, and a measure of several mental health outcomes.

Demographic data collected included: age range (*18 – 25, 26-35, 36-45, 46-55, 56-65, 65+*), racial/ethnic identity (*Asian/Pacific Islander, Black/African American, Latino, Middle Eastern, Multi-Racial, Native American/Alaskan Native/Indigenous, other – fill in the blank, White*), gender identity (*man, woman, transgender, genderqueer, intersex, other – fill in the blank*), sexual orientation (*asexual, bisexual, gay, heterosexual, lesbian, pansexual, queer, other – fill in the blank*), annual household income (*0 – \$5,000; \$5,001 - \$10,000; \$10,001 - \$20,000; \$20,001 - \$30,000; \$30,001 - \$40,000; \$40,001 - \$50,000; \$50,001 - \$75,000; \$75,001 or more*), highest level of education completed (*did not finish high school, high school diploma/GED, some college, associate's/vocational degree, bachelor's degree, post graduate degree*), disability status (*Do you consider yourself to have a disability or be disabled? Yes/No*), disability type (*intellectual/developmental disability, learning disability, physical disability, socio-emotional disability/mental health, multiple types of disabilities*), and disability visibility (*visible, invisible, both invisible and visible*).

The mental health measure used was the Mental Health Inventory (MHI; Veit & Ware, 1983). The full MHI contains 38 questions, but for the purpose of this study, the

shorter MHI-18, an 18-question version, was used with a six-point rating system, with 1 indicating all of the time, and 6 indicating none of the time. The MHI-18 has four subscales: Anxiety, Depression, Behavioral Control, and Positive Affect. Scoring ranged from 1 (*all of the time*) to 6 (*none of the time*). Items that are worded in a positive way were reverse scored so that higher total MHI-18 scores indicated better mental health. This shorter scale was used along with the Racial and Ethnic Microaggressions Scale in a previous study on microaggressions to examine mental health outcomes for people of color, and resulted in a Cronbach's alpha of .95, with subscale alphas ranging from .90 to .95 (Nadal, et al., 2014). By using this measure, participants were assigned a total mental health score, as well as scores on each of the four sub-scales. Please see Appendix D for the list of questions contained in this measure.

In case of any emotional discomfort, the researcher had resources available at the beginning and end of the survey for counseling and support if the participant had interest in accessing to them.

### **Analysis**

Initially, confirmatory factor analysis (CFA) was used to assess internal consistency of sub-scales of the AMS and MHI-18 (Hinkin, Tracey, & Enz, 1997). The CFAs were run following the assessment of normality, linearity, independence, homoscedasticity, and multicollinearity, as these are all assumptions that must be met for an accurate CFA (Tabachnik & Fidell, 2013). After the CFA assumptions were tested, a confirmatory factor analysis was run, using STATA (v.14), on each of the two AMS sub-scales and each of the four MHI sub-scales. The fit of each sub-scale model was

evaluated using chi-square fit, the root mean square error of approximation (RMSEA), and goodness of fit index (GFI).

Following the CFAs, statistical analyses were run on the data collected to examine potential correlations between scores on both the total AMS and AMS subscales, and the total MHI-18 score and score on the four sub-scales using SPSS for Windows (v.22). Additionally, demographics such as type of disability and visibility of disability were used in ANOVA analysis to explore whether there were differences of group mean scores on both the AMS and MHI-18 (Howell, 2011).

There are several different influences on power when doing statistical analysis, such as Type I error, Type II error, sample size, variance, the test used, and if it is one or two tailed. In the case of correlation, t-tests, and ANOVA analysis, sample size is more easily manipulated than many of these other variables, ergo, this this discussion of power for this study focuses on sample sizes needed for at least a medium effect size (Howell, 2011).

In using G\*Power (n.d.) to perform this power analysis for t-tests to test differences in means between groups, an effect size of .5 (considered medium), and a power of .90 (beta = .10) and  $\alpha = .05$ , the power analysis recommends a minimum sample size of 140. G\*Power (n.d.) indicated a smaller sample size would be needed for ANOVA analysis dependent on the number of groups, but all variations required a minimum sample size of below 100, and so the sample size was deemed sufficient.

## **Chapter Four: Results**

### **Phase I**

Semi structured interviews were conducted with 13 different participants, lasting between 23 minutes and an hour and a half (89 minutes), with a mean of 50 minutes. All interviews were conducted by the Principal Investigator via Skype or GoogleHangout as there were no participants local to Colorado. The interviews were then transcribed externally before being coded by hand by the Principal Investigator for potential items for the initial AMS survey in Phase II.

### **Demographics**

Full demographics of this sample of interviewees can be found in Table 1. The sample was White with only one person of color participating, and was also predominantly women, with ten of the 13 participants identifying as such. All except one participant identified as being disabled or being a person with disabilities, and all except one participant (a different individual) identified as being a disability advocate, with most participants sharing two or three of the disability-related identity options. Disabilities and impairments of all types (mental/socio-emotional, physical, learning, intellectual/developmental, and multiple types) were represented, ensuring a cross section of those within the disability community participated and shared their thoughts during this part of the research process. The age range of participants was 18 to 56, with the average age being 32.5 and the median age being 32. Types of disabilities and

impairments included in this group of participants were physical, psychiatric/socio-emotional, intellectual and developmental, learning, and multiple disabilities/impairments. Additionally, the participants had varied levels of education completed, as well as a range of ages and multiple sexual orientations, further diversifying the sample.

**Table 1**

*Phase I Sample Demographics*

	<i>N</i>	<i>%</i>
Identity	13	
Disability Activist/Advocate	12	92.3%
Disability Researcher	8	61.5%
Disabled Person/Person with Disabilities	12	92.3%
Race/Ethnicity	13	
White	12	92.3%
White/Asian	1	7.7%
Gender Identity	13	
Female/Woman	10	76.9%
Gender Questioning/Demigirl	1	7.7%
Male/Man	1	7.7%
Non-Binary	1	7.7%
Highest Level of Education Completed	13	
High School/Some College	3	23.1%
Undergraduate Degree	1	7.7%
Master's Degree	3	23.1%
Two Master's Degrees	1	7.7%
PhD	2	15.4%
EdD	1	7.7%
"Graduate School"	1	7.7%
JD	1	7.7%
Sexual Orientation	13	
Bisexual	2	15.4%
Queer	3	23.1%
Pansexual	1	7.7%
Straight/Heterosexual	7	53.8%

### **Coding and item creation**

Transcripts were read and coded to assess whether the participants' thoughts about ableist microaggressions were in alignment with the hypothesis of how ableist microaggressions are perpetuated, and how they are related to mental health. All participants spoke to ableist microaggressions being perpetuating in different ways based on different types of disabilities, as well as having an influence on the mental health and quality of life of disabled adults.

Every one of the participants agreed on seven of Bell's (2013) themes regarding ableist microaggressions holding true in their experiences in and/or supporting the disabled community, and were able to help co-create items that assessed these types of microaggressions. The remaining theme of PWD's experience of non-disabled others who assume to "understand" or identify with the experiences of PWD was divisive, with slightly more than half of the participants agreeing this was representative of their experience. Several gave examples such as people saying that they were so depressed when they got a B on an assignment (people who did not have depression as a mental health concern), people saying they felt like they understood the experiences of those with chronic fatigue because they were getting over the flu or another temporary illness, and people who would say things like "I'm so OCD" despite not having obsessive-compulsive disorder. Conversely, several participants actually saw this theme as a positive, with non-disabled people striving to empathize or identify with the experiences of disabled people. One participant spoke to this as ally behavior, and a way to build connection and understanding, rather than a microaggressive behavior.

Additionally, several of the participants suggested using the term “disability status” rather than “ability level or mental health status” in order to be inclusive of both disabled and non-disabled individuals being able to take the AMS. This constructive feedback was noted, and progressively added to the interviews to ensure other participants were able to provide feedback on this potential use of language. Overall, the response to the term “disability status” was very positive.

After reading through the transcripts, 120 items were copied from the participants’ suggestions and modified to fit within the formatting of items for the ableist microaggression scale. These were placed in a survey sent to all 13 participants with a request to participate by rating each item, and providing any additional feedback they may have. Of the 13 initial participants, a total of 9 participants responded to the survey, sharing their thoughts on each of the potential items. Each of these participants rated all 120 of the potential items.

Ten items had at least one category with a mean under 4.25, and were therefore dropped before moving to Phase II. All of the initial 120 items, and the mean participant ratings in each category for each potential item, can be found in Table 2.

**Table 2**

*Items developed from Phase I participants with mean scores of participants’ rating on 4 questions (n = 9). Items in grey were removed for Phase II survey based on low mean scores on at least one assessment area.*

# Items	Easy to Understand	Relevant to AMS	Formatted Well	Free of Bias
1 A family member held my disability status against me	4.56	4.78	4.33	5
2 A stranger asked me personal questions based on my disability status	5	5	5	5

3	An employer or co-worker treated me differently that someone with a different disability status	4.78	4.89	4.33	5
4	I could not attend an event/meeting/class based on it being inaccessible	4.44	4.33	4.22	4.56
5	I experienced exclusion from an event based on a lack of response to my accommodations	4.22	4.89	4.33	4.89
6	I experienced someone telling me my disability status is more severe than I think it is	4.67	4.78	4.78	5
7	I experienced someone telling me my disability status is not as severe as I think it is	4.67	4.89	4.78	5
8	I felt tokenized based on my disability status	4.44	4.89	4.67	4.67
9	I had to put forth a large amount of effort to ensure my accommodation needs were met	5	4.89	5	4.78
10	I have been asked to wait longer or go to the back of the line based on my disability status	4.78	4.56	5	4.89
11	I have been told people with my disability status are burdensome	5	5	5	5
12	I have been told to act as though I had a different disability status	4	4.56	4.11	4.56
13	I heard someone say that no one would want my disability status	4.89	5	4.89	5
14	I observed people with my disability status held positions of power in large corporations	4.78	4.56	4.44	4.44
15	I observed people with my disability status holding	5	4.56	4.89	4.67

positions of political power

	I observed people with my disability status in a prominent position at my				
16	workplace	5	4.78	5	4.56
	I observed people with my disability status portrayed				
17	positively in a movie	4.67	4.67	4.67	4.44
	I observed people with my disability status portrayed				
18	positively in magazines	4.67	4.78	4.78	4.67
	I observed people with my disability status portrayed				
19	positively on the news	4.56	4.89	4.78	4.56
	I observed people with my disability status portrayed				
20	positively on TV	4.67	4.67	4.56	4.56
	I received sub-standard service based on my				
21	disability status	4.89	5	4.67	5
	I was asked for proof of my				
22	disability status	5	4.67	5	4.89
	I was asked medical questions about my				
23	disability status from non-medical professionals	5	5	5	5
	I was asked personal questions about my				
24	disability status	4.67	4.67	4.67	5
	I was asked to disclose my disability status in				
25	inappropriate settings	4.78	5	4.78	5
	I was criticized for refusing				
26	unsolicited help	4.11	4.78	4.11	4.78
	I was denied access to an				
27	event based on my disability status	5	4.56	5	5
	I was denied my requested				
28	accommodations	5	4.33	4.89	4.89
	I was excluded based on my				
29	disability status	4.67	4.89	4.67	5
	I was expected to educate				
30	others on my disability status	5	4.89	5	5

31	I was given unsolicited encouragement based on my disability status	4.67	5	5	5
32	I was ignored at school based on my disability status	4.78	5	4.78	5
33	I was ignored at work based on my disability status	4.89	5	5	5
34	I was ignored in a meeting based on my disability status	5	5	5	5
35	I was invited to an event that was not accessible to me	5	4.67	4.89	4.78
36	I was labeled as "inspirational" for doing daily activities based on my disability status	4.89	5	4.67	5
37	I was offered help I did not request based on my disability status	4.78	4.78	5	5
38	I was reduced down to my disability status	3.89	4.67	3.78	4.33
39	I was told I could skip an important class/event/meeting so that it did not have to be made accessible	5	4.89	4.78	4.78
40	I was told I talk about my disability status too much	4.75	4.75	4.75	4.75
41	I was told I was burdensome based on my disability status	4.67	4.89	4.78	5
42	I was told my experiences regarding my disability status are not real or valid	4.89	5	4.89	5
43	I was told my requested accommodations were "too much"	4.89	5	4.89	5
44	I was told that ableism is no longer an issue in our society	4.78	4.67	4.78	4.44
45	I was told that ableism is not real	5	4.89	5	4.67

	Memes or articles about people with my disability status were used to inspire others on social media	4.56	4.56	4.33	4.33
46	My autonomy was violated based on my disability status	4	4.56	4.44	4.44
47	My employment opportunities were challenged based on my disability status	3.89	4.44	4.22	4.56
48	My needed accommodations were not met	4.56	4.44	4.78	4.78
49	My opinion was overlooked in a group discussion based on my disability status	5	5	5	4.78
50	My other identities were ignored once someone knew my disability status	4.44	4.78	4.44	4.56
51	My weaknesses were highlighted over my successes based on my disability status	4.67	4.89	5	4.78
52	Someone acted surprised about my professional success because of my disability status	4.67	5	4.22	5
53	Someone asked questions about my sex life based on my disability status	5	5	4.78	5
54	Someone asked uninvited questions regarding my disability status	5	5	4.89	5
55	Someone assumed all of my friends share my disability status	5	4.78	5	4.89
56	Someone assumed all people with disabilities/disabled people have or require the same accommodations	4.67	4.89	3.67	4.44
57	Someone assumed all people with	4.78	4.56	4.89	4.67
58					

	disabilities/disabled people have the same needs				
	Someone assumed all people with disabilities/disabled people				
59	look alike	4.67	4.56	4.78	4.56
	Someone assumed I am less competent than I am based				
60	on my disability status	5	5	4.89	5
	Someone assumed I cannot make decisions for myself based on my disability				
61	status	5	5	5	5
	Someone assumed I had a different disability status				
62	than I do	4.78	4.44	5	4.78
	Someone assumed I was less educated than I am based on my disability				
63	status	5	4.89	5	5
	Someone assumed I would				
64	ashamed of my disability	5	4.78	5	4.67
	Someone assumed I would choose to not have my				
65	disability status	5	4.89	5	5
	Someone assumed my				
66	friend was my caregiver	5	5	4.89	4.78
	Someone assumed my gender identity based on my				
67	disability status	4.11	4.22	4.33	4.67
	Someone assumed my intelligence based on my				
68	disability status	4.89	5	4.67	4.89
	Someone assumed my				
69	partner was my caregiver	5	5	5	4.78
	Someone assumed my work would be inferior based on				
70	my disability status	4.89	5	4.89	5
	Someone assumed that all challenges in my life are connected to my disability				
71	status	5	4.89	5	5
	Someone assumed that				
72	everyone in a group I was in	4.78	4.78	4.78	5

shared my disability status

73	Someone assumed they knew more about my disability status than I do	5	4.89	5	5
74	Someone assumed what I was/was not capable of, based on my disability status	4.67	5	4.33	4.78
75	Someone avoided making eye contact with me due to my disability status	5	4.67	4.67	4.33
76	Someone changed how they spoke to me based on my disability status	4.89	5	4.89	4.67
77	Someone compared me to a famous person with the same disability status	5	4.89	4.89	5
78	Someone devalued my communication style based on my disability status	4.56	4.89	4.56	4.78
79	Someone dismissed my experiences regarding my disability status	4.78	5	4.78	4.78
80	Someone expressed discomfort around interacting with me based on my disability status	5	5	5	5
81	Someone expressed interest in me solely because of my disability status	4.67	4.56	4.33	4.67
82	Someone expressed pity after hearing about my disability status	5	5	4.89	5
83	Someone expressed pity at people who share my disability status	5	4.89	4.89	5
84	Someone expressed surprise at finding out my disability status	5	4.44	4.67	4.78
85	Someone expressed surprise at my happiness based on my disability status	4.89	4.89	4.89	5
86	Someone expressed surprise at my level of independence	4.89	4.89	4.67	4.89

	based on my disability status				
87	Someone expressed surprise at my own disclosure of my disability status	5	4.78	4.89	5
88	Someone expressed surprise at my successes based on my disability status	5	4.78	4.89	5
89	Someone has used my disability status as the punch line of a joke	5	5	5	5
90	Someone ignored me based on my disability status	5	4.89	4.89	5
91	Someone implied that I was lazy based on my disability status	5	5	5	5
92	Someone made a joke about my disability status	4.89	4.78	4.78	4.89
93	Someone made assumptions about my family based on my disability status	4.67	4.78	4.56	4.56
94	Someone made assumptions about my partner's disability status	4.67	4.67	4.56	4.44
95	Someone made assumptions about my sexuality based on my disability status	5	4.89	5	5
96	Someone made statements in front of me that indicated disability was a problem or a negative outcome	5	5	5	4.78
97	Someone make a joke about my requested accommodations	5	5	4.89	4.78
98	Someone minimized my disability status	4.44	5	4.89	5
99	Someone minimized my experiences regarding my disability status	4.44	4.89	4.78	4.78
100	Someone offered unsolicited advice to me regarding my disability status	4.78	4.89	4.78	4.78
101	Someone offered	5	5	4.89	4.78

	unsolicited prayers for me based on my disability status				
102	Someone praised a family for maintaining a relationship with me based on my disability status	5	4.89	4.78	4.78
103	Someone praised my friend for maintaining a relationship with me based on my disability status	5	4.89	4.78	4.78
104	Someone praised my partner for maintaining a relationship with me based on my disability status	5	4.89	4.78	4.78
105	Someone reacted negatively to my intentions of planning a family based on my disability status	5	5	5	5
106	Someone said they didn't think of me as having my disability status	5	4.78	4.89	5
107	Someone spoke to my companions instead of me, based on my disability status	4.89	5	5	5
108	Someone told me I should stop talking about/making a big deal about disability	5	4.67	4.78	5
109	Someone told me I was brave for living with my disability status	5	5	5	5
110	Someone told me my disability status was something that should be changed or "fixed"	5	4.89	5	5
111	Someone told me they do not see "ability" or "disability"	4.89	4.67	4.67	4.78
112	Someone told me they would rather die than have my disability status	5	5	5	5
113	Someone touched my body or my assistive devices	4.33	4.78	4.33	5

114	without my permission based on my disability status Someone treated my accommodations as a burden	5	5	5	5
115	Someone tried to equate their experiences with my disability status	4.89	4.78	4.78	4.78
116	Someone used language specific to my disability status to explain their experiences	4	4.67	4.11	4.78
117	Someone used language specific to my disability status to explain their feelings	4.11	4.78	4.11	4.78
118	Someone used me as inspiration based on my disability status	4.89	4.89	4.78	5
119	Someone went out of their way to avoid me based on my disability status	5	5	4.78	4.78
120	Someone with a different disability status than mine tried to educate me about my own disability status	5	5	5	5

Small grammatical changes and formatting changes were conducted based on comments made by participants, such as removing slashes (meeting/class/event) and changing to commas (meeting, class, or event), in order to allow these items to be more accessible to those with traumatic brain injury (TBI) or stroke survivors, who might have trouble processing the forward slashes. The rest of the general feedback was positive, including feelings that this authentically captured their initial thoughts during the interview, sharing that they felt this was important work, and requests to be kept in the loop as the research progressed.

The ten items that were removed are as follows:

1. I could not attend an event/class/meeting based on it being inaccessible.
2. I experienced exclusion from an event based on a lack of response to my accommodations.
3. I have been told to act as though I had a different disability status.
4. I was criticized for refusing unsolicited help.
5. I was reduced down to my disability status.
6. My employment opportunities were challenged based on my disability status.
7. Someone assumed that all disabled people/people with disabilities have or need the same accommodations.
8. Someone assumed my gender identity based on my disability status.
9. Someone used language specific to my disability status to explain their experiences.
10. Someone used language specific to my disability status to explain their feelings.

## **Phase II**

The second phase of this project commenced with several cognitive interviews as part of a pilot test of the full survey. Then the Principal Investigator continued by cleaning the data, and then running analyses to examine the demographic make-up of this sample. A first look showed there to be strong reliability, although that was to be expected in a sample as large as this one. Following this initial glance at the data, items were removed that had means that were away from the mean of 3.0, as that indicated

most respondents had or had not experienced those particular items. Additionally, items with a standard deviation of under 1.0 were removed. After this step, the participants were randomly split into two groups in order to perform split sample cross validation. The samples, although slightly different in size, performed very similarly during both exploratory factor analysis and principal component analysis.

### **Cognitive interviews**

Following participant ratings in Phase I, the 110 items that were kept were entered into a survey, along with demographic questions, the items from the DISC, and the items for the SSCI. This initial draft of the survey was then used as the basis for cognitive interviews with eight individuals. These individuals consisted of both disabled and non-disabled individuals to make sure that this survey made sense for both populations, and included one blind participant to ensure that the survey was screen reader compatible for those who have visual impairments.

Two participants suggested adding definitions for the words “marginalized” and “tokenized” to make sure that this language was accessible to all of those individuals taking the survey. A few other small comments were made about word choices and grammar, and this feedback was incorporated into the final survey. One person suggested having an N/A option for each item. However, answers are not forced on this survey so that any participant can opt out of answering any item, and the Principal Investigator was concerned that adding an N/A option might seriously reduce the response rate to the items, and chose not to add such an option. Three mentioned that some of the questions

seemed similar to others, which is part of the scale development process, so these similar questions were not removed. More than two thirds of the participants shared that the survey was easy to take and moved smoothly, and almost all shared that it had made them think more closely about their own experiences (or lack thereof) with disability, impairment, and ableism. One participant suggested a repeat of the Principal Investigator's contact information at the end of the survey, and this was added in order to give participants increased access to offering questions or comments regarding the survey.

All participants said the survey took them between 20 minutes and 40 minutes to complete, with most indicating between 20 and 25 minutes. The one participant who responded it took 40 minutes also noted that he was a slow reader, and still felt invested in the survey at the end. Three quarters of the participants tested the survey on the computer while 25% tested it on a mobile device, to ensure it worked smoothly on multiple technological platforms.

### **Survey participants and sample demographics**

Initially, the number of respondents beginning the survey was 1,497. However, after cleaning the data to remove those who did not accept the informed consent, and those who did not answer any questions beyond the demographic questions, and did not answer at least half of the scale questions, the final sample was  $N = 984$ .

Regarding those who did not answer the majority of the items, seven individuals did not provide consent to continue the survey, 1464 answered the question regarding race, 1462 answered the question regarding gender identity, 1456 answered the questions

about household income, 1447 responded to the question on disability status, and then only 1332 answered the first item on the AMS scale. A total of 958 answered the final AMS scale item. There was no pattern in the data of who dropped out of the survey based on the answers that had been provided to previous items. Data missing on the actual scale items, as compared to demographic information were missing at random (MAR). Because the data were missing at random, the response mechanism is considered ignorable, and so analysis continued using listwise deletion of those participants not answering all scale specific questions (Pigott, 2001).

### **Demographics**

The respondents to this survey ranged from 18 to 70 years of age, with the average age being 36.1 years ( $SD = 10.61$ ). The majority identified as women (71.2%), with 80.7% of the total sample identifying as cisgender (non-transgender). Most of the respondents identified as White, with 13.4% identifying as other racial and ethnic identities. Over two thirds of the sample had a bachelor's or master's degree. Regarding sexual orientation, 39.9% identified as heterosexual with the remaining 60.1% identifying as a variety of other sexual orientations. Approximately one third (32.4%) of the sample reported an annual household income of over \$70,000, with the other two thirds of the sample being more evenly distributed across other income levels.

Slightly under two thirds of the sample identified as disabled or being a person with disabilities (63.2%), with a little more than one third being non-disabled (36.2%). Of those who were disabled, 43.1% responded that they had multiple types of disabilities or impairments. Please see Table 3 for full demographic data.

**Table 3***Phase II Sample Demographics*

	<i>N</i>	%
Gender Identity	982	
Man	92	9.4%
Woman	699	71.2%
Transgender	3	0.3%
Trans Man	21	2.1%
Trans Woman	10	1.0%
Gender Queer/Non-Binary	131	13.3%
Other	26	2.6%
Identify as Trans/Non-Binary	977	
Yes	189	19.3%
No	788	80.7%
Race/Ethnicity	981	
Asian/Pacific Islander	23	2.3%
Black/African American	19	1.9%
Latinx	34	3.5%
Middle Eastern	4	0.4%
Multi-Racial/Mixed Race	73	7.4%
Native/Alaskan Native/Indigenous	8	0.8%
White	810	82.6%
Other	10	1.0%
Highest Level of Education	983	
Some High School	4	0.4%
High School Diploma or GED	22	2.2%
Some College	144	14.6%
Associate's/Vocational	59	6.0%
Bachelor's Degree	325	33.1%
Master's Degree	332	33.8%
Doctoral	97	9.9%
Sexual Orientation	983	
Asexual	30	3.1%
Bisexual	163	16.6%
Gay	26	2.6%
Heterosexual	392	39.9%
Lesbian	57	5.8%
Pansexual	110	11.2%
Queer	179	18.2%
Other	26	2.6%
Annual Household Income	981	
0-\$5,000	53	5.4%
\$5,001-\$10,000	57	5.8%

\$10,001-\$20,000	108	11.0%
\$20,001-\$30,000	123	12.5%
\$30,001-\$40,000	90	9.2%
\$40,001-\$50,000	82	8.4%
\$50,001-\$60,000	82	8.4%
\$60,001-\$70,000	68	6.9%
\$70,001 or above	318	32.4%
Identify as disabled/PWD	976	
Yes	623	63.8%
No	353	36.2%
Type of Disability/Impairment	622	
Intellectual/Development	13	2.1%
Learning	15	2.4%
Physical (including pain/illness)	196	31.5%
Psychiatric/Socio-Emotional	130	20.9%
Multiple types	268	43.1%

### **Cronbach's Alpha**

In running the entire sample of those who responded to all 110 items on the Ableist Microaggression Scale, the initial Cronbach's alpha ( $n = 811$ ) was .99. Based on the mean and standard deviation of each item, the Principal Investigator opted to remove items that had a mean above 3.5 and those items that had a mean below 1.5, as the mean of the scale used was 3.0. Additionally, the Principal Investigator removed those items that had a standard deviation below 1.0.

The following 8 items were removed based on above stated means and standard deviations, indicating a lack of variability. None of these items alone being removed would affect the meaning of the scale. After deleting these 8 items, the Cronbach's alpha ( $n = 816$ ) was .99. There were no items that if removed would have increased the reliability of this scale.

**Table 4***Item Analysis Summary Table*

Item Number	Item Description/ content	Item <i>M</i>	Item <i>SD</i>	Alpha if item deleted OR item- total correlation	Reason for item deletion
8	I have been asked to wait longer or go to the back of the line based on my disability status	1.47	.931	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5 and the <i>SD</i> is below 1.0.
23	I was denied access to an event based on my disability status	1.45	.913	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5 and the <i>SD</i> is below 1.0.

34	I was told I could skip and important class, event or meeting so that it did not have to be made accessible	1.42	.903	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5 and the <i>SD</i> is below 1.0.
59	Someone assumed my friend was my caregiver	1.39	.946	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5 and the <i>SD</i> is below 1.0.
61	Someone assumed my partner was my caregiver	1.43	1.012	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5.

73	Someone expressed interest in me solely because of my disability status	1.62	.989	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The <i>SD</i> is below 1.0.
86	Someone made assumptions about my partner's disability status	1.50	1.020	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is 1.5, at the top end of the deletion range.
97	Someone reacted negatively to my intentions of planning a family based on my disability status	1.48	1.015	.987	If item is deleted, alpha does not change, and the content didn't affect the meaning of the scale. The mean is below 1.5.

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### Exploratory Factor Analysis

In an exploratory factor analysis, the KMO Measure of Sampling Adequacy was .99, exceeding the recommended value of .6, and the Bartlett's test of sphericity

(1954) reached significance ( $\chi^2 = 95,243.88$ ,  $df = 5151$ ,  $p < .001$ ), supporting the factorability of the correlation matrix.

### Principal Components Analysis

In order to find further evidence of validity, the sample was split in half to run two sets of cases in a principal components analysis (PCA), also known as split sample cross validation (DeVellis, 2016). Cases were randomly assigned numbers between 0 and 1. Those less than or equal to 0.50 were assigned a split case number of 0, while those greater than 0.50 were assigned a split case number of 1.

**Sample A (split case number = 0,  $n = 401$ ),  $M = 2.05$ ,  $SD = .83$  with a Cronbach's alpha = .99**

The PCA's eigenvalues suggest twelve components with eigenvalues above 1 for a total of 75.53% of the variance explained. Based on both the scree plot (using Cattell's scree test, 1966) and a parallel analysis, four components were retained for a total of 64.58% of the variance explained. However, after removing components that had fewer than 4 items loading on them, or that had factor loadings of less than .45, only two components were kept, explaining 58.98% of the variance.

**Table 5**

*Sample A factor loadings*

Item	Factor 1 Loading	Factor 2 Loading	Notes
Someone assumed I am less competent than I am based on my disability status	.86		
Someone offered unsolicited advice to me regarding my disability	.85		

status	
Someone minimized my experiences regarding my disability status	.84
Someone dismissed my experiences regarding my disability status	.84
I was expected to educate others on my disability status	.84
Someone asked uninvited questions regarding my disability status	.84
Someone assumed they knew more about my disability status than I do	.83
My other identities were ignored once someone knew my disability status	.83
Someone expressed pity after hearing about my disability status	.83
Someone tried to equate their experiences with my disability status	.83
I was asked personal questions about my disability status	.82
Someone expressed discomfort around interacting with me based on my disability status	.82
Someone minimized my disability status	.82
Someone assumed that all challenges in my life are connected to my disability status	.82
Someone told me my disability status was something that should be changed or “fixed”	.82
Someone assumed I would be ashamed of my disability	.82

status	
Someone assumed what I was or was not capable of based on my disability status	.82
My weaknesses were highlighted over my successes based on my disability status	.82
Someone assumed my work would be inferior based on my disability status	.81
Someone told me I was brave for living with my disability status	.81
Someone assumed I cannot make decisions for myself based on my disability status	.81
Someone expressed surprise at my successes based on my disability status	.81
I was told my experiences regarding my disability status are not real or valid	.81
Someone expressed pity at people who share my disability status	.80
My opinion was overlooked in a group discussion based on my disability status	.80
Someone implied that I was lazy based on my disability status	.80
Someone changed how they spoke to me based on my disability status	.80
Someone treated my accommodations as a burden	.80
Someone assumed I would choose to not have my disability status	.79

I was labeled as “inspirational” for doing daily activities based on my disability status.	.79	
I was given unsolicited encouragement based on my disability status	.79	
I was told I was burdensome based on my disability status	.79	Removed due to similarity
I have been told people with my disability status are burdensome	.79	
Someone told me I should stop talking about or stop making a big deal about disability	.78	
I heard someone say that no one would want my disability status	.78	
Someone offered unsolicited prayers based on my disability status	.78	
Someone acted surprised about my professional success because of my disability status	.78	
I was asked to disclose my disability status in inappropriate settings	.78	
I was excluded based on my disability status	.78	
I experienced someone telling me my disability status is not as severe as I think it is	.78	
I had to put forth a large amount of effort to ensure my accommodation needs were met	.77	
Someone assumed I was less educated than I am based on my disability status	.77	

I was asked medical questions about my disability status from non-medical professionals	.76
Someone ignored me based on my disability status	.76
My autonomy was violated based on my disability status	.76
Someone made assumptions about my family based on my disability status	.76
I was denied my requested accommodations	.75
Someone went out of their way to avoid me based on my disability status	.75
I was told my requested accommodations were “too much”	.75
Someone expressed surprise at my own disclosure of my disability status	.75
Someone expressed surprise at my level of independence based on my disability status	.75
Someone made a joke about my disability status	.75
Someone used me as an inspiration based on my disability status	.75
Someone made a joke about my requested accommodations	.74
Someone praised a family member for maintaining a relationship with me based on my disability status	.74
Someone devalued my communication style based on my disability status	.74
Someone expressed surprise at finding out my disability	.74

status		
I was told I talk about my disability status too much	.74	
Someone made statements in front of me that indicated disability was problem or negative outcome	.74	
Someone praised my friend for maintaining a relationship with me based on my disability status	.74	
I was asked for proof of my disability status	.74	
Someone assumed my intelligence based on my disability status	.74	
Someone said they didn't think of me as having my disability status	.73	
Someone with a different disability status than mine tried to educate me about my own disability status	.73	
Someone has used my disability status as the punch line of a joke	.73	Removed due to similarity
My needed accommodations were not met	.73	
Someone avoided making eye contact with me due to my disability status	.72	
A stranger asked me personal questions based on my disability status	.72	
Someone told me they would rather die than have my disability status	.71	
Someone expressed surprise at my happiness based on my disability status	.71	
I was ignored at work based on my disability status	.70	Removed due to not all respondents having an employer

I felt tokenized (made to be a token or only viewed as my disability status)	.70	
I received sub-standard care based on my disability status	.69	
A family member held my disability status against me	.69	
Someone assumed I had a different disability status than I do	.68	
Someone spoke to my companions instead of me, based on my disability status	.68	
I was ignored in a meeting based on my disability status	.68	Removed due to similarity
Someone praised my partner for maintaining a relationship with me based on my disability status	.68	Removed due to not all respondents having a partner
I was invited to an event that was not accessible to me	.68	
Someone asked questions about my sex life based on my disability status	.67	
I was offered help I did not request based on my disability status	.67	
Someone made assumptions about my sexuality based on my disability status	.64	Removed due to confusion/conflation
An employer or co-worker treated me different than someone with a different disability status	.64	Removed due to not all respondents having an employer
Someone compared me to a famous person with the same disability status	.63	
I was ignored at school based on my disability status	.62	Removed due to not all respondents being in school

I was told that ableism is not real	.59	
Someone touched my body or assistive devices without permission based on my disability status	.58	
Someone told me they do not see ability or disability	.56	
I was told that ableism is no longer an issue in our society	.55	Removed due to cross-loading on other components
I experienced someone telling me my disability status is more severe than I think it is	.52	
Someone assumed all people with disabilities/disabled people have the same needs	.51	Removed due to cross-loading on other components
Memes of articles about people with my disability status were used to inspire other on social media	.44	Removed due to low factor loading
I observed people with my disability status portrayed positively in the news (R)		.77
I observed people with my disability status portrayed positively on the TV (R)		.76
I observed people with my disability status portrayed positively in a movie (R)		.76
I observed people with my disability status portrayed positively in magazines (R)		.75
I observed people with my disability status holding positions of political power (R)		.71
I observed people with my disability status holding positions of power in large corporations (R)		.69

I observed people with my disability status in a prominent position at my workplace (R)	.67	Removed due to not all respondents having an employer
Someone assumed that all of my friends share my disability status	.50	Removed due to cross-loading on other components
Someone assumed that everyone in a group I was in shared my disability status	.49	Removed due to cross-loading on other components
Someone assumed all people with disabilities/disabled people look alike	.38	Removed due to low factor loading

**Sample B (split case = 1, n = 411),**  $M = 2.10$ ,  $SD = .85$  with a Cronbach's alpha of .99

The PCA's eigenvalues suggest eleven components with eigenvalues above 1 for a total of 74.12% of the variance explained. Based on both the scree plot (using Cattell's scree test, 1966) and the parallel analysis, four components were retained for a total of 64.95% of the variance explained. However, after removing components that had fewer than 4 items loading on them, or that had factor loadings of less than .45, only two components were kept, explaining 59.4% of the variance.

**Table 6**

*Sample B factor loadings*

Item	Factor 1 Loading	Factor 2 Loading	Notes
Someone assumed I am less competent than I am based on my disability status	.87		
I was asked personal questions about my disability status	.85		
Someone offered unsolicited advice to me regarding my disability status	.85		

Someone asked uninvited questions regarding my disability status	.85
Someone assumed they knew more about my disability status than I do	.84
Someone minimized my experiences regarding my disability status	.84
I was expected to educate others on my disability status	.84
Someone dismissed my experiences regarding my disability status	.83
Someone told me my disability status was something that should be changed or “fixed”	.83
Someone assumed I would choose to not have my disability status	.83
Someone assumed that all challenges in my life are connected to my disability status	.83
Someone told me I should stop talking about or stop making a big deal about disability	.83
Someone assumed what I was or was not capable of based on my disability status	.83
Someone minimized my disability status	.83
Someone expressed pity after hearing about my disability status	.82
Someone changed how they spoke to me based on my disability status	.82
Someone expressed pity at people who share my disability status	.82
Someone implied that I was lazy based on my disability status	.82
My other identities were ignored once someone knew my disability status	.82
Someone expressed discomfort around interacting with me based on my disability status	.82
I was asked to disclose my disability status in inappropriate	.82

settings		
Someone tried to equate their experiences with my disability status	.81	
Someone assumed I would be ashamed of my disability status	.81	
Someone assumed I cannot make decisions for myself based on my disability status	.81	
I was told my experiences regarding my disability status are not real or valid	.81	
Someone assumed my work would be inferior based on my disability status	.81	
Someone offered unsolicited prayers based on my disability status	.81	
Someone ignored me based on my disability status	.80	
My weaknesses were highlighted over my successes based on my disability status	.80	
I was told I was burdensome based on my disability status	.80	Removed due to similarity
Someone treated my accommodations as a burden	.79	
Someone told me I was brave for living with my disability status	.79	
I heard someone say that no one would want my disability status	.79	
I was excluded based on my disability status	.78	
I have told people with my disability status are burdensome	.78	
Someone devalued my communication style based on my disability status	.78	
Someone expressed surprise at my successes based on my disability status	.78	
A stranger asked me personal questions based on my disability status	.78	

I experienced someone telling me my disability status is not as severe as I think it is	.78
Someone assumed I was less educated than I am based on my disability status	.78
I was asked medical questions about my disability status from non-medical professionals	.77
I was given unsolicited encouragement based on my disability status	.77
My autonomy was violated based on my disability status	.77
My needed accommodations were not met	.77
Someone expressed surprise at my happiness based on my disability status	.77
Someone went out of their way to avoid me based on my disability status	.77
My opinion was overlooked in a group discussion based on my disability status	.76
Someone acted surprised about my professional success because of my disability status	.76
Someone avoided making eye contact with me due to my disability status	.76
I was labeled as “inspirational” for doing daily activities based on my disability status.	.75
I had to put forth a large amount of effort to ensure my accommodation needs were met	.75
Someone expressed surprise at my level of independence based on my disability status	.75
Someone praised a family member for maintaining a relationship with me based on my disability status	.75

Someone praised my friend for maintaining a relationship with me based on my disability status	.74	
I was told my requested accommodations were “too much”	.74	
Someone made a joke about my disability status	.74	
I was told I talk about my disability status too much	.74	
I was ignored at work based on my disability status	.74	Removed due to not all respondents having an employer
Someone made statements in front of me that indicated disability was problem or negative outcome	.73	
I was ignored in a meeting based on my disability status	.73	Removed due to similarity
Someone used me as an inspiration based on my disability status	.73	
Someone praised my partner for maintaining a relationship with me based on my disability status	.72	Removed due to not all respondents having a partner
Someone made assumptions about my family based on my disability status	.72	
I felt tokenized (made to be a token or only viewed as my disability status)	.72	
Someone made a joke about my requested accommodations	.72	
Someone with a different disability status than mine tried to educate me about my own disability status	.72	
I was offered help I did not request based on my disability status	.71	
Someone told me they would rather die than have my disability status	.70	
Someone expressed surprise at finding out my disability status	.70	
Someone has used my disability status as the punch line of a joke	.70	Removed due to similarity
I was asked for proof of my disability status	.69	

Someone said they didn't think of me as having my disability status	.69	
Someone spoke to my companions instead of me, based on my disability status	.68	
I was invited to an event that was not accessible to me	.67	
I was ignored at school based on my disability status	.67	Removed due to not all respondents being in school
Someone touched my body or assistive devices without permission based on my disability status	.66	
Someone asked questions about my sex life based on my disability status	.65	
Someone assumed I had a different disability status than I do	.65	
A family member held my disability status against me	.62	
Someone made assumptions about my sexuality based on my disability status	.60	Removed due to confusion/conflation
I was ignored at work based on my disability status	.60	Removed due to not all respondents having an employer
I was told that ableism is not real	.59	
Someone told me they do not see ability or disability	.58	
I was told that ableism is no longer an issue in our society	.58	Removed due to cross-loading on other components
Someone compared me to a famous person with the same disability status	.56	
Someone assumed all people with disabilities/disabled people have the same needs	.56	Removed due to cross-loading on other components
I experienced someone telling me my disability status is more severe than I think it is	.56	

Someone assumed all people with disabilities/disabled people look alike	.50	Removed due to cross-loading on other components
I observed people with my disability status portrayed positively on the TV (R)	.75	
I observed people with my disability status portrayed positively in a movie (R)	.74	
I observed people with my disability status portrayed positively in magazines (R)	.74	
I observed people with my disability status portrayed positively in the news (R)	.73	
I observed people with my disability status holding positions of political power (R)	.71	
I observed people with my disability status holding positions of power in large corporations (R)	.69	
I observed people with my disability status in a prominent position at my workplace (R)	.68	Removed due to not all respondents having an employer and cross-loading on other components
Someone assumed that all of my friends share my disability status	.52	Removed based on other sample cross-loading
Someone assumed that everyone in a group I was in shared my disability status	.50	Removed due to cross-loading on other components
Memes of articles about people with my disability status were used to inspire other on social media	.40	Removed due to low factor loading

There was no statistically significant difference in the means between the two groups. These items had identical Cronbach's alphas, similar information about components, and the scree plots and parallel analyses both resulted in suggesting

retaining four factors, while factor loadings in both groups resulted in keeping two components. Both sample A and sample B had similarly high loadings of at least .45 on each factor (Grimm & Yarnold, 1995). Factor analysis falls under Lissitz and Samuelsen’s duality theory of validation (2007), providing validity that is internal to the measure (versus validation that is external to the measure).

A total of 14 items were removed based on factor loadings, similarity to other questions, or based on the qualitative response on the survey regarding difficult/problematic questions, resulting in 87 items, 81 on Component 1 and 6 on Component 2. Component 1 was labeled the Interpersonal sub-scale, and Component 2 was labeled the Visibility in Society sub-scale.

In re-running the EFA after the removal of these items on the AMS-87, Sample A has a mean of 2.04 ( $SD = 0.85$ ) with a Cronbach’s alpha of .99, and Sample B has a mean of 2.08 ( $SD = 0.86$ ) with a Cronbach’s alpha of .99, with no significant difference in means between the two samples.

However, 87 items on a scale is a very large number and responding to this many items is time consuming, potentially leading to survey fatigue. After consulting with a psychometric expert, the Principal Investigator removed an additional 22 items based on content and whether there were other items that covered those content areas to some extent, or items that did not add to the content of the scale. See Table 7 for these items.

**Table 7**

*Items removed due to content duplication*

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1. I was denied my requested accommodations
2. My autonomy was violated based on my disability status
3. My needed accommodations were not met
4. My other identities were ignored once someone knew my disability status

5. Someone asked questions about my sex life based on my disability status
  6. Someone avoided making eye contact with me due to my disability status
  7. Someone devalued my communication style based on my disability status
  8. Someone expressed pity after hearing about my disability status
  9. Someone made assumptions about my family based on my disability status
  10. Someone make a joke about my requested accommodations
  11. Someone minimized my disability status
  12. Someone praised my friend for maintaining a relationship with me based on my disability status (combined with similar family member item)
  13. Someone touched my body or my assistive devices without my permission based on my disability status
  14. Someone used me as inspiration based on my disability status
  15. I experienced someone telling me my disability status is not as severe as I think it is (combined with similar more severe item)
  16. I felt tokenized (made to be a token or only viewed as my disability status) based on my disability status
  17. I was asked medical questions about my disability status from non-medical professionals
  18. Someone assumed my intelligence based on my disability status
  19. Someone assumed I cannot make decisions for myself based on my disability status
  20. Someone assumed my work would be inferior based on my disability status
  21. Someone expressed surprise at finding out my disability status
  22. Someone tried to equate their experiences with my disability status
- 

The split sample analysis was then re-run on the AMS-65.

**Sample A AMS-65 (split case number = 0,  $n = 425$ ),  $M = 2.12$ ,  $SD = .85$  with a Cronbach's alpha = .98**

The PCA's eigenvalues suggested seven components with eigenvalues above 1 for a total of 73.51% of the variance explained. Based on both the scree plot (using Cattell's scree test, 1966) and the parallel analysis, two components were retained for a total of 62.24% of the variance explained. All of the items loaded on these two components with factor loadings at .50 or higher, and the same six items loaded on the

second component as with the AMS-87, leading a similar combination of one Interpersonal component and one Visibility in Society component.

**Sample B AMS-65 (split case = 1,  $n = 436$ ),  $M = 2.16$ ,  $SD = .86$  with a Cronbach's alpha of .98**

The PCA's eigenvalues suggested six components with eigenvalues above 1 for a total of 71.80% of the variance explained. Based on both the scree plot (using Cattell's scree test, 1966) and the parallel analysis, two components were retained for a total of 62.55% of the variance explained. All of the items loaded on these two components with factor loadings at .55 or higher, and the same six items loaded on the second component as with the AMS-87, leading a similar combination of one Interpersonal component and one Visibility in Society Component.

Despite the slightly lower Cronbach's alpha for the AMS-65, the decision was made to keep the shorter version of this scale to make it easier for participants to answer all of the items, and to reduce risk of survey fatigue during future use. The Cronbach's alpha of .98 is a sufficiently high indication of reliability for such a scale, and the remaining 65 items still address the depth and breadth of ableist macroaggressions discussed in Phase 1 with the various stakeholders. The final questions on the AMS-65 are as in Appendix D.

### **Evidence for Construct Validity**

There was a significant difference between disabled and non-disabled participants on the original sample,  $t(808) = 19.94$ ,  $p < .001$ , with disabled individuals receiving

higher scores ( $M = 2.45, SD = .80$ ) than non-disabled participants ( $M = 1.45, SD = .43$ ). When running this test again using the AMS-65, this held true with  $t(974) = 22.70, p < .001$ , with disabled individuals receiving higher scores ( $M = 2.52, SD = .81$ ) than non-disabled participants ( $M = 1.48, SD = .42$ )

### **Evidence for Convergent and Discriminant Validity**

The mean AMS-65 score and the mean DISC score were strongly correlated,  $r(893) = .84, p < .001$ . Similarly, the mean AMS-65 score and the mean SSCI score were also fairly highly correlated,  $r(936) = .70, p < .001$ . A potential rationale for these correlations may be found in the discussion section.

## **Phase III**

### **Survey participants and demographics**

Initially the number of respondents to the survey was 417. However, after cleaning the data to remove those who did not accept the informed consent, and those who did not answer any questions other past the initial demographic questions and did not answer at least half of the scale questions, the sample size was 311.

In regard to those who did not complete the demographic questions, or who answered less than half of the scale questions; one person did not provide consent to continue the survey, 412 answered the question regarding race, 407 answered the question regarding gender identity, 404 answered the questions about household income and disability status, and then only 362 answered the first item on the AMS-65 scale. A total of 307 answered the final AMS-65 scale item. A total of 310 respondents answered

the first MHI-18 item and the same number answered the last MHI-18 item. There was no pattern in the data of who dropped out of the survey based on the answers that had been provided to previous items. Data missing on the scale items were missing at random (MAR). Given that the data were found to missing at random (as compared to NMAR, or not missing at random), statisticians consider this response mechanism to be ignorable (Pigott, 2001). Therefore, the Principal Investigator continued analysis by employing listwise deletion of individuals who opted not to respond to each one of the questions on the AMS-65 (Pigott, 2001).

The respondents to this survey ranged from 19 to 68 years of age, with the average age being 35.8 years ( $SD = 10.26$ ). The majority identified as women, with 77.3% of the total sample identifying as cisgender (non-transgender). Most of the respondents identified as White, with 17.0% identifying as other racial and ethnic identities. Almost two thirds of the sample had a bachelor's or master's degree. Regarding sexual orientation, 39.9% identified as heterosexual with the remaining 60.1% identifying as a variety of other sexual orientations. Approximately one quarter (27.5%) of the sample reported an annual household income of over \$70,000, with the other three quarters of the sample being more evenly distributed across other income levels.

All of the respondents in this sample identified as disabled or being a person with disabilities, as those who responded that they did not were removed during data cleaning. Regarding types of disabilities and impairments, 46.5% responded that they had multiple types of disabilities or impairments, with an additional 35.5% reporting that they had a

physical disability or impairment (including chronic pain and chronic illness). See Table 8 below for a more nuanced breakdown of the demographic data.

**Table 8**

*Phase III Sample Demographics*

	<i>N</i>	%
Gender Identity	309	
Man	23	7.4%
Woman	213	68.5%
Transgender	1	0.3%
Trans Man	6	1.9%
Trans Woman	2	0.6%
Gender Queer/Non-Binary	56	18.1%
Other	8	2.6%
Identify as Trans/Non-Binary	309	
Yes	70	22.7%
No	239	77.3%
Race/Ethnicity	311	
Asian/Pacific Islander	3	1.0%
Black/African American	5	1.6%
Latinx	10	3.2%
Middle Eastern	2	0.6%
Multi-Racial/Mixed Race	20	6.4%
Native/Alaskan Native/Indigenous	1	0.3%
White	258	83.0%
Other	12	3.9%
Highest Level of Education	311	
Some High School	3	1.0
High School Diploma or GED	4	1.3%
Some College	46	14.8%
Associate's/Vocational	23	7.4%
Bachelor's Degree	101	32.5%
Master's Degree	95	30.0%
Doctoral	30	12.5%
Sexual Orientation	311	
Asexual	18	5.8%
Bisexual	49	15.8%
Gay	7	2.3%
Heterosexual	124	39.9%
Lesbian	20	6.4%
Pansexual	25	8.0%
Queer	59	19.0%

Other	9	2.9%
Annual Household Income	305	
0-\$5,000	26	8.5%
\$5,001-\$10,000	20	6.6%
\$10,001-\$20,000	41	13.4%
\$20,001-\$30,000	28	9.2%
\$30,001-\$40,000	28	9.2%
\$40,001-\$50,000	27	8.9%
\$50,001-\$60,000	29	9.5%
\$60,001-\$70,000	22	7.2%
\$70,001 or above	84	27.5%
Type of Disability/Impairment	310	
Intellectual/Development	5	1.6%
Learning	8	2.6%
Physical (including pain/illness)	110	35.5%
Psychiatric/Socio-Emotional	43	13.9%
Multiple types	144	46.5%

### **Cronbach's alpha**

For those responding to all 65 items on the Ableist Microaggression Scale (AMS-65), the initial Cronbach's alpha ( $n = 276$ ) was .97, and the initial Cronbach's alpha for those who completed all of the items on the Mental Health Inventory 18 (MHI-18;  $n = 302$ ) was .94. Regarding the sub-scales, the Cronbach's alpha for AMS-Interpersonal was .98 ( $n = 282$ ), and AMS-Disability in Society was .90 ( $n = 303$ ), while the Cronbach's alpha for MHI-Depression was .81 ( $n = 306$ ), MHI-Anxiety was .86 ( $n = 310$ ), MHI-Behavior Control was .81 ( $n = 309$ ), and MHI-Positive Affect was .82 ( $n = 308$ ). Please see Table 9 for full descriptive results.

**Table 9***Descriptive results for AMS-65 and MHI-18 total scales and sub-scales*

Scale or Sub-Scale	Cronbach's $\alpha$	<i>n</i>	<i>M</i>	<i>SD</i>	Skewnes s	Kurtosis
AMS-65	.97	276	2.94	.75	-.09	-.55
MHI-18	.94	302	3.41	.94	.15	-.53
AMS	.98	282	2.80	.82	-.07	-.55
Interpersonal						
AMS Dis. in Society	.90	303	4.41	.66	-1.49	3.00
MHI Depression	.81	306	3.32	1.15	.12	-.74
MHI Anxiety	.86	310	2.96	1.12	.47	-.49
MHI Behavior	.81	309	3.84	1.15	-.25	-.79
Control						
MHI Positive Affect	.82	308	3.48	.94	.02	-.52

**Confirmatory Factor Analysis**

The assumptions of confirmatory factor analysis are normality, linearity, independence, homoscedasticity, and lack of multicollinearity (Garson, 2013). Before conducting a CFA on each the AMS-65 and MHI-18 sub-scales, the assumptions for running a CFA were assessed. The CFA was to fit the two-component structure of the AMS-65, and the four-component structure of the MHI-18. All skewness and kurtosis were within acceptable range, with the exception of kurtosis = 3.00 for the AMS-Disability in Society sub-scale. There were no multivariate outliers in this sample, and the relationship between the variables was not nonlinear, so the assumption of linearity was not violated. Therefore, the CFA could commence. Multicollinearity was evaluated and the assumption of lack of multicollinearity was met.

Statisticians suggest using multiple indices of fit in order to best assess whether each model has a suitable fit in the CFA (Brown, 2015; Harrington, 2009). Brown (2015) advises using three different fit indices, with one representing each of the different

categories of fit estimates. These three categories are an index of absolute fit, an index for adjusted fit, and an index for comparative or incremental fit. This study used the following fit indices; the chi square likelihood ratio ( $\chi^2$ ), standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), and the comparative fit index (CFI). General criteria for assessing the model fit to the data for the listed fit indices are as follows;  $\chi^2 > .05$ ; SRMR < .08; RMSEA < .08; and CFI > .95 (Brown, 2015; Jackson, Gillaspay, & Purc-Stephenson, 2009).

Findings indicate that the  $\chi^2$  values were significant for all of the sub-scales except the MHI-Depression sub-scale. Three of the sub-scales had good model fit to the data across all three indices: MHI-Depression (SRMR = .01, RMSEA = .00, CFI = 1.00), MHI-Anxiety (SRMR = .03, RMSEA = .08, CFI = .99), and MHI-Positive Affect (SRMR = .02, RMSEA = .00, CFI = .99). AMS-Interpersonal (SRMR = .07, RMSEA = .09, CFI = .69) and AMS-Disability in Society (SRMR = .06, RMSEA = .17, CFI = .93) had good model fit to the data on the SRMR index, but not the other two indices, and MHI-Behavior Control did not have good model fit to the data on any of the three indices. See Table 10 for all of the model indices. The challenges with the poor model fit for some of these sub-scales are explored in the discussion section.

**Table 10***CFA Results for AMS-65 and MHI-18 sub-scales*

Sub-Scale	Cronbach's $\alpha$	$\chi^2$	<i>df</i>	SRMR	RMSEA	RMSEA 90% CI	CFI
AMS	.98	5305.60***	1652	.07	.09	.086-.091	.69
Interpersonal AMS Dis. in Society	.90	87.4***	9	.06	.17	.14-.20	.93
MHI Depression	.81	1.90	2	.01	.00	.00-.11	1.00
MHI Anxiety	.86	13.78*	5	.03	.08	.03-.12	.99
MHI Behavior Control	.81	62.97***	2	.10	.31	.25-.38	.89
MHI Positive Affect	.82	4.86**	2	.02	.00	.00-.15	.99

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

SRMR (standardized root mean square residual), RMSEA (Root Mean Square Error of approximation), CFI (comparative fit index)

**Correlations Between AMS-65 and MHI-18**

Using the full sample, the mean AMS-65 scores and the mean total MHI-18 scores were correlated,  $r(269) = -.19, p < .001$ . Regarding the MHI-18 sub-scales, the depression ( $r(273) = -.15, p < .05$ ), anxiety ( $r(275) = -.19, p < .01$ ) and behavior control ( $r(274) = -.24, p < .001$ ) sub-scales were all correlated with scores on the AMS-65. There was not a statistically significant correlation between scores on the AMS-65 and scores on the MHI-18 positive affect subscale.

Given that 13.9% of the respondents in this survey identified as having only psychiatric/socio-emotional impairments/disabilities, there is the possibility that their responses on the MHI-18 are related to their existing mental health diagnoses. Therefore, these correlations were re-run excluding this sub-group. With this new sub-sample, the

AMS-65 scores and the total MHI-18 scores were correlated,  $r(232) = -.24, p < .001$ . Regarding the MHI-18 sub-scales, the depression ( $r(236) = -.19, p < .01$ ), anxiety ( $r(238) = -.21, p < .01$ ), behavior control ( $r(237) = -.27, p < .001$ ) and positive affect ( $r(236) = -.13, p < .05$ ) sub-scales were all correlated with scores on the AMS-65.

### Correlations between AMS-65 and MHI-18 Sub-Scales

The sub-scales of both the AMS-65 (Interpersonal and Disability in Society) and the MHI-18 (depression, anxiety, behavioral control and positive affect) were analyzed for correlations between each of the sub-scales using the full sample. The results can be seen below in Table 11.

**Table 11**

*Correlations between AMS Sub-Scales and MHI Sub-Scales*

	1	2	3	4	5	6
1. AMS Inter-personal	-	$r = 0.06$ $n = 276$	$r = -0.15^*$ $n = 278$	$r = -0.17^{**}$ $n = 281$	$r = -0.20^{**}$ $n = 280$	$r = -0.07$ $n = 279$
2. AMS Disability in Society		-	$r = -0.67$ $n = 299$	$r = -0.11$ $n = 302$	$r = -0.15^{**}$ $n = 301$	$r = -0.26^{**}$ $n = 300$
3. MHI Depression			-	$r = 0.66^{**}$ $n = 306$	$r = 0.82^{**}$ $n = 305$	$r = 0.64^{**}$ $n = 304$
4. MHI Anxiety				-	$r = 0.60^{**}$ $n = 309$	$r = 0.60^{**}$ $n = 308$
5. MHI Behavioral Control					-	$r = 0.71^{**}$ $n = 307$
6. MHI Positive Affect						-

Note. \* $p < 0.05$ . \*\* $p < 0.01$ , \*\*\* $p < 0.001$

### AMS-65 and MHI-18 Scores by Type of Disability

One objective of this study was to better understand how microaggressions differ (if at all) across types of disability, and visibility of disability. To assess whether there would be differences in the scores on the AMS-65 and the MHI-18 between types of disabilities, an ANOVA analysis was run. In the ANOVA analysis examining mean differences between the different types of disabilities, there was no significant difference between types of disability and scores on the AMS-65.

In the same analysis examining differences by the type of disability, there was a statistically significant difference for type of disability on mean score on the total MHI-18,  $F(4, 301) = 19.76, p < .001, \eta^2 = .21$ . Homogeneity of variance was not violated, and a Tukey's post-hoc test revealed a significant difference between the means of those with physical disabilities (3.99) and those with learning disabilities (3.12,  $p < .05$ ), psychiatric/socio-emotional disabilities (3.11,  $p < .001$ ), and multiple types of disabilities (3.08,  $p < .001$ ). There was no significant difference between any other types of disabilities.

Correlations were also analyzed using the full sample between mean AMS-65 scores and the mean MHI-18 scores, with self-reported levels of disability visibility or how apparent participants' disabilities were. The scores on AMS-65 were significantly correlated with level of visibility of disability,  $r(271) = .25, p < .001$ . The mean score on the MHI-18 was also significantly correlated with level of visibility of disability ( $r(296) = .24, p < .001$ ). See Table 12 for correlation between visibility/apparentness of disability and the sub-scales of both AMS-65 and MHI-18.

**Table 12**

*Correlations between Visibility of Disability and the AMS Sub-Scales & MHI Sub-Scales*

	<i>Visibility</i>
AMS Inter-personal	$r = 0.26^{***}$ $n = 265$
AMS Disability in Society	$r = 0.01$ $n = 265$
MHI Depression	$r = 0.18^{***}$ $n = 265$
MHI Anxiety	$r = 0.23^{***}$ $n = 265$
MHI Behavioral Control	$r = 0.20^{**}$ $n = 265$
MHI Positive Affect	$r = 0.22^{***}$ $n = 265$

**Note.** \* $p < 0.05$ . \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## **Chapter Five: Discussion**

### **Overview**

This study used a three-phase mixed method sequential exploratory design to answer three questions. The first phase explored “What are the different ways in which ableist microaggressions occur?” The second phase involved using a nationwide cross-sectional survey to develop and validate the AMS-65. This phase answered the question, “How can the different levels of experiences of ableist microaggressions be measured?” Finally, the third phase of this study used another cross-sectional nationwide survey, this one of disabled adults in the United States, to examine the correlates of anxiety, depression, behavioral control, and positive affect of participants with the levels of ableist microaggressions someone has experienced. This helped to answer the question, “What is the association between ableist microaggressions and mental health of people with disabilities?”

The findings here overall indicate that microaggressions happen in ways and catalogues similar to those found in Bell’s 2013 study, and that they can be measured via a scale such as the Ableist Microaggression Scale. Perhaps most importantly, this study found that as one’s experience of ableist microaggressions increases, one’s mental health decreases. This finding is incredibly relevant for social workers and other human service professionals to know when working with disabled clients, and also important for anyone working to dismantle oppression in our society. While being able to assess the

experiences of microaggressions someone has undergone is useful, the ability to connect these experiences to mental health moves to name and validate the relationship between these experiences and mental health that many people with disabilities have known to be their lived truth. With this information, professionals, communities, and individuals can work to better support disabled people in the reduction of ableist microaggressions, and by providing mental health support and other social services that acknowledge this relationship.

### **Phase I**

In phase one, the answers from participants supported the majority of themes as published in Bell's (2013) qualitative study about ableist microaggressions, demonstrating that many of these findings are transferable from one group of disabled individuals to another, and across difference fields of study. Additionally, participants spoke to the varying nature of ableist microaggressions, discussing how they happened in every facet of life, from being on public transit to being in the classroom, and happening between the participants and family, friends, partners, co-workers, supervisors, and even strangers. They shared how different types of disabilities and impairments (mobility/socio-emotional/learning/intellectual and developmental/multiple types; level of apparentness/visibility; congenital versus acquired) experienced different types and different levels of microaggressions, and that these microaggressions may happen in different settings. These are things previously known to be true for other types of microaggressions; for example, Black individuals may experience different types of microaggressions than Asian people (Nadal et al., 2014), so this fit within the

microaggression literature. The thoughts that were shared during the interviews were helpful in guiding the conversation to suggestions of potential items for a scale that would be able to take the participants' experiences of microaggressions, and change them into something slightly more generalizable that could be measured across the population. An example of this is how many participants spoke to how people had randomly stopped them to pray over them, or come up to them in a religious setting and offered to pray/stated that they were already praying on this disabled person's behalf. This was then translated into the item "A stranger offered to pray for me based on my disability status."

In this vein, the participants helped to co-create a list of potentially microaggressive situations, coming up with, along with the Principal Investigator, 120 items for potential inclusion on the Ableist Microaggression Scale. They also participated in a discussion about how to phrase the instructions for the scale that would be inclusive of both disabled and non-disabled participants, arriving at the idea "disability status" to denote different levels of function and impairment that varied person to person. Finally, they rated each of the group co-created items, allowing the initial 110 scale to be used in the second phase.

The ability to co-create this scale with participants who brought a variety of connections to disability, types of disabilities/impairments, and life experiences to the conversation helped to ensure that this scale was one representing not only my own experiences with disability, but those of a larger group. Had the research just interviewed individuals and come up with a set items based on perceptions of participants' experiences, the researcher's own lens on disability may have skewed their

interpretations of their statements. While this did result in an additional amount of back and forth between the researcher and the participants, she found this to be a more meaningful way of scale creation, wherein the scale items emerged directly from the stakeholders in conversation with the researcher, rather than the more traditional model in which the researcher designs the scale items based on their own interpretation of the themes that occurred in the interviews with the participants.

## **Phase II**

One of the challenges that arose during this phase was that the different methods of selecting factors (eigenvalues, variance explained, scree plot, and parallel analysis) indicated differing factors. Because of this, and how the items loaded only two components were retained in a fairly long (65 items) scale, meaning that even with two sub-scales, one sub-scale is still quite long at 59 items. This was a little surprising to the Principal Investigator, given the different various sub-scales/areas that were thought might arise during this analysis. It is possible that a different sample might yield different results regarding potential factors, and this should certainly be considered in future validation studies, as should the potential for a more concise scale.

The fact that the two groups had similar findings and that there were no significant differences between groups indicates the AMS-65, with two sub-scales (Interpersonal and Disability in Society) has support for validity and reliability for use in assessing individuals' experiences of ableist microaggressions. This scale could be used on an individual basis, for example, with clients, to assess the level of ableist microaggressions they have experienced in the past month. It could also be used in

educational settings, both prior to and after a potentially educational intervention, to assess whether the number of ableist microaggressions experienced in a certain setting changes over time, or as a result of such an intervention. Future research is also needed to better understand the differing levels of ableist microaggressions experiences by people with different types of disabilities/impairments, different visibility of disabilities/impairments, and even differences within disabled communities based on other social identities, such as race, class, gender, sexual orientation, and more.

Finally, it is interesting to observe the high correlation between the mean AMS-65 score and not only the mean DISC score ( $r(893) = .84, p < .001$ ) as expected in providing evidence for convergent validity, but also with the mean SSCI score ( $r(936) = .70, p < .001$ ), disproving the hypothesis of offering evidence of discriminant validity. However, this is not entirely surprising. It was difficult to find an existing scale that had already been validated that measured something similar enough to ableism but was different enough that it would not have similar scores to a scale specifically about ableist microaggressions. Furthermore, in analyzing this finding, it makes sense for scores on an internalized stigma scale to be highly correlated with scores on an ableist microaggressions scale, as the theoretical framework for this study hypothesized that stigmatization is one result of how stigmatization is operationalized. Additionally, critical race theory, as modified for ableism/disability, suggests that one of the six tenets through which ableism occurs is internalized ableism, which is internalized stigma. Therefore, it makes sense for these two scores to be highly correlated, even though the original intent was that they would not be as they proposed to measure different facets of ableism.

### **Phase III**

Half of the sub-scales did not indicate a good model fit with the data. For the AMS-Interpersonal and AMS-Disability in Society sub-scales, this could be due to the two factors indicated by the scree plots and parallel analysis in Phase II, as compared with the higher number of factors indicated by the eigenvalues and percentage of the variance explained. The MHI-Behavior Control did not have a good model fit with the data overall, although the scores on many of the fit indices were close to the conventional cut offs for good model fit. Reliability was strong across all six sub-scales, as well as the full AMS-65 and MHI-18 scales.

There was a significant negative correlation ( $r = -.19$ ) between the mean AMS-65 score and the total MHI-18 score, indicating a relationship between experiences of ableist microaggressions and less positive mental health outcomes. There were also significant negative correlations between the mean AMS-65 score and three of the MHI-18 sub-scales: depression, anxiety and behavior control. When individuals were removed who reported that their only disability/impairment was socio-emotional/psychiatric (which may have included those measured on the MHI-18), all three existing negative correlations were strengthened, and positive affect became significantly negatively correlated with the mean AMS-65 score. There were also significant correlations between some of the AMS-65 sub-scales (Interpersonal and Disability in Society) and some of the MHI-18 sub-scales.

Some of the concerns with poor model fit may be linked to a smaller sample size, but also to challenges within the sub-scales themselves. These issues of poor model fit for the two AMS-65 sub-scales indicate the need to potentially return to the original AMS data, or collect new data, and re-run exploratory factor analysis to better understand potential factors that may have improved model fit. Future research should include psychometric and ableism experts to better assess theoretically grounded factors and statistical analysis that may yield factors that have better model fit. Regarding the poor model for MHI-Behavior control, this scale and four sub-scales have been validated multiple times and used across various populations, so it may be a challenge with these particular data. This study should be replicated with new respondents to assess whether this was a one-time problem with model fit, or an issue with the sub-scale itself. It is possible this sub-scale has not been normed with disabled specific populations, and may need to be adjusted for use with this group.

### **Implications for Social Work and Human Service Professionals**

Firstly, this study has only reached the tip of the iceberg regarding ableist microaggressions, and how these everyday intersections may be related to the mental health of disabled adults. It is clear that social workers and other human service professionals need to take this information into account when supporting clients. Much time and energy is spent on empowering clients, but it is also important that providers acknowledge how pervasive ableism is, and how much the experiences of ableist microaggressions may resonate with and harm their clients. Simply telling clients to push through or move past these interactions is unhelpful in fact, providers may be among

those unintentionally microaggressing their own clients. Rather, providers should be thinking more systemically about how the ongoing experiences of ableism effect disabled clients, and supporting people with disabilities on how to be resilient in an ableist society.

Moreover, as this study indicates that the more ableist microaggressive experiences has are correlated with less positive mental health outcomes, providers working in the mental health field should be cognizant of disability identity/experiences when supporting individuals with disability who report depression, anxiety, behavioral control, and even positive affect. While it is certainly true that many people may have these mental health outcomes separate from other identities and microaggressive experiences, it is important to allow for that fact that the relationship between ableist microaggressions and mental health may increase or intensify these mental health experiences. Treatment should include culturally responsive care, using disability inclusive language, and not frame disability as either something problematic, or as a “super-crip” identity in which the disabled are put upon a pedestal. Instead, including assessment of social interactions, experiences of microaggressions, and how the clients engage with these microaggressions may help in better understanding these experiences, and increase the providers’ abilities to provide meaningful support. A variety of resources for social workers, human services professionals, researchers, and others interested in creating more disability inclusive are included in Appendix E.

### **Limitations and Future Research**

As with all studies, there are several limitations that should be addressed. Firstly, it is important to speak to the diversity of all three samples. Participants in all three

phases of this were predominantly White, with more than 80% of each sample respondents being White. So much of extant research in the social sciences has already been conducted using mostly White research participants, so there is a demonstrated need both in this topic area and within research as a whole to better recruit samples that are racially and ethnically diverse. Future research on the AMS-65 should partner with communities of color and organizations serving disabled people of color in order to more intentionally recruit people of color in order to participate, and ensure that this scale is culturally responsive across diverse communities. These samples were also more highly educated than the majority of disability specific samples. It is impossible to know if that would change the results of the scale, so further research should be conducted to assess whether this scale remains reliable for samples with lower education levels.

As with all surveys similar to those used in this study, data that are collected at only one moment in time (cross-sectional) and based on the reflection of the participants (self-report) are limiting. Time of year, the political landscape, and other such concerns could affect how participants answered the question at the time of the survey as compared to how they might respond at a future time. Although the Principal Investigator attempted to reduce issues of recall bias by reducing the time frame of recall to one month (four weeks), it may have been difficult for participants to remember the frequency of each item over the past month, especially given the innocuous nature of microaggressions being viewed as smaller and less significant than outright instances of ableism.

Moreover, cross-sectional data can be used to show relationships and correlations, but cannot be used to demonstrate the impact of one thing upon another. Therefore, while

there is a demonstrated correlation between the experiences of ableist microaggressions and mental health outcomes, it cannot be stated that ableist microaggressions lead to less positive mental health. One question that arises may be whether individuals who have higher levels of depression and anxiety and/or lower levels of behavior control and positive affect may in fact interpret more situations as ableist microaggressions, rather than the assumptive other way around. Future studies should aim for a more sequential and nuanced look at these relationships.

Another limitation of this study is that the final Ableist Microaggression Scale is 65 items, which is very long for a scale, and could result in survey fatigue. While it was still possible to get over 300 participants using this length of scale, future research could aim to shorten this scale while retaining reliability and validity in order to offer a more succinct version for ease of use. The recruitment of participants for all three phases and dissemination of both surveys was done using the Internet, and only in English. These choices result in several communities likely being underrepresented or left out, especially those in rural settings, individuals who may be homeless or between homes, those who are aging, those in low-income settings who may not have their own access to the Internet, and anyone for whom English is not their most comfortable language.

Given that the samples were convenience and snowball samples, it is possible that people who chose to participate in this study already knew what ableist microaggressions were, and therefore had a different view of them than a random individual might. Future studies should attempt to further validate this scale by using samples that do not select in, but are instead selected randomly, or using a specific group (college students, Amazon

Mechanical Turk, etc.). Additionally, there was a high dropout rate from those who clicked through the consent form to those who actually answered the majority of the scale questions. While these data were shown to be missing at random, future research should more deeply explore this attrition rate. Potential ideas include putting demographic questions at the end rather than the beginning, changing the order of the scale items, validating the survey via paper/oral/in person questioning (rather than online), conducting additional cognitive interviews, and/or having an online survey that directs to a page with a “why did you stop this survey” question box when people click out of it. More information on this drop off rate will help to better understand whether it is a concern of survey design, the scale itself, the recruitment method, or another piece of the research puzzle.

One final challenge with the design of the AMS-65 is that in order to ensure it could be used with people of all disability statuses, rather than just disabled individuals, the language could have been confusing. The term “disability status” was used, and while there was clarification regarding this term, it is possible potential participants assumed this meant the survey was not for them, or that people participated and this language skewed their answers to the questions.

Future research should certainly look at all of the above limitations. Additionally, given the differing indication of number of factors based on eigenvalues, percent of the variance, scree plots and parallel analysis, it would be worthwhile for a future validation study to use confirmatory factor analysis on the full AMS-65 item list to better assess whether there may be more factors based on a theoretical assessment of ableism,

particularly as more information is published on the occurrence of ableism in our society. Future replication and validation studies should also consider more random sampling of participants in order to remove any potential sampling bias that could have occurred with the convenience and snowball sampling in this case.

## **Conclusion**

While this is an exploratory study that does not indicate impact of ableist microaggressions, nor the direction or causality of the relationship between ableist microaggressions and the mental health of disabled adults in the United States, findings indicated that there is a negative relationship between experiences of ableist microaggressions and mental health outcomes. Thirteen participants shared their thoughts about and experiences of ableist microaggressions and co-created 120 items to measure these same experiences. After rating these items on a variety of areas, 110 items were kept to be shared in a nationwide cross sectional survey of 984 adults in the United States. These were analyzed using a variety of psychometric approaches, including a split sample cross-validation analysis using exploratory factor analysis. After these analyses, the AMS-65 was finalized with two sub-scales; the 59-question Interpersonal sub-scale, and the 6-question Disability in Society sub-scale. Finally, the AMS-65 was distributed via a nationwide survey of 311 U.S. adults identifying as disabled or having one or more disability along with the MHI-18. Analysis of these two scales demonstrate a negative correlation between mental health outcomes and the experiences of ableist microaggressions.

The AMS-65 will be useful in measuring the experiences of ableist microaggressions in a variety of settings, from including as part of intake with disabled clients to using it as a pre-test/post-test after training staff, faculty, or community members in acknowledging their able-bodied/neurotypical privilege and/or creating more disability inclusive spaces. The findings of the relationship between ableist microaggressions and mental health outcomes showcases the need for social workers and other human services professionals to better understand how ableism plays out in society, and to support their clients in existing and resisting in a world that contains ableist microaggressions.

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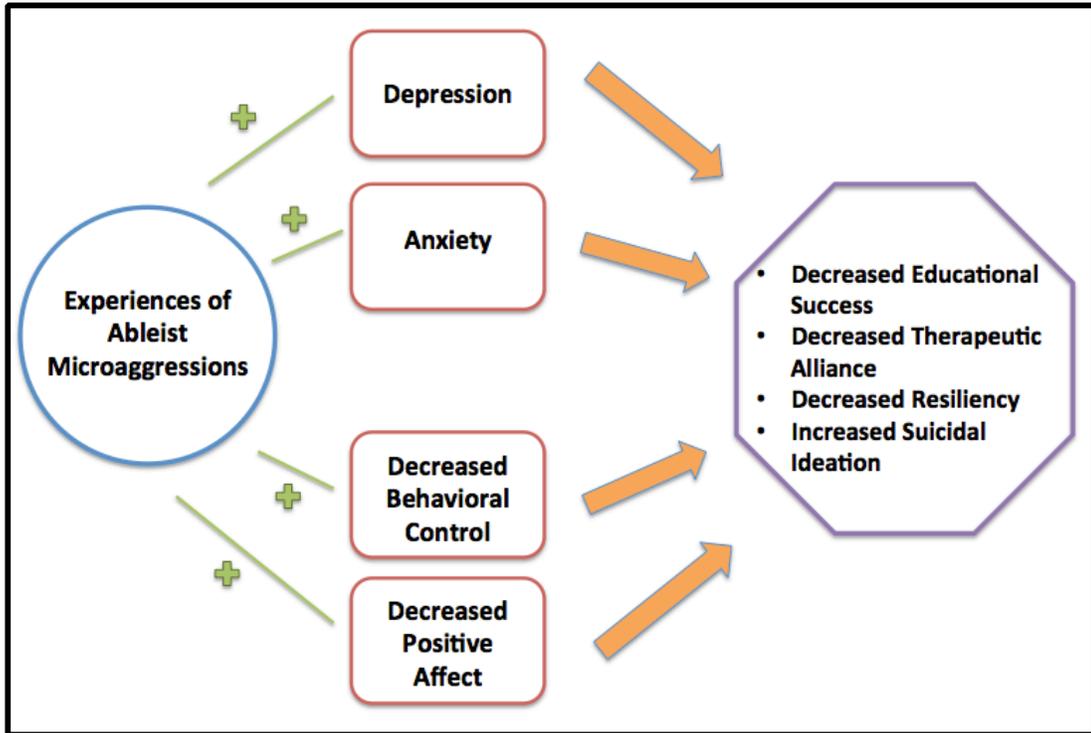
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## Appendix A

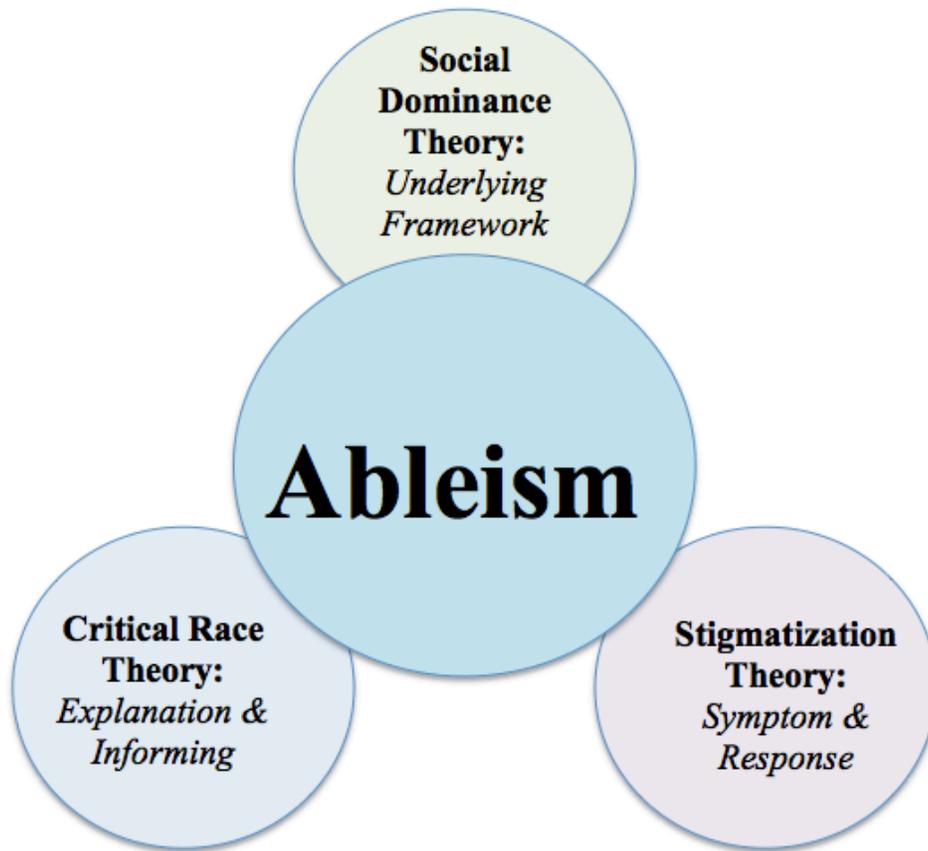
### Models

#### Model 1



*Figure 1.* Models for relationship between ableist microaggressions and mental health outcomes.

**Model 2**



*Figure 2.* Theoretical model detailing the intersections of the three theories

## Appendix B

### Scales, Forms and Survey Items Phase 1

#### Phase I Participant Demographics and Interview Questions

##### Participant Information

Of the following, do you identify as (check all that apply):

A disability activist/advocate  Disability researcher  Disabled person/person with disabilities

Age:

Race/Ethnic Identity:

Gender identity and pronouns:

Sexual orientation:

Highest level of education completed:

##### Interview Questions (Phase I)

When I say “ableist microaggressions” what does that mean to you?

What are some of the different contexts in which ableist microaggressions are perpetuated?

Outside of context-based microaggressions, what are some of the different types of ableist microaggressions that may occur?

Do you think people with different types of disabilities or impairments experience different types of ableist microaggressions?

For example, do people with physical disabilities/impairments experience microaggressions differently than people with intellectual/development disabilities, or those with socio-emotional disabilities/mental health concerns? If so, how?

Sue suggests microaggressions fall into three categories: **micro assaults** (verbal/nonverbal; e.g.: name-calling, avoidant behavior, purposeful discriminatory actions), **micro insults** (communications that convey rudeness and insensitivity and demean a person's ability or identity; subtle snubs; unknown to the perpetrator; hidden

insulting message to the recipient) and **micro invalidations** (communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person belonging to a particular group) – what are your thoughts on this in relation to ableist microaggressions?

Bell (2013) suggested the following categories of how ableist microaggressions might be characterized. As I read each one, please let me know if you agree or disagree, and whether you can think of questions that might “get at” ableist microaggressions that fall into this category.

- Exclusion from the mainstream population
- Responses of astonishment from non-disabled others related to myths about disability
- Receiving the message from non-disabled others that disability or PWDs are inherently abnormal and undesirable
- Receiving the message from non-disabled others that disability and PWDs are burdensome
- PWDs experience of non-disabled others who assume to “understand” or identify with the experiences of PWD
- Responses of pity and apologies from non-disabled others
- Experiences with non-disabled others’ odd or awkward avoidance behavior
- Experiences with the intrusive behavior of non-disabled others who assume PWDs need assistance or lack ability

What potential categories are missing? What are questions that might “get at” these types of ableist microaggressions?

Are there any questions we haven’t discussed that you think should be included? If yes, what are they?

Any other thoughts you’d like to share on this topic?

## **Phase I Consent Form**

**DU IRB Approval Date: 11/10/2015 Valid for Use Through: 11/10/2018**

**Project Title: Ableist Microaggression Scale and Assessing the Relationship Between Ableist Microaggressions and the Mental Health Outcomes of Disabled Adults**

**Principal Investigator: Shanna K. Kattari, MEd**

**Faculty Sponsor: Dr. N. Eugene Walls**

**DU IRB Protocol #: 807206**

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You are being asked to be in a research study. This form provides you with information about the study. A member of the research team will describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part.

### **Invitation to participate in a research study**

You are invited to participate in a research study about ableist microaggressions and the different ways that they occur.

*Microaggressions are everyday interactions perpetuating inequalities & stereotypes against people who belong to marginalized communities.*

*Examples of ableist microaggressions may include telling someone that they speak very well for a Deaf person, asking everyone to stand/requiring people to stand in line (with the assumption that everyone can stand), making a joke about how fast someone can go in their wheelchair, or telling someone they are "lucky" that they are able to bring their service dog to work with them.*

You are being asked to be in this research study because you identify as disabled/a person with disabilities, a disability researcher, and/or a disability advocate.

### **Description of subject involvement**

If you agree to be part of the research study, you will be asked to engage in a recorded discussion about ableist microaggressions, the different types of ableist microaggressions that occur, and the contexts in which they occur. You may be asked to suggest potential items/questions to be included on an ableist microaggression scale.

This interview will take about 60-90 minutes.

You will also be given a rating sheet to rate the final list of questions. This will be sent out and returned via email.

### **Possible risks and discomforts**

There is little risk involved for you. It is possible that you may experience emotional discomfort at discussing the ways in which ableism and ableist microaggressions are perpetuated in society. However, this is not unusual for people with disabilities and

disability advocates, as they likely experience various types of ableism (inability to access spaces, not seeing disabled people in the media, experiencing microaggressions like those described above) on a regular basis. In case of any emotional discomfort, the researcher will have resources on hand for counseling and support if the participant would like access to them.

If you do experience a negative reaction to any of the questions, please seek out support at a local mental health and/or counseling center. You may also call the National Alliance for Mental Health 1-800-950-NAMI (6264) or the Suicide and Crisis Hotline at 1-800-999-9999.

**Possible benefits of the study**

This study is designed for the researcher to learn more about ableist microaggressions and how they happen.

If you agree to take part in this study, there will be no direct benefit to you. However, information gathered in this study may help researchers, educators and service providers better understand ableist microaggressions and how they take place.

**Study compensation**

As a thank you for your time, I would like to compensate you with a \$25 gift card incentive.

**Study cost**

You will not be expected to pay any costs related to the study.

**Confidentiality, storage and future use of data**

To keep your information safe, the researchers will store this form and a recorded copy of your interview in a password protected file that is encrypted. Interview files will then be transcribed, with the original recording being deleted. Transcripts will also be password protected. All of this information will be stored until 5 years after the completion of this study, at which time they will be destroyed.

The results from the research may be shared at a meeting. The results from the research may be in published articles. Your individual identity will be kept private when information is presented or published.

**Who will see my research information?**

Although we will do everything we can to keep your records a secret, confidentiality cannot be guaranteed.

Both the records that identify you and the consent form signed by you may be looked at by others.

- Federal agencies that monitor human subject research
- Human Subject Research Committee

All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Also, if you tell us something that makes us believe that you or others have been or may be physically harmed, we may report that information to the appropriate agencies.

### **Voluntary nature of the study**

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. If you decide to withdraw early, the information or data you provided will be destroyed.

### **Contact information**

The researcher carrying out this study is Shanna K. Kattari, M.Ed. You may ask any questions you have now. If you have questions later, you may call Shanna at 720.273.3288 or email her at [shanna.kattari@du.edu](mailto:shanna.kattari@du.edu).

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, you may contact the Chair of the Institutional Review Board for the Protection of Human Subjects, at 303-871-4015 or by emailing [IRBChair@du.edu](mailto:IRBChair@du.edu), or you may contact the Office for Research Compliance by emailing [IRBAdmin@du.edu](mailto:IRBAdmin@du.edu), calling 303-871-4050 or in writing (University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121).

### **Agreement to be in this study**

I have read this paper about the study or it was read to me. I understand the possible risks and benefits of this study. I know that being in this study is voluntary. I choose to be in this study: I will get a copy of this consent form.

If you agree to be in this study, please scan and email a copy of this form to [shanna.kattari@du.edu](mailto:shanna.kattari@du.edu) or mail a signed copy to Shanna Kattari, University of Denver Graduate School of Social Work, 2148 S. High Street, Denver, CO 80208.

Please **[initial/check]** in the appropriate boxes:

I agree to be audiotaped for research purposes.

I DO NOT agree to be audiotaped for research purposes.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

## Appendix C

### Scales, Forms and Survey Items Phase 2

#### **Discrimination and Stigma Scale (DISC) Sub-Scale I**

These questions ask about times you may have been treated unfairly specifically because of your ability level/mental health status.

For each question, please answer “Not at All” “A Little” “Moderately” or “A Lot” (or N/A)

1. Have you been treated unfairly in making or keeping friends?
2. Have you been treated unfairly by the people in your neighborhood?
3. Have you been treated unfairly in dating or intimate relationships (not counting a spouse or longtime partner)?
4. Have you been treated unfairly in housing?
5. Have you been treated unfairly in your education (elementary school, middle school, high school, college, vocational programs, on the job training)?
6. Have you been treated unfairly in marriage or divorce (includes civil unions and domestic partnerships)?
7. Have you been treated unfairly by your family (this includes family of origin, such as parents, siblings, your own children, etc.)?
8. Have you been treated unfairly in finding a job (any type of paid work)?
9. Have you been treated unfairly in keeping a job?
10. Have you been treated unfairly when using public transport (by drivers, other passengers, etc.)?
11. Have you been treated unfairly when getting SSDI, disability pensions, or other governmentally supported benefits?
12. Have you been treated unfairly in your religious practices?
13. Have you been treated unfairly in your social life (hobbies, attending events, other leisure activities)?
14. Have you been treated unfairly by the police (any contact with police)?
15. Have you been treated unfairly when getting help for physical health problems (includes GP, nurses, dentists, emergency treatment)?
16. Have you been treated unfairly by mental health staff?
17. Have you been treated unfairly in your levels of privacy (in community settings, medical records, background checks, in hospital or in-patient settings)?
18. Have you been treated unfairly in your personal safety and security (could include physical abuse, verbal abuse, assault)?
19. Have you been treated unfairly in starting a family or having children (from health professionals, friends, family, parents, as well as how you/partner were treated during pregnancy or childbirth)?

20. Have you been treated unfairly in your role as a parent to your children (by teachers, other parents, community members)?
21. Have you been avoided or shunned by people who know about your abilities, impairments, mental health status, learning abilities, etc.?
22. Have you been treated unfairly in any other area of your life (based on ability/mental health//learning ability/etc.)?

### **Stigma Scale for Chronic Illness – Self/Internalized Stigma Sub-Scale (modified)**

Please rate each item as *never*, *rarely*, *sometimes*, *often* or *always*

1. Because of my ability level/mental health status, I feel emotionally distant from other people.
2. Because of my ability level/mental health status, I feel left out of things.
3. Because of my ability level/mental health status, I feel embarrassed in social situations.
4. Because of my ability level/mental health status, I worry about other people's attitudes towards me.
5. Because of my ability level/mental health status, I am unhappy about my appearance.
6. Because of my ability level/mental health status, it is difficult for me to stay neat and clean.
7. Because of my ability level/mental health status, I worry I am a burden to others.
8. I feel embarrassed about my ability level/mental health status.
9. I feel embarrassed about my physical/emotional/intellectual limitations.
10. I feel embarrassed about speaking or communicating.
11. Because of my ability level/mental health status, I feel different from others.
12. I tend to blame myself for my problems.
13. I avoid making new friends to avoid telling others about my ability level/mental health status.

## **Phase II Consent Form**

You are being asked to be in a research study. This form provides you with information about the study. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part.

### **Invitation to participate in a research study**

You are invited to participate in a research study about ableist microaggressions and the different ways that they occur.

You are being asked to be in this research study because you are willing to take the time to answer a variety of survey questions on ableism, microaggressions, stigma, and internalized ableism. Inclusion criteria for this study includes being 18 years of age or older, and living in the United States. This study is designed for participation by both disabled individuals/people with disabilities as well as able-bodied/non-disabled people.

*Microaggressions are everyday interactions perpetuating inequalities & stereotypes against people who belong to marginalized communities.*

*Examples of ableist microaggressions may include telling someone that they speak very well for a Deaf person, asking everyone to stand/requiring people to stand in line (with the assumption that everyone can stand), making a joke about how fast someone can go in their wheelchair, or telling someone they are "lucky" that they are able to bring their service dog to work with them.*

### **Description of subject involvement**

If you agree to be part of the research study, you will be asked to fill out a variety of questions that are part of an online survey. These questions will be about experiences you have had, as well as information about your identities.

This will take about 20-30 minutes of your time.

### **Possible risks and discomforts**

There is little risk involved for survey participants. It is possible that you may experience emotional discomfort at discussing the ways in which ableism and ableist microaggressions are perpetuated in society. However, this is not unusual for people with disabilities and disability advocates, as they likely experience various types of ableism (inability to access spaces, not seeing disabled people in the media, experiencing microaggressions like those described above) on a regular basis. People without disabilities may be uncomfortable in recognizing they may not have experienced these items on any regular basis while disabled individuals have. Any discomfort for you

should be short-term, given the short duration of the survey itself. In case of any emotional discomfort, the researcher will offer resources at the beginning and end of the survey for counseling and support if the participant would like access to them. All responses will be anonymous with no connection to any individual participant, and participants are not being asked to share confidential experiences, or sensitive information.

If you do experience a negative reaction to any of the questions, please seek out support at a local mental health and/or counseling center. You may also call the National Alliance for Mental Health 1-800-950-NAMI (6264) or the Suicide and Crisis Hotline at 1-800-999-9999.

### **Possible benefits of the study**

This study is designed for the researcher to learn more about ableist microaggressions and how they happen.

If you agree to take part in this study, there will be no direct benefit to you. However, information gathered in this study may help researchers, educators and service providers better understand ableist microaggressions and how they take place.

### **Study compensation**

If you are interested, upon completion of the survey, you may choose to be entered into a drawing to win one of 10 \$50 Amazon gift cards. You will be taken to a separate survey so that your email address cannot be connected with your responses. There is no obligation to enter this drawing.

### **Study cost**

You will not be expected to pay any costs related to the study.

### **Confidentiality, storage and future use of data**

To keep your information safe, the researchers will not collect any identifying information from you (such as your name, date of birth, zip code, IP address, etc.). Participants will each be assigned a number, and all data will be looked at all together (rather than on an individual basis).

The results from the research may be shared at a meeting. The results from the research may be in published articles. Your individual identity will be kept private when information is presented or published.

### **Voluntary nature of the study**

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. If you decide to withdraw early, the

information or data you provided cannot be destroyed because it is not linked to you either directly or by a code.

**Contact information**

The researcher carrying out this study is Shanna K. Kattari, M.Ed. You may contact her to ask any questions you have now. If you have questions later, you may call Shanna at 720.273.3288 or email her at shanna.kattari@du.edu.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about: (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, you may contact the Chair of the Institutional Review Board for the Protection of Human Subjects, at 303-871-4015 or by emailing IRBChair@du.edu, or you may contact the Office for Research Compliance by emailing IRBAdmin@du.edu, calling 303-871-4050 or in writing (University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121).

**Agreement to be in this study**

I have read this paper about the study or it was read to me. I understand the possible risks and benefits of this study. I know that being in this study is voluntary. I choose to be in this study: I can choose to print a copy of this consent form if I would like one for my records.

Please click here if you agree to participate in the study

Please click here if you do not agree to participate in the study - you will be taken to a separate page

## Appendix D

### Scales, Forms and Survey Items Phase 3

#### Final Items for AMS-65

1. A family member held my disability status against me
2. A stranger asked me personal questions based on my disability status
3. I experienced someone telling me my disability status is more or less severe than I think it is
4. I had to put forth a large amount of effort to ensure my accommodation needs were met
5. I have been told people with my disability status are burdensome
6. I heard someone say that no one would want my disability status
7. I observed people with my disability status held positions of power in large corporations REVERSED
8. I observed people with my disability status holding positions of political power REVERSED
9. I observed people with my disability status portrayed positively in a movie REVERSED
10. I observed people with my disability status portrayed positively in magazines REVERSED
11. I observed people with my disability status portrayed positively on the news REVERSED
12. I observed people with my disability status portrayed positively on TV REVERSED
13. I received sub-standard service based on my disability status
14. I was asked for proof of my disability status
15. I was asked personal questions about my disability status
16. I was asked to disclose my disability status in inappropriate settings
17. I was excluded based on my disability status
18. I was expected to educate others on my disability status
19. I was given unsolicited encouragement based on my disability status
20. I was invited to an event that was not accessible to me
21. I was labeled as "inspirational" for doing daily activities based on my disability status
22. I was offered help I did not request based on my disability status
23. I was told I talk about my disability status too much
24. I was told my experiences regarding my disability status are not real or valid
25. I was told my requested accommodations were "too much"
26. I was told that ableism is not real
27. My opinion was overlooked in a group discussion based on my disability status
28. My weaknesses were highlighted over my successes based on my disability status
29. Someone acted surprised about my professional success because of my disability status

30. Someone asked uninvited questions regarding my disability status
31. Someone assumed I am less competent than I am based on my disability status
32. Someone assumed I had a different disability status than I do
33. Someone assumed I was less educated than I am based on my disability status
34. Someone assumed I would be ashamed of my disability
35. Someone assumed I would choose to not have my disability status
36. Someone assumed that all challenges in my life are connected to my disability status
37. Someone assumed they knew more about my disability status than I do
38. Someone assumed what I was/was not capable of, based on my disability status
39. Someone changed how they spoke to me based on my disability status
40. Someone compared me to a famous person with the same disability status
41. Someone dismissed my experiences regarding my disability status
42. Someone expressed discomfort around interacting with me based on my disability status
43. Someone expressed pity at people who share my disability status
44. Someone expressed surprise at my happiness based on my disability status
45. Someone expressed surprise at my level of independence based on my disability status
46. Someone expressed surprise at my own disclosure of my disability status
47. Someone expressed surprise at my successes based on my disability status
48. Someone ignored me based on my disability status
49. Someone implied that I was lazy based on my disability status
50. Someone made a joke about my disability status
51. Someone made statements in front of me that indicated disability was a problem or a negative outcome
52. Someone minimized my experiences regarding my disability status
53. Someone offered unsolicited advice to me regarding my disability status
54. Someone offered unsolicited prayers for me based on my disability status
55. Someone praised a family member, friend or partner for maintaining a relationship with me based on my disability status
56. Someone said they didn't think of me as having my disability status
57. Someone spoke to my companions instead of me, based on my disability status
58. Someone told me I should stop talking about or stop making a big deal about disability
59. Someone told me I was brave for living with my disability status
60. Someone told me my disability status was something that should be changed or "fixed"
61. Someone told me they do not see "ability" or "disability"
62. Someone told me they would rather die than have my disability status
63. Someone treated my accommodations as a burden
64. Someone went out of their way to avoid me based on my disability status
65. Someone with a different disability status than mine tried to educate me about my own disability status

## **Mental Health Inventory – 18**

In the past month (four weeks):

1. Has your daily life been full of things that were interesting to you?
2. Did you feel depressed?
3. Have you felt loved and wanted?
4. Have you been a very nervous person?
5. Have you been in firm control of your behavior, thoughts, emotions and feelings?
6. Have you felt tense or high-strung?
7. Have you felt calm and peaceful?
8. Have you felt emotionally stable?
9. Have you felt downhearted and blue?
10. Were you able to relax without difficulty?
11. Have you felt restless, fidgety, or impatient?
12. Have you been moody, or brooded about things?
13. Have you felt cheerful, light-hearted?
14. Have you been low, or low in spirits?
15. Were you a happy person?
16. Did you feel you had nothing to look forward to?
17. Have you felt so down in the dumps that nothing could cheer you up?
18. Have you been anxious or worried?

### **Phase III Consent Form**

You are being asked to be in a research study. This form provides you with information about the study. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part.

#### **Invitation to participate in a research study**

You are invited to participate in a research study about ableist microaggressions and how they are related to mental health outcomes of people with disabilities.

You are being asked to be in this research study because you identify as being disabled, a person with disabilities, or someone that has one or more impairments/disabilities.

*Microaggressions are everyday interactions perpetuating inequalities & stereotypes against people who belong to marginalized communities.*

*Examples of ableist microaggressions may include telling someone that they speak very well for a Deaf person, asking everyone to stand/requiring people to stand in line (with the assumption that everyone can stand), making a joke about how fast someone can go in their wheelchair, or telling someone they are "lucky" that they are able to bring their service dog to work with them.*

#### **Description of subject involvement**

If you agree to be part of the research study, you will be asked to fill out a variety of questions that are part of an online survey regarding ableist microaggressions, information about your identities, and some measures of mental health.

This will take about 20-30 minutes of your time.

#### **Possible risks and discomforts**

There is little risk involved for survey participants. It is possible that you may experience emotional discomfort at discussing the ways in which ableism and ableist microaggressions are perpetuated in society. However, this is not unusual for people with disabilities and disability advocates, as they likely experience various permutations of ableism on a regular basis. Any discomfort for you should be short-term, given the short duration of the survey itself. In case of any emotional discomfort, the researcher will offer resources at the beginning and end of the survey for counseling and support if the participant would like access to them. All responses will be anonymous with no connection to any individual participant, and participants are not being asked to share confidential experiences, or sensitive information.

If you do experience a negative reaction to any of the questions, please seek out support at a local mental health and/or counseling center. You may also call the National Alliance

for Mental Health 1-800-950-NAMI (6264) or the Suicide and Crisis Hotline at 1-800-999-9999.

### **Possible benefits of the study**

This study is designed for the researcher to learn more about ableist microaggressions and how are related to the mental health outcomes of people with disabilities/disabled individuals.

If you agree to take part in this study, there will be no direct benefit to you. However, information gathered in this study may help researchers, educators and service providers better understand ableist microaggressions and their relationship with mental health, allowing them to provide better support and resources to disabled individuals.

### **Study compensation**

If you are interested, upon completion of the survey, you may choose to be entered into a drawing to win one of 10 \$50 Amazon gift cards. You will be taken to a separate survey so that your email address cannot be connected with your responses. There is no obligation to enter this drawing.

### **Study cost**

You will not be expected to pay any costs related to the study.

### **Confidentiality, Storage and future use of data**

To keep your information safe, the researchers will not collect any identifying information from you (such as your name, date of birth, zip code, IP address, etc.). Participants will each be assigned a number, and all data will be looked at all together (rather than on an individual basis).

The results from the research may be shared at a meeting. The results from the research may be in published articles. Your individual identity will be kept private when information is presented or published.

### **Voluntary Nature of the Study**

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### **Contact Information**

The researcher carrying out this study is Shanna K. Kattari, M.Ed. You may contact her to ask any questions you have now. If you have questions later, you may call Shanna at 720.273.3288 or email her at shanna.kattari@du.edu.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, you may contact the Chair of the Institutional Review Board for the Protection of Human Subjects, at 303-871-4015 or by emailing IRBChair@du.edu, or you may contact the Office for Research Compliance by emailing IRBAdmin@du.edu, calling 303-871-4050 or in writing (University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121).

### **Agreement to be in this study**

I have read this paper about the study or it was read to me. I understand the possible risks and benefits of this study. I know that being in this study is voluntary. I choose to be in this study: I can choose to print a copy of this consent form if I would like one for my records.

Please click here if you agree to participate in the study

Please click here if you do not agree to participate in the study - you will be taken to a separate page

## Appendix E

### Resources

#### Disability Resources in the US

##### *American Association of People with Disabilities*

[www.aapd.com](http://www.aapd.com)

The nation's largest disability rights organization promoting equal opportunity, economic power, independent living, and political participation for people with disabilities.

##### *Disability.gov*

[www.disability.gov](http://www.disability.gov)

Federal government website for comprehensive information on disability programs and services in communities nationwide.

##### *Disability Rights Advocates*

[www.dralegal.org](http://www.dralegal.org)

Works for the protection and advancement of civil rights for people with disabilities through research, education, and legal advocacy.

##### *Disabled American Veterans*

[www.dav.org](http://www.dav.org)

Providing free, professional assistance to veterans and their families in obtaining benefits and services earned through military service.

##### *Disabled Rights Education and Defense Fund*

[www.dredf.org](http://www.dredf.org)

The Disability Rights Education and Defense Fund is a leading national civil rights law and policy center working to advance the civil and human rights of people with disabilities through legal advocacy, training, education, and public policy and legislative development.

##### *Easter Seals Disability Services*

[www.easterseals.com](http://www.easterseals.com)

Easter Seals provides exceptional services, education, outreach, and advocacy so that people living with autism and other disabilities can live, learn, work and play in our communities. Easter Seals has been helping individuals with disabilities and special needs, and their families, live better lives for nearly 90 years. From child development centers to physical rehabilitation and job training for people with disabilities, Easter Seals offers a variety of services to help people with disabilities address life's challenges and achieve personal goals.

***Enable America***

[www.enableamerica.org](http://www.enableamerica.org)

Enable America is proud to support wounded warriors and disabled veterans in their transition to civilian society.

***Incight***

[www.incight.org](http://www.incight.org)

Non-profit organization which aims to eliminate stigma associated with disability and expand inclusion by helping students and jobseekers in particular.

***Kristin Brooks Hopeline (Toll-free: 1-800-442-4673)***

24 hours a day/7 days a week

[www.hopeline.com](http://www.hopeline.com)

There is hope and you can feel happy again! If you need to speak with someone right now call one of our hotlines.

***Specialty lines:***

- Spanish speaking suicide hotline (Toll-free: 1-800-784-2432)
- Vet2Vet: Veterans crisis hotline (Toll-free: 1-877-838-2838)
  - [www.veteranscall.us](http://www.veteranscall.us)
- Graduate student hotline (Toll-free: 1-800-472-3457)
  - [www.hopeline.com/gradhelp.html](http://www.hopeline.com/gradhelp.html)
- Mothers' post-partum depression hotline (Toll-free: 1-800-773-6667)
- Youth America hotline (Toll-free: 1-877-968-8454)
  - [www.youthline.us](http://www.youthline.us)

***Job Accommodation Network***

[askjan.org](http://askjan.org)

If you have a question about workplace accommodation or the Americans with Disabilities Act (ADA) and related legislation, we can help.

***National Disability Rights Network [www.ndrn.org](http://www.ndrn.org)***

NDRN advocates for the enactment and vigorous enforcement of laws protecting civil and human rights of people with disabilities.

***National Health Law Program***

[www.healthlaw.org](http://www.healthlaw.org)

The National Health Law Program protects and advances the health rights of low income and underserved individuals. The oldest non-profit of its kind, NHeLP advocates, educates and litigates at the federal and state level.

***National Organization on Disability***

[www.nod.org](http://www.nod.org)

The National Organization on Disability (NOD) is a private, non-profit organization that promotes the full participation of America's 56 million people

with disabilities in all aspects of life. Today, NOD focuses on increasing employment opportunities for the 79 percent of working-age Americans with disabilities who are not employed.

***National Suicide Prevention Lifeline (Toll-free: 1-800-273-8255; TTY: 1-800-799-4889)***

24 hours a day/7 days a week

[www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)

- Deaf, hard of hearing, and speech impaired services available.

The National Suicide Prevention Lifeline is a 24-hour, toll-free, confidential suicide prevention hotline available to anyone in suicidal crisis or emotional distress. The Lifeline's national network of local crisis centers provide crisis counseling and mental health referrals day and night. There are live online chat services also available.

***Specialty Lines:***

- Veterans Crisis Line (Toll-free: 1-800-273-8255, Press 1; Text: 838255)
  - [www.veteranscrisisline.net](http://www.veteranscrisisline.net)

***TASH: Equity, Opportunity and Inclusion for People with Disabilities***

[www.tash.org](http://www.tash.org)

The mission of TASH is to promote the full inclusion and participation of children and adults with significant disabilities in every aspect of their community, and to eliminate the social injustices that diminish human rights. These things are accomplished through collaboration among self-advocates, families, professionals, policy-makers, advocates and many others who seek to promote equity, opportunity and inclusion.

***Through the Looking Glass***

[www.lookingglass.org](http://www.lookingglass.org)

Through the Looking Glass is a nationally recognized center that has pioneered research, training, and services for families in which a child, parent or grandparent has a disability or medical issue.