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Developing and Testing a Model of Discrimination, Internalized Oppression, Mental Health, and Suicidality in Disabled Transgender and Gender Non-binary (TGNB) Individuals

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Developing and Testing a Model of Discrimination, Internalized Oppression, Mental Health, and Suicidality in Disabled Transgender and Gender Nonbinary (TGNB) Individuals

A thesis defense submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

Steph L. Cull

Virginia Commonwealth University, April 2024

Committee Co-Chairs:

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Abstract

Developing and Testing a Model of Discrimination, Internalized Oppression, Mental Health, and Suicidality in Disabled TGNB Individuals

By Steph L. Cull

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

Virginia Commonwealth University, 2024

Transgender and gender nonbinary (TGNB) individuals experience high rates of discrimination and microaggressions that can lead to internalized cisgenderism and adverse mental health outcomes such as depression, anxiety, and suicidality. Individuals with disabilities similarly experience high rates of discrimination and microaggressions that can lead to internalized ableism and increased adverse mental health outcomes. Although both of these populations have been researched separately, very little extant research has explored the intersections of disabled and TGNB identities. The purpose of this study was to explore a hypothesized pathway leading from microaggressions through internalized oppression and mental health to suicidal ideation within a sample of disabled TGNB individuals in an effort to understand how these variables affect suicidality within this multiply marginalized community. The study performed a multiple mediation path analysis using AMOS to identify direct and indirect effects of each aspect of the hypothesized path model. The findings illuminated the importance of exploring the intersections of multiply marginalized identities. The sample showed increased rates of adverse mental health symptoms (depression, anxiety, and suicidality) as well as correlations between microaggressions and internalized oppression. Indirect effects were observed between disability

microaggressions and mental health symptoms as well as disability microaggressions and past-month suicidal ideation, and between internalized ableism and past-month suicidal ideation. These findings point to the necessity of exploring the intersections of multiply marginalized identities.

Vita

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EDUCATION

2022-2024 M.S., Psychology, Virginia Commonwealth University

Anticipated graduation May 11, 2024

Thesis: Developing and Testing a Model of Discrimination, Internalized Oppression, Mental Health, and Suicidality in Disabled Transgender and Gender Nonbinary Individuals

2019-2022 B.S., Psychology, *summa cum laude,* Virginia Commonwealth University

Honors in Psychology Thesis: "The Impact of Covid-19 Lockdowns on the Mental Health of LGBTQ+ College Students"

B.S., Sociology, *summa cum laude,* Virginia Commonwealth University

Minor, LGBT & Queer Studies, Virginia Commonwealth University

VCU Honors College Graduate

2016-2019 A.S., Science with a Science Specialization, *summa cum laude,* Reynolds Community College

A.S., Social Science, *summa cum laude,* Reynolds Community College

Reynolds Designated Honors Scholar

2011-2013 A.S., Science and General Education, *summa cum laude,* Piedmont Virginia Community College

1997 General Education Diploma, Hopewell, Virginia

ELLOWSHIPS

$11,357 August 2020-May 2022

Virginia Commonwealth University Initiative to Maximize Student Development (IMSD).

Research fellowship.

$3,200 May 2020-August 2020

Virginia Commonwealth University Guided Research Experiences (GREAT). Research fellowship.

RESEARCH EXPERIENCE

Developing and Testing a Model of Discrimination, Internalized Oppression, Mental Health, and Suicidality in Disabled Transgender and Gender Nonconforming Individuals. Thesis, Virginia Commonwealth University, Fall 2023/Spring 2024.

Research Focus: Developing a model to explore relationships between discrimination, internalized oppression, mental health, and suicide in a sample of disabled TGNB adults.

Duties: Creation of a new survey, completion of an IRB protocol, extensive literature review, writing a thesis proposal, presenting the thesis proposal, collecting data, analyzing data, writing results, creating final thesis, presenting final thesis.

Supervisors: Dr. Eric Benotsch and Dr. Paul Perrin

Thesis Committee Members: Dr. Eric Benotsch, Dr. Paul Perrin, Dr. Kevin Allison, Dr. B. Ethan Coston.

Correlates of Religiosity and Suicidality Among US Transgender Adults. Research Assistant, Virginia Commonwealth University IMSD Program, Summer/Fall 2021.

Research Focus: Examining possible correlations between religiosity and suicidality among transgender adults in the United States using the National Transgender Survey.

Duties: Extensive review of current research on the topic, literature review preparation and presentation, creating an e-poster presentation for ABRCMS conference, presenting research findings.

Supervisor: Dr. B. Ethan M. Coston

The Impact of Minority Stress on LGBTQ+ College Student Complete Mental Health. Research Assistant, Virginia Commonwealth University VCU GREAT program, Summer/Fall 2020.

Research Focus: Examining possible correlations between flourishing mental health and alcohol use/abuse in LGBTQ+ college students.

Duties: Conducting secondary data analysis using SPSS software, literature review, research paper preparation, presentation preparation, presenting research.

Supervisor: Dr. B. Ethan M. Coston

Internalizing Symptoms and Alcohol Use and Abuse Research Assistant, Virginia Commonwealth University, Spring 2020.

Research focus: Effects of anxiety and depression on alcohol consumption among college students.

Duties: Literature review, data analysis, presentation preparation

Supervisor: Dr. Amy Adkins

Degrees of Distress: An Examination of Mental Health and Community College Students Research Assistant, J Sergeant Reynolds Community College, Spring 2018.

Research focus: Effects of mental health and substance abuse issues on community college students.

Duties: Survey design, data collection and analysis, literature review, research paper preparation, presentation preparation, present findings at Faculty Research

Symposium.
Supervisor: Dr. Gayle D'Andrea

TEACHING EXPERIENCE

2020-2022 Undergraduate Teaching Assistant (Learning and Cognition)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Hold regular office hours, attend course lectures to assist students, communicate with students regarding confusing course concepts, aid in examination prep for students

2022 Teaching Assistant (Introduction to Psychology)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Grade assignments, coordinate and assist students with online education platforms, communicate with students about assignments, grading, accommodations, and make up exams, proctor examinations.

Spring 2023 Teaching Assistant (Learning and Cognition)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Hold regular office hours to assist students, grade assistants, communicate with students regarding grades and course concepts, maintain grades from online education platforms, attend course lectures to assist students, help proctor examinations

Summer 2023 Teaching Assistant (Research Methods)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Hold regular office hours, grade assignments, communicate with students, offer students constructive critiques of scientific writing

Fall 2023 Teaching Assistant (Psychology of Sensation and Perception)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Hold regular office hours to assist students, grade assistants, communicate with students regarding grades and course concepts, maintain grades from online education platforms, attend course lectures to assist students, help proctor examinations

Spring 2024 Teaching Assistant (Research Methods)

Virginia Commonwealth University, Richmond, VA

Responsibilities: Hold office hours, grade assignments, communicate with students. Offer students constructive critiques to assist in their scientific writing.

PROFESSIONAL AND WORK EXPERIENCE

Sociology Club, Virginia Commonwealth University, President, 2021-2022 academic year, Vice President 2022-2023, 2023-2024 academic years.

Duties: Maintain effective operations of student organization, communicate effectively with students and faculty, organize and implement service-learning projects for members, organize and implement membership meetings.

Phi Kappa Phi, Virginia Commonwealth University, Vice President for Graduate Students, 20222-2023 & 2023-2024 academic years.

Duties: Help coordinate service projects, communicate with student members and other board members, attend initiation ceremony, assist in hosting annual eat and greet event for members.

Alpha Kappa Delta Sociology Honor Society, Virginia Commonwealth University

secretary/treasurer 2021-2022 academic year.

Duties: Take meeting notes, create and maintain organization annual budget, organize service-learning events for members, communicate with members and non-member sociology students, work effectively with university staff and faculty.

Reynolds Community College Career and Transfer Center, Work Study, Jan 2019-May 2019
Duties: Greet students and determine the nature and purpose of their visit, and direct or escort them to the correct department or person, utilize computers for various applications, such as database management or word processing, schedule appointments for career and transfer specialists, other administrative tasks as assigned by supervisors

Reynolds Community College Food Pantry Implementation Team, Member, Jan 2019-May 2019
Duties: Create, maintain, and enter information into databases, coordinate monthly Feed More food distributions, maintain email, volunteer, and food recipient databases, attend

weekly planning sessions, coordinate multiple tasks during hectic, fast-paced distributions, collect and report distribution data to Feed More, coordinate volunteers for monthly distributions

Phi Theta Kappa Honor Society, Reynolds Community College Vice President Alpha Iota Beta Chapter, May 2018-April 2019

Duties: Work effectively with Google Drive and Microsoft Office Suites Communicate effectively with around 500 members to announce events, service projects, and meetings, coordinate and execute workshops, service projects, social events, and membership meetings for Phi Theta Kappa members, communicate effectively verbally and in writing with officers, advisors, members, and college administrators, interpret and follow oral and written instructions, policies, and procedures, provide a high level of customer service at Phi Theta Kappa events and tables, establish and lead Phi Theta Kappa sub-committee for the commit to complete initiative, promote Phi Theta Kappa and college completion at PTK and college events.

Reynolds Community College Spectrum LGBTQ+ Student Organization, Vice President, September 2017-May 2019.

Duties: Work effectively with other organization officers as a team. Communicate effectively with organization members via bi-weekly emails. Organization and run service events for the organization. Plan and lead weekly organization meetings. Organize and lead recruitment events. Help organize the Masquerade Ball (Queer Prom) for Spectrum members as well as the broader Reynolds community. Plan, organize, and help lead fundraising events for the organization. Communicate and work effectively with Reynolds staff and administration to plan and hold organization events.

PRESENTATIONS

Cull, S., Wall, C.S.J., Duffy, C., Otieno, J., O'Neil, M., Cardinale-McGinnis, G., Benotsch, E. (2024). Social support only goes so far: Examining the intersections of disability, gender identity, and psychological distress. Poster presented at the 45th annual meeting of the Society of Behavioral Medicine, Philadelphia, PA.

Wall, C.S.J., McLamore, Q., Duffy, C., **Cull, S.,** Otieno, J., O'Neill, M. †, Cardinale-McGinnis, G.†, & Benotsch, E. G. (March 2024). A pandemic of misinformation: Examining susceptibility to misinformation about trans health in a politically diverse sample. Poster presented at the annual meeting of the Society of Behavioral Medicine, Philadelphia, PA, USA.

Benotsch, E.G., Wall, C.S.J., Smout, S.A., **Cull, S**. **L.** , Carrico, M., O'Neill, M. (2023). Cannabis vaping among transgender and gender diverse adults, polysubstance use, and dependence. Poster to be presented at the 131st annual meeting of the American Psychological Association, Washington, DC.

Wall, C.S.J., Patev, A.J., Smout, S.A., **Cull, S.L**., O'Neill, M., Carrico, .M.., Benotsch, E.G. (2023). "I had to 'DIY' for most of my transition": Experiences and barriers faced by transgender individuals in accessing regular healthcare. Poster to be presented at the 44th annual meeting of the Society of Behavioral Medicine, Phoenix, AZ.

Wall, C.S.J., Patev, A.J., Smout, S.A., **Cull, S.L**., O'Neill, M., Carrieo, M.., Benotsch, E.G. (2023). Beyond transphobia: Political ideology predicts support for transgender-inclusive healthcare policies. Poster to be presented at the 44th annual meeting of the Society of Behavioral Medicine, Phoenix, AZ.

Cull, S. L. (2021), November). *Correlates of Religiosity and Suicidality Among US Transgender Adults.* Annual Biomedical Research Conference for Minority Students (ABRCMS), Fall 2021. Virtual Experience.

Cull, S. L. (2020, November). *The Impact of Minority Stress on LGBTQ+ College Student Complete Mental Health.* Annual Biomedical Research Conference for Minority Students (ABRCMS), Fall 2020. Virtual Experience.

Cull, S. L. , O'Hara, R., & Patel, K. (2020, April). *Internalizing Symptoms and Alcohol Use.* Spit for Science Symposium. Richmond, VA.

Cull, S. **L.** (2019) *Research to Results: Implementing a Food Pantry at a Community College*. An original presentation made at the Virginias Collegiate Honors Council 2019 Spring Conference, James Madison University, Harrisonburg, VA.

Committees and Professional Organizations

Committee for the Promotion of Equity, Diversity, and Inclusion (PrEDI), 2023-20-24 academic year, Virginia Commonwealth University Psychology Department.

Sociology Diversity. Equity, and Diversity Committee, 2023-2024 academic year, Virginia Commonwealth University, Sociology Department.

Graduate Academic Committee Student Representative, spring 2024-ongoing, Virginia Commonwealth University, Psychology Department.

Society of Behavioral Medicine Health Equity SIG Student Liaison, spring 2024-2025.

Society of Behavioral Medicine, student member, 2022-present.

American Psychological Association, student member, 2023-present.

MANUSCRIPTS IN PREPARATION

Note: All manuscripts listed are at least 50% complete and data collection has ended.

Cull, S. L., Perrin, P. (20203). *Correlates of religiosity, religious rejection, mental health, and suicidal ideation in TGNC adults.* (intent to publish summer 2024).

Perrin, P. B., Christ, B., Vargas, T., Dini, M. E., Ertman, B., **Cull, S. L**., Rivera, D., Andrews, E., Mona, L., Gates, A., Klyce, D. W. (in preparation). The Internalized Ableism Inventory (IAI): Scale development using a hybrid artificial intelligence and community-based participatory research design. (intent to publish summer 2024).

Invited Presentations

1. **Cull, S. L.** (2023). Alumni Speaker for the transfer student orientation, Office of Admissions, Virginia Commonwealth University.
2. **Cull, S. L.** (2023). Camp Qmunity, Virginia Commonwealth University, invited panelist.
3. **Cull, S. L.** (2023). Reynolds Community College Career Panel Series. Invited Alumni Presenter.

4. **Cull, S. L.** (2024). Career Readiness Series, Virginia Commonwealth University, invited panelist.

ACCOLADES

Pi Gamma Mu Honor Society for Social Sciences (Virginia Commonwealth University)—November 2023

Phi Kappa Phi Interdisciplinary Honor Society (Virginia Commonwealth University)—November 2021

Alpha Alpha Alpha (Delta Theta Chapter) Honor Society for first-generation college students (Virginia Commonwealth University) - October 2021

Alpha Sigma Lambda International Honor Society for Adult Learners - September 2021

Virginia Association of Educational Opportunity Program Personnel (VAEOPP) TRIO Student Support Services 2021 Scholarship ($500)

Alpha Kappa Delta International Sociology Honor Society - May 2021

Tau Sigma International Honor Society for Transfer Students April 2020

Designated Honors Scholar in Social Science (Reynolds Community College) - May 2019

Designated Honors Scholar in Science with a science specialization (Reynolds Community College) - May 2019

Phi Theta Kappa Virginia All-Academic Team Scholarship ($500) - May 2019

Honors Bradley Family Scholarship (Virginia Commonwealth University, $500) - May 2019

Phi Theta Kappa International Honor Society - November 2017

Introduction

Intersectionality and Minority Stress Theories

Intersectionality is a theoretical framework first developed to address issues in the legal system. Kimberlé Crenshaw (1989) reviewed a legal case in which a Black woman sued her employer for their lack of offering promotions to Black women. The judge in the case (*DeGraffenreid v General Motors*) ruled in favor of the defendant, citing the fact that both Black people and women had been promoted in the company. What the judge failed to recognize, according to Crenshaw, is that all of the Black persons who had been promoted were men and all of the women who had been promoted were White. Crenshaw viewed this as an injustice and developed the theory of intersectionality to explain how people of multiply marginalized identities often have the intersections of those identities overlooked (Crenshaw, 1989). The name "intersectionality" was chosen as Crenshaw believed that one could view marginalized identities as a crossroads where two (or more) intersections meet. DeGraffenreid, Crenshaw believed, was failed by the justice system because the judge in the case did not recognize her intersecting identities of being both a woman (a marginalized identity) and a Black person (a second marginalized identity). Crenshaw believed that, far too often, injustices caused by failures to recognize intersecting marginalized identities occur to people encompassing multiply marginalized identities.

Since Crenshaw's original development of intersectionality theory within the legal sphere, scholars have widely adopted it in many other disciplines. The theoretical framework of intersectionality may help to explain how the intersection of multiple marginalized identities can interact on an individual level to adversely impact numerous health outcomes (Henderson, 2022) including suicidal ideation and depression (Meyer, 2003; Shepherd, et al., 2023). In addition to

intersectionality theory, minority stress theory (Meyer, 1995. 2003) explores how social marginalization can contribute to adverse psychological outcomes (Meyer, 2003; Meyer et al., 2021). Minority stress theory was first developed by Ilan Meyer to explain how various types of stressors (proximal and distal) impact the mental health of lesbians, gay men, and bisexual people (Meyer et al., 1995). Since its development, minority stress theory has been expanded to incorporate other minoritized identities, including racial/ethnic groups, gender minorities, and more. According to the Institute of Medicine, intersectionality theory and minority stress theory can be complementary theories in exploring health disparities faced by transgender and gender non-binary (TGNB) persons (Henderson, 2022; Institute of Medicine, 2011). Although experiences of the TGNB population have been explored through the framework of intersectionality, specifically utilizing minority stress theory to do so, minority stress theory has only recently been applied to the disabled community (Conover & Israel, 2019; Dispenza et al., 2019; Dispenza, 2023; Lund, 2021). This may be due to our culture's tendency to view disability less as a social categorization and more as a health issue, otherwise known as the biomedical model (Macdonald et al., 2023). Disability status, however, is very much a socially marginalized category that should be explored via intersectionality frameworks. Museus and Griffin (2011) describe four ways that intersectional analysis can influence research in that they: (a) more accurately reflect diversity; (b) facilitate the excavation of voices and realities at the margins; (c) promote a greater understanding of how converging identities contribute to inequality; and (d) avoid simultaneous advancement and perpetuation of inequality. This study aims to explore the associations among discrimination (microaggressions), internalized oppression, and mental health in a sample of multiply marginalized adults who identify as both disabled and TGNB.

Disabled TGNB Individuals

Although intersecting identities are important to explore, traditional scientific research is lacking when it comes to many marginalized groups. In an extensive review of peer reviewed articles, the author found but two research studies specifically on TGNB individuals with disabilities. In one study conducted in Sweden, Zeluf et al. (2016) explored health and disability in a sample (n=796) of transgender (43%) and gender nonbinary (44%) Swedes between the ages of 15-94. Around 53% of the respondents in their survey reported having either a physical or cognitive disability that directly impacted their daily life. The researchers found several predictors of greater self-reported disability, lower quality of life, and worse self-reported overall health, including past experiences of transphobia in healthcare settings and lack of legal gender recognition. Another study by Coston et al., (2022) analyzed data from the US Transgender Survey (N=27, 715) to explore the experiences of disabled TGNB college students who engage in sex work. In this study, they found that 49.2% of TGNB college students from the USTS report having a disability; 40.2% of these disabilities involve cognitive impairment and could be considered to be "invisible" (Coston et al., 2022). Further, this same study found that 64% of disabled TGNB college students in their sample met the criteria for 'serious psychological distress' and 90% reported experiencing suicidal ideation within their lifetime (Coston et al., 2022).

Although the research specifically on TGNB individuals with disabilities is lacking, several studies have found that, when compared to cisgender men and women, TGNB individuals are at higher risk of having chronic health conditions, having physical and/or cognitive disabilities, and experiencing poorer quality of life (Henderson, 2022; James et al., 2016; Newcomb et al., 2020).

Further, a small but budding research area has examined the experiences more broadly of the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community with disabilities. For example, Lund et al. (2019) discussed the proximal and distal stressors of minority stress theory in relation to individuals with disabilities, especially those with multiple minority identities. As Lund writes, "When addressing minority stressors in people with multiple marginalized identities, it is critical that researchers and practitioners alike address minority stressors originating from multiple aspects of identity as well as the intersections of those identities" (p. 187). In a study of over 7,000 high school students, McGee (2014) found that 61.4% of sexual minority youth with disabilities reported having experienced peer victimization within the last 30 days. Conover and Israel (2019) conducted one of the first large-scale quantitative studies specifically on disabled sexual minorities (n = 192), finding that ableist and heterosexist microaggressions were both related to greater depressive symptoms. Finally, Dispenza (2023) conducted a study of 160 sexual minority people with chronic illnesses and disabilities and found that proximal minority stressors were associated with poorer psychosocial adaptation and quality of life. Despite these studies, Coston et al. (2023) is the only known study specifically on TGNB individuals with disabilities. As a result, the rest of this introduction will explore the research foci of the current study with both the TGNB community as well as the disabled community separately in an attempt to create a fuller picture of the needs of this multiply marginalized community.

Suicide and the TGNB Community

The prevalence of suicidality, including suicidal ideation and suicide attempts, within the TGNB population is widely accepted to be greater than in the cisgender population. Numerous studies have reported increased rates of suicidal ideation and attempts (Aboussouan, 2022;

Cramer et al., 2022; Hill et al., 2023; Pellicane & Ciesla, 2022; Stewart et al., 2023; Woolford-Clevenger et al., 2021; Yockey et al., 2022) within this population when compared to both the cisgender population and the broader general population. A National study of over 27,000 TGNB adults (2015 US National Transgender Survey; UTS) found that 40% of participants had at least one suicide attempt in their lifetime and that 82% of the sample reported having suicidal thoughts at some point in their lifetime; 48% reported suicidal thoughts within the past year and 24% reported planning for suicide within the past year (James et al., 2016). These findings are not limited to just the United States. In an Australian study, Hill et al. (2023) found 62.4% of a transgender sample reported experiencing suicidal ideation while 9.5% reported having attempted suicide in the past year. Aboussouan et al. (2022) report that between 28-41% of TGNB individuals report at least one lifetime suicide attempt and that between 45-54% report lifetime suicidal ideation. To put this in context, lifetime rates of suicide attempts within the general population are around 2.7% and lifetime rates of suicidal ideation within the general population are around 9.2% (Aboussouan et al., 2022). In a meta-analysis and systematic review of worldwide prevalence rates, Kohnepoushi et al. (2023) found lifetime rates of suicidal thoughts within the TGNB population to be around 50% and lifetime suicide attempts to be around 29%.

Multiple hypotheses have been examined for possible risk factors for these increased rates of suicidality within the TGNB population. Some of these risk factors are: familial rejection, discrimination in the workplace and/or healthcare settings, childhood bias-based discrimination, internalized stigma or transphobia, psychological pain, psychiatric disorder diagnosis, history of abuse (both sexual and/or physical), and experiences of discrimination (Cramer et al., 2022); experiences of homelessness or housing insecurity, low income,

intersections with sexual minority identity, and living with a disability (Hill et al., 2023); increased rates of anti-transgender stigma, having high anxiety, having experienced any form of discrimination or harassment, and experiencing transgender-related violence (Yockey et al., 2023).

Suicide and the Disability Community

Although less studied than suicidality in the TGNB population, suicidality in individuals who identify as disabled is essential to explore. The CDC states that 26.7% of US adults meet the definition of functional disability, defined by the United States Department of Health and Human Services as "a condition of the body or mind (impairment) that makes it more difficult for the person to do certain activities (activity limitation) and interact with the world around them (participation restrictions)" (Marlow, 2022). People who identify as disabled experience elevated rates of suicidality compared to those who do not identify as disabled (Khazem et al., 2023; Lutz & Fiske, 2018; Marlow et al., 2022). In a study of individuals with disabilities in the United States, Marlow et al. (2021) found that suicide attempts were 2.5 times more likely among individuals with disabilities and 3 times more likely among those who had 2 or more significant limitations.

Rates of suicidality can vary by disability type. Individuals who have some type of mobility-related disability may be at higher risk of suicidal ideation and be up to eight times more likely to have attempted suicide when compared to those without a disability (Khazem et al., 2023), while those with a visual disability are about three times more likely to have attempted suicide (Khazem & Anestis, 2019; Khazem et al., 2023). In addition, individuals with disabilities related to vision had significantly greater odds of past-year suicidal ideation, suicidal

planning, and suicide attempts when compared to those without disabilities (Khazem et al., 2023).

The primary theoretical model used to explore suicide risk within the disabled community is the Interpersonal-Psychological Theory of Suicide (ITS; Joiner, 2005; Van Orden et al., 2010), a theory based within the ideation to action framework of suicide (Khazem & Anestis, 2019). The ITS offers three factors for increased suicidality in disabled populations, all of which relate to beliefs associated with interpersonal relationships: thwarted belongingness, hopelessness, and perceived burdensomeness (Khazem et al., 2023; Shepherd et al., 2023). A meta-analysis by Chu et al. (2017) found that thwarted belongingness and perceived burdensomeness were associated with both suicidal ideation and attempted suicide. Another possible risk factor for increased suicidality within disabled populations is experiences of chronic pain. Fishbain, Lewis, and Gao (2014), conducting a narrative review, identified associations between chronic pain and suicidal ideation as well as between chronic pain and attempted suicide. Similarly, Lutz and Fiske (2018) found an association between functional disability and suicidal ideation as well as attempted suicide and concluded that depression plays a role in these relationships, most likely as a mediator.

Discrimination and Microaggressions in TGNB Individuals

TGNB individuals experience disproportionate amounts of discrimination compared to their cisgender counterparts. Evidence supporting the increased rates of discrimination, stigmatization, violence, and microaggressions within TGNB communities abounds (Austin & Goodman, 2017; James et al., 2016; Kohnepoushi et al., 2023; Meyer et al., 2017; Newcomb et al., 2020; Pellicane & Ciesla, 2022; Scott & Cornelius-White, 2022; Zeluf et al., 2016). Discrimination, stigmatization, victimization, and microaggressions take many forms. Fiani et al.

(2017) noted that TGNB individuals are more likely to encounter the criminal justice system and to be incarcerated after these encounters; these encounters are also often marked by increased maltreatment, microaggressions, and victimization. Rates of incarceration also appear to be higher among TGNB individuals, especially for transgender persons of color (Fiani et al., 2017). TGNB individuals also experience other forms of discrimination/stigmatization, including in housing and employment (Brennan et al., 2017; Pellicane & Ciesla, 2022); rejection from familial and/or friend groups (Brennan et al., 2017; Hill et al., 2023); social exclusion and gender-based physical, verbal, and/or sexual violence (Brennan et al., 2017; Hill et al., 2023); institutional discrimination, and discrimination in healthcare and other public settings, such as restaurants or public transportation (Brennan et al., 2017). Rates of these various forms of discrimination vary by type (microaggressions versus direct violence) and by study. Newcomb et al. (2020) cite that between 50-90% of TGNB individuals will experience microaggressions such as disrespect or verbal harassment at some point in their lifetime while at least a quarter will experience physical violence. The US Transgender Survey (James et al., 2016), which had a sample size of over 27,000 TGNB participants, found that 77% of respondents reported having experiences of verbal or physical abuse in school settings, while 50% reported being rejected by at least one family member; 46% of respondents reported being verbally harassed within the last twelve months, while 47% reported sexual assault at some point during their lifetime (James et al., 2016). Other studies have found similarly high rates. Brennan et al. (2017) cite rates of lifetime victimization or harassment between 60-69%. Likewise, the number of hate crimes against TGNB individuals appears to be rising (Yockey et al., 2022), as do the rates of violent deaths in TGNB communities (Scott & Cornelius-White, 2022). These experiences of discrimination may lead to adverse physical and mental health outcomes within the TGNB

community. Minority Stress theory (Meyer, 1995, 2003) states that the discriminatory experiences faced by people with marginalized identities, such as TGNB individuals, can lead to health disparities including increased rates of depression, anxiety, suicidality (including ideation and attempts), and other psychological distress (Meyer, 1995, 2003; Pellicane & Ciesla, 2022). These increased rates of stigmatization and the subsequent increase in adverse mental health outcomes led the National Institutes of Health to declare TGNB individuals to be a health disparity population in 2016 (National Institute on Minority Health Disparities, 2016; Velente et al., 2020).

Discrimination and Microaggressions in Disabled Individuals

Discrimination in the disabled community may be explored in the form of implicit and explicit bias. Implicit attitudes or biases are those in which an individual may not realize their true bias and may, therefore, be unwilling or unable to challenge those beliefs. Implicit bias often manifests itself in microaggressions. Explicit bias, on the other hand, includes attitudes of superiority that the individual who possesses them is aware of and may manifest in outright discrimination or abuse. Although the family members of those with disabilities may think that they have no biases toward people with disabilities, many still endorse negative implicit biases (Right, 2021). Implicit bias may also manifest in healthcare settings; almost 85% of healthcare providers show implicit bias toward disabled people (Right, 2021). Although implicit bias is more prevalent, there is one area in which explicit bias toward disabled people abounds: in the workforce. People with disabilities may be denied workplace accommodations, have lower pay, face harassment, and be less likely to be hired (Right, 2021). Many individuals with disabilities also face institutional forms of discrimination, specifically within infrastructure. As Danso et al. (2019) write, “Limitations in accessibility to public spaces and transportation systems stand out

as the most solid physical exclusions. For many people with disabilities, life is severely limited by barriers in the transportation environment" (p. 185). Danso et al. (2019) estimate that as many as 500,000 individuals with disabilities in the US never leave their homes due to issues related to transportation and infrastructure. Disabled people are also disproportionately involved in use-of-force incidents or police killings (Morgan, 2021). Most likely, the most definitive cause of these issues is ableism. Dunn (2019) defines ableism as, "prejudicial attitudes and discriminatory behaviors directed at disabled persons by nondisabled individuals" (p. 666). Ableism can lead to microaggressions, such as pity or "talking down" to people with disabilities as well as to aggression and violence towards people with disabilities (Jóhannsdóttir et al., 2022).

Internalized Cisgenderism/Transphobia

Cisgenderism or transphobia is rooted in the belief that a cisgender identity (those whose gender identity aligns with the sex that they were assigned at birth) is superior to TGNB identities. As Hill and Willoughby (2005) conceptualize it, transphobia is an irrational fear or disgust for individuals whose gender identity does not conform to society's gender expectations. When TGNB individuals take these transphobic ideologies and turn these beliefs upon themselves, it is known as internalized cisgenderism or internalized transphobia. Many TGNB individuals, after being exposed to transphobia and other negative societal attitudes will begin to internalize those attitudes, which can lead to negative self-perception, emotional distress, depressive symptomology, poorer coping skills, suicidality, and other adverse mental health outcomes (Austin & Goodman, 2017; Pellicane & Ciesla, 2022; Staples et al., 2018). In Meyer's (2003) expanded minority stress theory, he organizes the stressors faced by minoritized populations into three distinct types: distal stressors (e.g., external environmental stressors), interactive proximal stressors (e.g., awareness and expectation of environmental stressors), and

internalized proximal stressors (e.g., internalized negative attitudes, such as internalized transphobia). The Gender Minority Stress and Resilience model (Testa et al., 2015) is an extension of Meyer's minority stress theory and states that internalized transphobia (ITP) is a particular form of proximal minority stress that occurs when transgender individuals are repeatedly exposed to societal stigmatization against transgender people and then begin to develop negative self-perceptions. Internalized transphobia has been associated with adverse mental health outcomes (Austin & Goodman, 2017; Brennan et al., 2017; Lee et al., 2020; Scandurra et al., 2018; Staples et al., 2018). There may be a correlation between experiences of discrimination and increased internalized transphobia. Some studies indicate that individuals who experience distal stressors, such as victimization, stigmatization, and rejection may be more likely to internalize that stigma (Austin & Goodman, 2017).

Internalized Ableism

Less studied than internalized transphobia is internalized ableism, which occurs when a person with a disability (or disabilities) internalizes the ableist attitudes and systems of the society around them. Campbell et al. (2008, 2009) state that there are two components of the internalization of ableist attitudes: disabled people distancing themselves from one another and disabled people taking on the beliefs of ableist norms. Similar to internalized transphobia/cisgenderism, people with disabilities who experience increased microaggressions may be more likely to internalize ableist mindsets (Jóhannsdóttir et al., 2022). Jóhannsdóttir et al. (2022) argue that internalized oppression often operates outside people's conscious awareness and control but nonetheless influences how people from minority groups feel about themselves and their group.

Mental Health in TGNB individuals

When compared to cisgender populations, TGNB individuals have elevated risk for numerous adverse mental health outcomes, including depression (Freese et al., 2018; James et al., 2016; Newcomb et a., 2020; Pellicane & Ciesla, 2022; Prasath et al., 2023; Scott & Cornelius, 2022; Zeluf et al., 2016), substance use (Pellicane & Ciesla, 2021), anxiety (Freese et al., 2018; Prasath et al., 2023; Scott & Cornelius, 2022; Zeluf et al., 2016), and suicidality (Aboussouan, 2022; Cramer et al., 2022;Hill et al., 2023; Pellicane & Ciesla, 2022; Stewart et al., 2023; Woolford-Clevenger et al., 2021; Yockey et al., 2022). The U.S. Transgender Survey (James et al., 2016) found that 39% of respondents endorsed serious psychological distress in the past month, a rate almost eight times that of the general population. Valente et al. (2020) found that over a third of TGNB participants had anxiety and depressive symptomology above the 90th percentile of community norms in the U.S. A study of participants in the United Kingdom found depression rates of 55% and anxiety rates of 38%, far surpassing those seen in the general population (Lloyd & Bond, 2019). Rates of mental health disparities may vary *within* the TGNB community as well; the U.S. Transgender Survey (James et al., 2016) found higher rates of psychological distress within non-binary respondents compared to transgender respondents and higher rates of lifetime suicide attempts among transgender men, while other studies have found higher rates of anxiety and depression among nonbinary participants than among transgender men and transgender women (Newcomb, 2020).

The prevailing theory utilized to explain the heightened mental health adversities within TGNB samples is minority stress theory (Meyer, 2003, 2017, 2021) which posits that the extra stressors faced by minorities, such as TGNB populations, leads to adverse mental health outcomes within these minoritized populations (Scandura et al., 2020). Empirical evidence has shown links between stigmatization and/or discrimination faced by TGNB populations and

adverse mental health outcomes (Brennan et al., 2017; Fiani et al., 2017; Freese et al., 2018; Scandurra et al., 2020).

Mental Health in Disabled Individuals

Increased rates of adverse mental health outcomes have also been noted in samples of people with disabilities (Marlow et al., 2022). These adverse outcomes include depression (Jung et al., 2021; Khazem et al., 2023; Morgan, 2021), anxiety and posttraumatic stress disorder (Khazem et al., 2023), and suicidality (Khazem et al., 2023; Lund et al., 2019; Marlow et al., 2022). Morgan (2021) notes several possible reasons for the increased rates of depressive symptomology in people with disabilities, including social factors such as social participation restrictions and loss of independence in daily living.

The Current Study

TGNB individuals experience increased rates of adverse mental health outcomes such as suicidality (Aboussouan, 2022; Cramer et al., 2022; Hill et al., 2023; Pellicane & Ciesla, 2022; Stewart et al., 2023; Woolford-Clevenger et al., 2021; Yockey et al., 2022), depression (James et al., 2016; Newcomb et a., 2020; Pellicane & Ciesla, 2022; Prasath et al., 2023; Scott & Cornelius, 2022; Zeluf et al., 2016)), and anxiety (James et al., 2016; Valente et al. (2020). This population also experiences increased rates of discrimination and microaggressions (Austin & Goodman, 2017; James et al., 2016; Kohnepoushi et al., 2023; Meyer et al., 2017; Newcomb et al., 2020; Pellicane & Ciesla, 2022; Scott & Cornelius-White, 2022; Zeluf et al., 2016). Likewise, populations of persons with disabilities also experience increased rates of adverse mental health outcomes such as suicidality (Khazem et al., 2023; Marlow et al., 2021; Marlow et al., 2022), depression (Jung et al., 2021; Khazem et al., 2023; Morgan, 2021), anxiety (Khazem et al., 2023), and posttraumatic stress disorder (Khazem et al., 2022). This population also

experiences increased rates of discrimination and microaggressions (Danso et al., 2019; Jóhannsdóttir et al., 2022; Right, 2021).

Given the increased rates of discrimination, adverse mental health outcomes, and increased suicidality in both TGNB individuals and people with disabilities and the lack of extant research examining this multiply marginalized community, the purpose of the current study was to examine factors that may contribute to increased risk of mental health issues and suicidality among TGNB individuals with disabilities. It was hypothesized that multiple factors may contribute to increased suicidality within this population. It was hypothesized that each form of microaggressions (cisgenderist and ableist) would have a direct and positive effect on its respective form of internalized oppression. It was then hypothesized that both microaggressions and internalized oppression would have a direct effect on mental health (with a combined index from averaged z-scores of each variable). It was further hypothesized that microaggressions, internalized oppression, and mental health would have a combined direct effect on suicidal ideation.

Method

Participants

Participants for this study (n=289) came from the TGNB Disability Survey, a 30–minute survey with VCU IRB approval (VCU IRB Protocol Number: HM20027206) that includes measures assessing various constructs among TGNB disabled people such as mental health, discrimination, resilience and more. The survey was hosted on Qualtrics and delivered via Prolific; once participants completed the survey, Prolific compensated them ($7.81). The survey contained some quality control features; there was a repeated question at both the beginning and end of the survey as well as an open-ended question (“In one sentence or less, what do you think

was the purpose of this survey?") at the end. Five participants were removed from the dataset for not passing both quality control checks. Only Prolific users who identified as both TGNB and disabled were invited to take the survey. Other inclusion criteria were that only individuals who were age 18 or older, able to read and understand English, and who have access to electronic devices that would enable them to take an online survey were included. Participants were provided with an information sheet detailing the purpose of the study and other pertinent information. Prolific is an online platform that was designed specifically to connect researchers to participants and the platform enables anonymous data collection. Prolific was selected as it has numerous advantages over other online platforms (such as Amazon's MTurk) including a more diverse array of survey participants and higher data quality (Palan & Schitter, 2018; Peer et al., 2017). Prolific also allows the researcher autonomy in participant selection via data quality checks; the researcher can review data quality checks before approving the submission, thus motivating participants to provide high quality data. Prolific participants also answer approximately 190 demographic questions upon signing up for the platform, enabling researchers to target specific demographic groups. These built-in questions assess disability and gender identity statuses.

Measures

Demographics. Numerous researcher-generated demographic items regarding participant race/ethnicity, age, gender identity, sex assigned at birth, sexual orientation, household income, educational attainment, religious/spiritual affiliation, relationship status, and residence were included in the survey.

Disability. Disability status was assessed using the HHS Implementation Guidance on Data Collection Standards, as outlined on the Centers for Disease Control and Prevention

Disability Health Promotion website (Disability and Health - Disability Data | CDC). The six-item survey is designed to measure a minimum standard regarding disability status and includes questions regarding the disability categories of: hearing impairment, visual impairment, cognitive impairment, mobility impairment, and two questions regarding impairment in daily living activities. A final set of questions asks about congenital versus acquired conditions, age of onset, severity of disability, and visibility of disability.

Disability-based Microaggressions. Disability-based microaggressions were assessed utilizing the Ableist Microaggressions Scale (AMS; Conover et al., 2017), a 20-item scale designed to measure the experiences that people with disabilities have had with microaggressions. The AMS asks the participant to indicate the frequency with which they have experienced specific microaggressions in their lifetime and offers a Likert-scale of responses that range from 0 (never) to 5 (very frequently). Examples of questions asked on the AMS are: "people minimize my disability or suggest that it could be worse", "people don't see me as a whole person because I have a disability", and "people suggest that living with a disability would not be a worthwhile existence". Participants are given a total score, with higher scores indicating greater prevalence of experiencing microaggressions.

TGNB-based Microaggressions. Microaggressions against transgender and gender nonbinary persons were assessed using the Gender Identity Microaggressions Scale (GIMS; Nadal, 2019), a 13-item scale designed to measure the experiences that gender minority individuals face due to their gender identity. The scale asks participants to indicate the frequency with which they have experienced specific microaggressions over the past six months and offers a Likert-scale of responses that range from 0 (I did not experience this event) to 5 (I experienced this event five or more times in the last 6 months). Example questions from the GIMS are:

"strangers and acquaintances have called me by the wrong personal pronoun," "I was told that I complain too much about societal discrimination towards gender nonconforming people," and "LGB people have told me that my gender nonconformity is just a phase." Participants are given a total score with higher scores indicating greater prevalence of experiencing gender-related microaggressions.

Internalized Ableism. Internalized ableism was measured with a newly developed scale called the Internalized Ableism Inventory (IAI; Perrin et al., *in preparation*) which is currently in development. This 51-item measure (which is under factor analysis at the time of this writing) was designed to measure various aspects of internalized ableism experienced by persons with disabilities. The IAI asks respondents to answer how strongly they agree or disagree with each statement and has answer choices on a Likert-scale from 1 (strongly disagree) to 7 (strongly agree). Encompassed within the IAI are eight subscales: negative self-perception, shame and embarrassment, stereotype endorsement, denial of disability, fear of association, impact on aspirations and roles, concerns about romance, and isolation due to perceived burdensomeness. Example questions from the IAI are: "I believe that I am less attractive because of my disability;" I believe that people with disabilities are less successful;" and "I feel voiceless or overlooked because of my disability." Participants' averaged total item score was used, with higher scores indicating greater prevalence of internalized ableism.

Internalized Cisgenderism. Internalized cisgenderism was measured using the internalized transphobia subscale from the Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015). The GMSR is a 38-item scale designed to assess aspects of minority stress and resilience faced by transgender persons. The five subscales of the GMSR are: gender-related discrimination, gender-related rejection, gender-related victimization, non-affirmation,

internalized transphobia, and pride. This study utilized the internalized transphobia subscale; an 8-item measure with responses on a 5-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example questions from the GMSR-IT subscale are: “I resent my gender identity or expression;” “when I think about my gender identity or expression, I feel depressed;” and “I envy people who do not have a gender identity or expression like mine.” Respondents are given a sum score ranging from 8-40 where higher numbers indicate greater instance of internalized cisgenderism.

Mental Health. Mental health was measured utilizing two scales. The Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001) is a 9-item scale designed to measure depressive symptoms over the previous two weeks. Responses range from 0 (not at all) to 3 (nearly every day) and ask participants to rate how often they have experienced each item in the past two weeks. Example questions from the PHQ-9 are: “little interest or pleasure in doing things;” “feeling tired or having little energy;” and “trouble concentrating on things, such as reading the newspaper or watching television.” Respondents are given a sum score ranging from 0-27 with higher scores indicating greater depressive symptomology over the past two-week period. Anxiety symptomology was assessed using the Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006), a seven-item measure designed to assess symptoms of anxiety over the previous two-week period. Respondents are asked how often over the prior two-week period that they have been bothered by each experience and responses range from 0 (not at all) to 3 (nearly every day). Respondents are given a sum score ranging between 0-21 with higher scores indicating greater prevalence of anxiety symptomology. Example questions from the GAD-7 are: “feeling nervous, anxious, or on edge;” “trouble relaxing;” and “feeling afraid as if something

awful might happen." A combined mental health symptom score was created using the averages of the z-scores for both the PHQ-9 and the GAD-7.

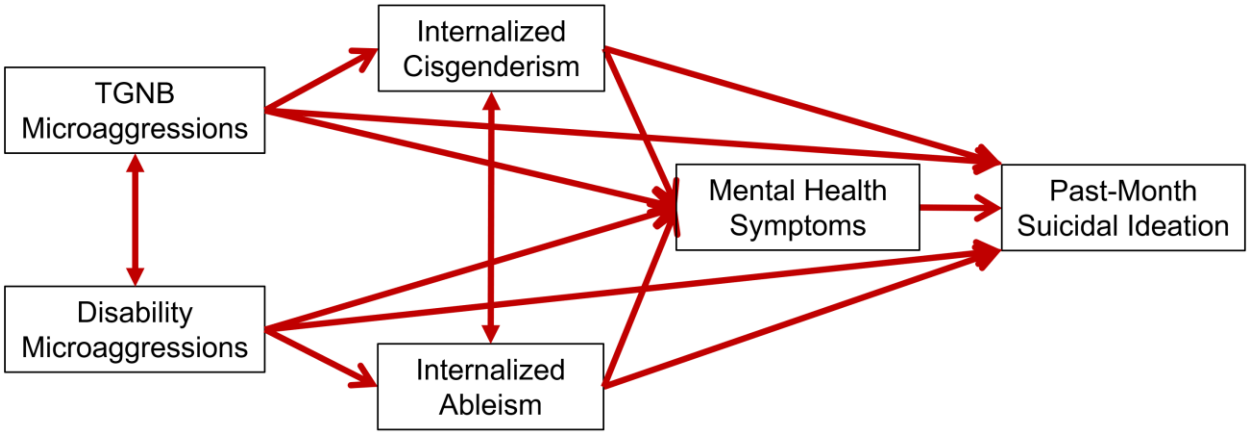
Suicidal Ideation. Suicidal ideation was assessed using questions from the Columbia-Suicide Rating Scale (C-SSRS; Posner et al., 2008). The C-SSRS is a multi-item measure designed to help clinicians diagnose suicidality. The current survey utilized five questions regarding suicidal ideation. Respondents were asked to give two responses, one for ever in their lifetime and one for in the past month, with either "yes" or "no" responses for each. Some sample questions from the C-SSRS are: "have you ever wished you were dead or wished you could go to sleep and not wake up?" "have you actually had any thoughts of killing yourself?" and "have you had these thoughts and had some intention of acting on them?" The C-SSRS offers five categories regarding severity of suicide risk based on question type. The data were re-coded to accommodate these guidelines; respondents who scored at a level 5 risk were coded as 5, regardless of any other item answer; those who scored at a 4 were coded as 4 and so on. These re-codes were done for both past-month and lifetime ideation, although only past-month ideation was used for the model analysis.

Data Analysis

The researcher hypothesized that multiple factors may contribute to increased suicidal ideation within disabled TGNB individuals. Participant data were removed from the data set (n=5) if respondents did not pass both of the quality control checks; four participants were removed as their answers to two questions assessing age differed from the beginning of the survey to the end and one participant was removed for providing an illogical response to the final open-ended question regarding the purpose of the current study. Descriptive statistics and bivariate correlations between variables of interest were conducted using SPSS Version 29.0.

A multiple mediation path model was developed using AMOS Version 29.0 (Arbuckle, 2007) to examine a hypothesized series of relationships leading from microaggressions (both cisgenderist and ableist) through internalized oppression (both internalized cisgenderism and internalized ableism) and mental health symptoms (an index from averaged z-scores of depression and anxiety) to past-month suicidal ideation (Figure 1). Standardized direct and indirect effects were estimated using 2,000 bootstrapped samples, with 2-tailed *p*-values. For this analysis, it was hypothesized that each form of microaggression would have a direct and positive effect on its respective form of internalized oppression. It was then hypothesized that both microaggressions and internalized oppressions would have a direct effect on mental health symptoms. It was further hypothesized that microaggressions, internalized oppressions, and mental health symptoms would have a combined direct effect on past-month suicidal ideation. Each of the possible indirect effects, whether singular (e.g., internalized oppression mediating the relationship between microaggressions and mental health symptoms) or sequential (e.g., internalized oppression and mental health symptoms both mediating the relationship between microaggressions and past-month suicidal ideation), were hypothesized to be partial. Traditional fit indices (root mean square error of approximation, Tucker-Lewis index, goodness of fit index, etc.) were examined in the final model to assess overall fit.

Figure 1. *Hypothesized Multiple Mediation Model*



Results

Descriptive Statistics

Demographic information on the current sample (n=289) can be found in Table 1. The ages in the sample ranged from 18-68 with a mean age of 31.5 years (*SD*=9.7). Of the sample, 63.7% currently lived in their self-identified gender and 81% think of themselves or identify as transgender. In terms of relationship status, the majority of the sample (38.4%) is single, having never been married, and 30.8% were currently in a committed relationship at the time they took the survey. The two most represented sexual orientations in the sample were queer (34.3%) and bisexual (33.9%); 60.6% of the sample identify as gender nonbinary/genderqueer/gender nonconforming, and 71.3% of participants were assigned female at birth. The majority of the sample (66.1%) identified as White/European-American while 10.7% identified as multiracial/multiethnic; the most prominent religious affiliation represented was Agnostic (29.8%) with Atheist (24.9%) coming close behind. The most common education level was high school/GED (45%), and the most prominent employment status was full-time employment (35.3%) with 6.6% reporting that they were on full disability. The majority of respondents (38.8%) had an annual household income of less than $25,000. The sample showed good

geographical distribution, with 43 states represented in the sample. California had the most respondents (12.5%) and 54.3% of respondents indicated that their state of residence was considered to be historically liberal/Democratic.

In terms of disability demographics, 78.2% of the sample had a cognitive impairment that impacts their ability to concentrate, remember or make decisions, while 4.8% were deaf or hard of hearing and 6.2% were blind or visually impaired. In terms of function, 31.5% of participants had difficulty walking or climbing stairs; 49.1% of respondents had disabilities that were acquired whereas 34.9% had disabilities that were both acquired and congenital. The majority of respondents had disabilities either invisible in nature (60.6%) or semi-visible (35.3%).

Table 1. *Participant Demographics*

Variable	N	%
Currently live in self-identified gender (Yes)	184	63.7
Sexual Orientation		
Asexual	61	21.1
Bisexual	98	33.9
Homosexual/lesbian/gay	63	21.8
Pansexual	64	22.1
Straight/heterosexual	7	2.4
Queer	99	34.3
Not Listed	16	5.5
Sex assigned at birth		
Male	68	23.5
Female	206	71.3
Not listed	15	5.2
Current gender self-perception		
Woman	42	14.5
Man	90	31.1
Nonbinary/genderqueer/nonconforming	175	60.6
Agender	38	13.1
Not listed	14	4.8
Race/ethnicity		
White/European-American	191	66.1
Black/African-American	28	9.7
Asian/Asian-American/Pacific Islander	15	5.2
Latino/Hispanic	13	4.5
American Indian/Native American/Alaska-Native	6	2.1
Middle-Eastern, North African/Arabic	1	0.3

Multiracial/multiethnic	31	10.7
Not listed	4	1.4
Household Income		
<$10,000	52	18.0
Between $10,000 and $24,999	60	20.8
Between $25,000 and $39,999	36	12.5
Between $40,000 and $54,999	37	12.8
Between $55,000 and $69,999	22	7.6
Between $70,000 and $84,9999	22	7.6
Between $85,000 and $99,999	15	5.2
$100,000 or more	45	15.6
Education		
Grade School	1	0.3
High School/GED	130	45.0
2-year College Degree	34	11.8
4-year College Degree	92	31.8
Master's Degree	31	10.7
Doctorate Degree	1	0.3
Religious affiliation		
Agnostic	86	29.8
Atheist	72	24.9
Buddhist/Confucian	11	3.8
Christian	29	10.0
Druid	2	0.7
Hindu	2	0.7
Jewish	14	4.8
Muslim/Islam	1	0.3
Native American Traditional Practices	4	1.4
Paganist/New Age Religion	22	7.6
Pantheist	6	2.1
Taoist	3	1.0
Unitarian	3	1.0
Wiccan	4	1.4
Spiritual, no religious affiliation	57	19.7
Not listed	12	4.2
Employment status		
Part-time	52	18.0
Full-time	102	35.3
Employed on temporary leave	1	0.3
On permanent disability	19	6.6
Unemployed, looking	42	14.5
Unemployed, not looking	19	6.6
Retired	1	0.3
Student	28	9.7
Not listed	25	8.7
Disability characteristics		

Blind, visually impaired	18	6.2
Deaf, hearing impaired	14	4.8
Trouble concentrating, remembering, making decisions	226	78.2
Difficulty walking, climbing stairs	91	31.5
Difficulty dressing/bathing	52	18.0
Difficulty doing errand alone	182	53.
Acquired condition	142	49.1
Congenital condition	46	15.9
Both acquired and congenital	101	34.9
Visible	12	4.2
Invisible	175	60.6
Semi-visible	102	35.5

Note. Some category frequencies and percentages do not add to the total sample size or 100%, respectively, because of the ability to select multiple categories for some demographics.

Descriptive statistics for the primary variables of interest can be found in Table 2. In terms of the model outcomes, the clinical cutoff for endorsing symptoms of depression when utilizing the PHQ-9 is a score of 10 or higher. In this sample, 70.9% of participants met the clinical definition of symptom endorsement for depression (*M*=13.54, *SD*=6.74). Likewise, when utilizing the GAD-7, the clinical cutoff for endorsing symptoms of anxiety is 10. In this sample, 57.1% of participants endorsed clinically elevated symptoms of anxiety (*M*=10.91, *SD*= 5.95).

Table 2. *Variable Descriptive Statistics*

Variable	*M*	*SD*
TGNB microaggressions	15.64	13.27
Disability microaggressions	34.22	23.44
Internalized cisgenderism	17.38	8.57
Internalized ableism	188.45	66.17
Depression	13.54	5.74
Anxiety	10.91	5.95
1-month suicidal ideation	1.12	1.48

In terms of suicidal ideation, 47.4% reported positive ideation over the past 1 month, and 92.7% reported positive ideation over their lifetimes (Table 3).

Table 3. *Suicidal Ideation Frequency Distributions*

CSRS Category	Frequency	Percent

Lifetime Ideation		
0	21	7.3
1	10	3.5
2	30	10.4
4	74	25.6
5	154	53.3
Past 1-Month Ideation		
0	152	52.6
1	40	13.8
2	50	17.3
3	21	7.3
4	10	3.5
5	16	5.5

Of the sample, 3.1% reported a suicide attempt in the past 3 months, and 51.8% reported a suicide attempt over their lifetimes (Table 4).

Table 4. *Suicide Attempt Frequency Distribution*

Number of Attempts	Frequency	Percent
Lifetime		
0	132	46.2
1	52	18
2	31	10.8
2.5	1	0.3
3	41	14.3
4	10	3.5
5	7	2.4
6	1	0.3
7	1	0.3
8	1	0.3
10	2	0.7
12	1	0.3
13	1	0.3
14	1	0.3
15	1	0.3
25	2	0.7
50	1	0.3
Past 3 Months		
0	279	95.9
1	5	1.7
2	4	1.4

Note. Frequencies do not add to the total sample size because several participants reported a non-numerical value (e.g., “Numerous”).

Preliminary Analyses

A bivariate correlation matrix for the variables of interest can be found in Table 5. All constructs used in the primary model were significantly positively associated with each other. In particular, both forms of microaggressions were highly correlated. Internalized ableism was strongly associated with experiences of disability microaggressions, and internalized cisgenderism was moderately associated with experiences of TGNB microaggressions. Mental health symptoms were most strongly associated with internalized ableism and had moderate or small associations with both forms of microaggressions and internalized cisgenderism. Past-month suicidal ideation was most strongly associated with mental health symptoms, followed by internalized ableism.

Table 5. *Correlation Matrix*

	1	2	3	4	5
1. TGNB microaggressions					
2. Disability microaggressions	.54*				
3. Internalized cisgenderism	.32*	.25*			
4. Internalized ableism	.22*	.49*	.41*		
5. Mental health symptoms	.16*	.31*	.21*	.53*	
6. 1-month ideation	.19*	.22*	.21*	.36*	.45*

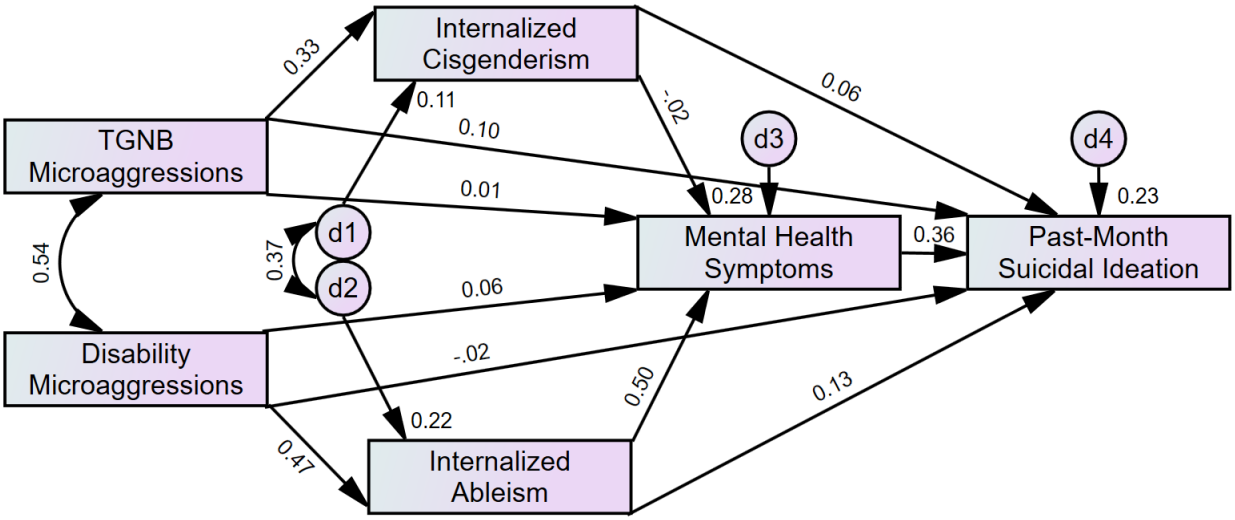
Note. *$p < .01$.

Path Analysis

For the path analysis, the following criteria were used to assess goodness of fit for the model: ratio of chi-square to degrees of less than 2.0; traditional fit indices, including the comparative fit index (CFI) goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), incremental fit index (IFI), and Tucker-Lewis index (TLI), higher than .90 which would indicate adequate fit (Byrne, 1994; Hu & Bentler, 1999); and a root mean square error of approximation (RMSEA) of .08 or less (Tabachnick & Fidell, 2001).

The path model with standardized regression weights appears in Figure 2.

Figure 2. *Multiple Mediation Path Model*



The overall fit for the model was generally good, χ^2/df = 1.68, CFI = 1.00, GFI = 1.00, NFI = .99, IFI = 1.00, TLI = .98, AGFI = .96, and RMSEA = .049. As hypothesized, TGNB microaggressions were positively associated with internalized cisgenderism (β = .33, p<.001), disability microaggressions were positively associated with internalized ableism (β =.47, p<.001), and internalized ableism was associated with mental health symptoms (β =.50, p<.001). Mental health symptoms were also associated with past-month suicidal ideation (β = .36, p<.001). The two forms of microaggressions were positively correlated (r=.54, p<.001), as were the two forms of internalized oppression (r=.37, p<.001). Additionally, disability microaggressions yielded a significant indirect effect on mental health symptoms (β =.24, p<.001) as well as on past-month suicidal ideation (β =.17, p<.001), while internalized ableism yielded a significant indirect effect on past-month suicidal ideation (β=.18, p<.001). No other direct or indirect effects were significant within the model. This implied that internalized ableism fully mediated the relationship between disability microaggressions and mental health

symptoms, mental health symptoms fully mediated the relationship between internalized ableism and past-month suicidal ideation, and both internalized ableism and mental health symptoms fully mediated the relationship between disability microaggressions and past-month suicidal ideation. The disability component of the model found robust support throughout every component of the theoretical chain; however, after controlling for the effects of disability microaggressions and internalized ableism, no TGNB-based effects were statistically significant other than TGNB microaggressions being associated with increased internalized cisgenderism.

Discussion

This study generated and tested a multiple mediation path model of microaggressions, internalized oppression, mental health, and suicidal ideation in a sample of disabled TGNB adults. It was hypothesized that each form of microaggression (cisgenderist and ableist) would have a direct and positive effect on its respective form of internalized oppression. It was then hypothesized that both microaggressions and internalized oppression would have a direct effect on mental health (with a combined index from averaged z-scores of each variable). It was further hypothesized that microaggressions, internalized oppression, and mental health would have a combined direct effect on suicidal ideation. In the sample, numerous concerning outcomes regarding mental health were present. Around 57% of the sample met the clinical cutoff for symptoms of anxiety while 71% met the clinical cutoff for depression. In regard to suicidal ideation, almost half (47%) had experienced suicidal ideation within the past month while an astonishing 93% had experienced it at some point throughout their lifetime. Around 3% of the sample had attempted suicide at least once in the past 3 months while slightly over half (52%) had attempted suicide at least once throughout their life. While these increased rates of adverse mental health outcomes are consistent with extant literature concerning mental health in samples

of TGNB populations and samples of disabled populations separately, they are a bit higher than rates found in those separate identity groups. Overall, the path model had good fit. Several indirect effects were observed in the model, indicating mediating effects. While the only significant effect in the TGNB component of the model was a direct effect between cisgenderist microaggressions and internalized cisgenderism, the disability component yielded numerous effects. Disability microaggressions had a strong association with cisgenderist microaggressions and internalized ableism and a moderate association with mental health symptoms. Internalized ableism had a strong association with mental health symptoms and a moderate association with past-month suicidal ideation. In terms of mediations, internalized ableism fully mediated the relationship between disability microaggressions and mental health symptoms, mental health symptoms fully mediated the relationship between internalized ableism and past-month suicidal ideation, and both internalized ableism and mental health symptoms fully mediated the relationship between disability microaggressions and past-month suicidal ideation. While the disability path found vast support throughout every component of the theoretical model, after controlling for the effects of disability microaggressions and internalized ableism, no TGNB-based effects were significant, aside from TGNB microaggressions being associated with increased internalized cisgenderism. While some of these findings were contrary to the hypothesized patterns, they highlight the importance of taking intersectionality into account when considering the mental health of multiply marginalized individuals.

Interpretation of Descriptive Statistics

As expected, the sample was relatively young, which can be common in online research. The vast majority of the sample (81%) considered themselves or identified as transgender, which is consistent with findings from a fairly large sample of TGNB participants in the U.S. (USTS;

James et al., 2016), which found that 88% of respondents thought of themselves as transgender. This indicates that, even those individuals who identify with a specific gender minority category, such as genderqueer or nonbinary, may also identify under the larger umbrella term of transgender. This sample had a much higher percentage of nonbinary respondents (60.6%) when compared to the 2015 USTS (35%), which may be due to societal trends over time and/or the younger mean age of the sample. Also consistent with other research findings, the majority of the sample identified as White/European American. In terms of religiousness/spirituality, the most prevalent affiliations were Agnostic (29.8%) and Atheist (24.9%), which is also consistent with findings from the 2015 USTS, which found rates of 23% and 22% respectively. Likewise, while 9% of the USTS respondents reported receiving social security disability as their income, 6.6% of this sample reported the same. A finding that was particularly noteworthy was the incredibly high rate of cognitive impairments reported in the sample; 78% of respondents indicated that they had a cognitive impairment that impacts their ability to concentrate, remember or make decisions. Although it might be expected that the disability type skews towards neurodivergence, this rate was much higher than expected. Consistent with this increased rate, the majority of respondents indicated that their disability was either invisible or semi-visible in nature.

Particularly concerning in this sample was the incredibly high instances of adverse mental health symptomology; 57% of respondents met the clinical cutoff for experiencing symptoms of anxiety while 71% met the clinical cutoff for symptoms of depression. This is consistent with previous findings of elevated adverse mental health outcomes within samples of TGNB populations (Lloyd & Bond, 2019; Newcomb et al., 2020; Prasath et al., 2023; Scott & Cornelius-White, 2022) as well as within disabled populations (Jung et al., 2021; Khazem et al., 2023; Lutz & Fiske, 2019; Marlow et al., 2022), but is alarmingly high. Additionally, incredibly

high rates of suicidality were observed in this sample. In terms of suicidal ideation, almost half of the sample reported positive ideation over the past month while 93% reported lifetime ideation rates. While extant research has shown increased rates of suicidal ideation within samples of TGNB populations (Aboussouan et al., 2022; Hill et al., 2023; Pellicane et al, 2022; Yockey et al., 2022) as well as in disabled populations (Herek et al., 2015; Khazem, 2019; Khazem et al., 2023; Marlow et al., 2022), most of these rates were slightly less than observed in this sample. For example, Freese et al. (2018) found that 82% of their sample of TGNB individuals had experienced suicidal thoughts throughout their lifetime with 48% experiencing these within the past year. In terms of attempted suicide, 3.1% of the current sample reported having at least one suicide attempt within the past three months, while 52% reported at least one attempt in their lifetime. Similar to suicidal ideation, increased rates of suicide attempts have been reported in samples of TGNB individuals (Aboussouan et al. 2022; Hill et al., 2023; Newcomb et al., 2020; Pellicane et al., 2022; Stewart et al., 2023) and, though less studied, in samples of disabled individuals (Marlow et al., 2022; Shepherd et al., 2023). Once again, however, we see slightly higher rates of suicide attempts in the current sample than in previously noted samples; the USTS, for instance, found that 40% of respondents had attempted suicide at least once in their lifetime. The increased rates of adverse mental health symptoms, including suicidality, observed in the current sample could be due to the intersections of multiply marginalized identities; as the intersection of gender minority identity and disability identity has not yet been heavily explored, it is only possible to compare rates of these marginalized identities in each group separately.

Interpretation of Bivariate Correlations

Several correlations of note emerged in the analyses. The two forms of microaggressions were highly correlated as were the two forms of internalized oppression. These correlations

could be due to the intersections of both marginalized identities; if a disabled TGNB participant experiences microaggressions, they may not be able to discern if they are due to their disability or gender identity. Likewise, individuals who embody multiple marginalized identities may be more likely to experience microaggressions and internalized oppression related to each and all of those identities. Furthermore, as expected, both forms of internalized oppression were associated with their respective forms of microaggressions. Specifically, there was a significant moderate association between cisgenderist microaggressions and internalized cisgenderism and a significant strong correlation between disability microaggressions and internalized ableism. This makes sense, logically speaking. We would expect these constructs to be correlated. These correlations specifically are consistent with minority stress theory (Meyer, 1995, 2003) and gender minority stress theory (Testa et al., 2015) which posit that minoritized individuals experience increased stressors, such as microaggressions that can lead to increased adverse mental health outcomes and the internalization of negative external beliefs (internalized oppression). This is also consistent with the minimal research on internalized ableism which, likewise, posits that microaggressions experienced by persons with disabilities can lead to internalized ableism (Jóhannsdóttir et al., 2022). In terms of mental health symptoms, they were most strongly correlated with internalized ableism but only had moderate or small associations with the two forms of microaggressions and internalized cisgenderism. Suicidal ideation (past-month) was, unsurprisingly, strongly associated with mental health symptoms and slightly less strongly associated with internalized ableism.

Interpretation of Fit Indices

Several indices were utilized to determine goodness of fit in the overall model; the model surpassed each of these cutoffs. Specifically, the criterion of the ratio of chi-square to degrees of

freedom less than 2.0 (1.68) and the root mean error of approximation of .08 or less (.05) (Tabachnick & Fidell, 2001) were exceeded, indicating goodness of fit for this model. Likewise, each of the following indices being greater than .90 (Byrne, 1994; Hu & Bentler, 1999) would indicate adequate fit: comparative fit index (1.00), goodness of fit index (1.00), adjusted goodness of fit index (.96), normed fit index (.99), incremental fit index (1.00), and Tucker-Lewis index (.98). Each of these cutoffs were, likewise, exceeded, indicating that the overall fit of the model was good.

Interpretation of Direct Effects

As hypothesized, TGNB microaggressions were positively associated with internalized cisgenderism. This is consistent with the previous literature on minority stress theory (Meyer, 2003; Testa et al., 2015). Likewise, disability microaggressions were positively associated with internalized ableism, again consistent with previous findings (Jóhannsdóttir et al., 2022). Internalized ableism was also strongly associated with mental health symptoms; internalized cisgenderism, however, was not significantly associated with mental health symptoms. These differences may be due to differences in the measures for internalized oppression and microaggressions. As both the Ableist Microaggressions Scale (20 questions) and the Internalized Ableism Inventory (51 questions) had more questions than the Gender Identity Microaggressions Scale (13 questions) and the Internalized Transphobia Subscale (8 questions), they may have allowed for more nuance in responses and, therefore, more robust measurement of the constructs. Mental health symptoms were moderately associated with past-month suicidal ideation, a finding which is consistent with expectations.

Interpretation of Indirect Effects

In terms of indirect effects observed in the model, there were no significant findings on the TGNB-related path after controlling for the effects of disability microaggressions and internalized ableism. This could be due to a number of things, including the measurement issues noted above. These differences may have led to more robust measurement and, therefore, more significant findings on the disability component of the model than on the TGNB component. It is important to note that this pattern of finding does not imply that one form of oppression is somehow worse than another; however, it is imperative to expand our understanding of the intersections of multiply marginalized identities and how these identities interact and impact the mental health of those who embody them. It is also pertinent to create measures that can adequately assess all aspects of multiply marginalized identities. In terms of the disability component, disability microaggressions yielded a significant indirect effect on mental health symptoms, indicating a mediation effect occurring through internalized ableism. Disability microaggressions also yielded a significant indirect effect on past-month suicidal ideation, indicating a mediation occurring through both internalized ableism and mental health symptoms. Internalized ableism yielded its own significant indirect effect on past-month suicidal ideation indicating a mediation effect through mental health symptoms. The findings in the disability component imply that internalized ableism fully mediated the relationship between disability microaggressions and mental health symptoms, mental health symptoms fully mediated the relationship between internalized ableism and past-month suicidal ideation, and both internalized ableism and mental health symptoms fully mediated the relationship between disability microaggressions and past-month suicidal ideation. These findings add to the relatively scant literature on ableism and internalized ableism and point to the importance of expanding this

research foci, especially in the context of disabled individuals who also hold other marginalized identities.

Clinical Implications

Clinicians working with disabled TGNB individuals should take care to consider the intersections of both marginalized identities and how both identities intersect to impact mental health. As extant research has shown increased adverse mental health symptomology in both TGNB samples (Freese et al., 2018; James et al., 2016; Newcomb et a., 2020; Pellicane & Ciesla, 2022; Prasath et al., 2023; Scott & Cornelius, 2022; Zeluf et al., 2016) as well as within samples of disabled populations (Jung et al., 2021; Khazem et al., 2023; Marlow et al. 2022) and increased risk of suicidality in both groups (Aboussouan, 2022; Cramer et al., 2022; Hill et al., 2023; Khazem et al., 2023; Lutz & Fiske, 2018; Marlow et al., 2022; Pellicane & Ciesla, 2022; Stewart et al., 2023; Woolford-Clevenger et al., 2021; Yockey et al., 2022), it is essential for clinicians to take both forms of minoritized identities into account when working with disabled TGNB individuals. As the research on this multiply marginalized groups is lacking, clinicians working with these at-risk individuals should be informed about the importance of intersectionality. It may also be essential for clinicians to consider possible strategies to help mitigate this increased risk in this population, such as explorations of resilience and increasing social support.

Limitations and Future Directions

The differences in scales used for the constructs of interest can be seen as a limitation of this study. In particular, the measure of disability microaggressions may be a more comprehensive measure than that of the TGNB microaggressions measure. Likewise, the IAI, though still in the prototype phase, holds promise to be a robust assessment that, when compared

to the 8-item subscale used for internalized cisgenderism, is most likely a more encompassing and nuanced exploration of this construct. These differences may very well account for the significant findings in the disability component that were not observed in the TGNB component. Although much time and consideration were given to choosing adequate measures for all constructs of interest, unfortunately, in some instances, finding fully tested and validated robust measures was not possible. Though we attempted to utilize parallel measures with high internal consistency as much as possible, there simply were not parallel measures across both disability and gender identity concerning the constructs of microaggressions and internalized oppression published at the time of data collection. The sample in this study was relatively diverse; however, it was skewed White/European American, young-to-middle aged, neurodivergent, and non-binary; therefore, these results cannot be generalized to the larger population of disabled TGNB individuals in the U.S. (or more globally). Given that the current study took a deficit-based approach (focusing on adversity and its outcomes), future studies should explore resilience factors, such as social support, religiosity, and positive identity development, to determine if any of these mitigate the adverse mental health outcomes observed in this sample. Future research should also attempt to recruit a greater diversity of racial/ethnic identities to obtain a more representative sample.

Conclusion

This study offers preliminary evidence that disability-based microaggressions impact internalized oppression, mental health, and past-month suicidal ideation in disabled TGNB individuals. The mediations observed point to the importance of furthering the exploration and understanding of ableist microaggressions and internalized ableism. Disability is often viewed less as a minoritized identity status than other minority groups (such as racial/ethnic minorities,

sexual minorities, etc.) and this needs to change. The study also points to the importance of exploring multiply marginalized identities and how those identities intersect to affect health outcomes. To date, there is very little research exploring the intersecting identities of disability and TGNB identities. It is clear from the adverse mental health outcomes observed in this sample that more research needs to be done with this multiply marginalized group to determine interventions and/or ways to mitigate these adverse outcomes.

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Appendix A

Survey Participant Information Sheet

Research Participant Information Sheet

Study Title: Experiences of Transgender and Gender Nonbinary Adults with Disabilities

INVESTIGATORS: Eric Benotsch, Ph.D., Paul Perrin, Ph.D., Steph Cull

You are being asked to participate in a research study. Your participation in this study is completely voluntary. You have the right to decide not to participate. If you choose to participate in the study, you can withdraw at any time.

WHY IS THIS STUDY BEING DONE?

The purpose of this study is to learn more about the experiences of transgender and gender nonbinary adults with disabilities.

WHAT WILL HAPPEN IF I PARTICIPATE?

In this study, you will be asked to complete a survey. The survey will ask about your health and health behaviors, strengths that you experience as a person, and potentially challenging experiences you have had. The survey is designed to take about 30 minutes to complete.

WHAT ARE THE RISKS AND BENEFITS OF PARTICIPATING?

Some people may become upset by answering some of the questions in the survey. Some questions will ask about private things such as your health. If you do not wish to provide the information asked, you may choose to leave the study at any time. We will not ask for any identifying information, such as your name, to maximize anonymity. As a result, we do not anticipate that any information you provide will be able to be linked to you.

WILL I BE PAID TO PARTICIPATE IN THE STUDY?

You will receive $6.14 from Prolific for completing the full study. You will be paid $.14 if you are determined to be ineligible for the rest of the study after filling out the first screening survey.

CAN I STOP BEING IN THE STUDY?

You can stop being in this research study at any time. Per the terms of Prolific, only people who complete the survey are eligible to be paid.

HOW WILL INFORMATION ABOUT ME BE PROTECTED?

VCU has established secure research databases and computer systems to store information and to help with monitoring and oversight of research. Your information may be kept in these databases and will only be accessible to individuals working on this study or authorized individuals.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY?

The investigator(s) named below are the best person(s) to contact if you have questions, complaints, or concerns about your participation in this research:

Steph Cull; culls@vcu.edu; 804-920-0037

Eric Benotsch; ebenotsch@vcu.edu; 804-828-0133

If you have general questions about your rights as a participant is this or any research, or if you wish to discuss problems, concerns, or questions, to obtain information or to offer input about research, you may contact:

Virginia Commonwealth University Office of Research

800 East Leigh Street, Suite 3000, Box 980568, Richmond, VA 23298

(804) 827-2157; orsp@vcu.edu

Do not consent unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Please indicate below if you consent to participate:

__ I consent and wish to take part in this study.

__ I do NOT consent and do NOT wish to take part in this study.

Appendix B

TGNB Disability Survey Questions

Demographics

The following questions ask about basic demographic information.

1. What is your age?

2. What was your sex assigned at birth (that is, the sex on your original birth certificate)?

   [ ] Female

   [ ] Male

   [ ] Not Listed: _____

3. Some people are labeled male or female at birth, but are born with physical differences in sex anatomy, reproductive organs, chromosomes, and/or hormone function that do not fit typical expectations. These differences are known as variations in sex characteristics, differences in sex development, intersex traits, or sometimes by specific medical terms (like Congenital Adrenal Hyperplasia or Androgen Insensitivity Syndrome). Were you born with any of these physical differences?

   [ ] Yes

   [ ] No

   [ ] I don't know.

4. What is your gender identity (check all that apply)?

[ ] Woman

[ ] Man

[ ] Non-binary/genderqueer/gender nonconforming

[ ] Agender

[ ] Not listed: _____

5. Do you think of yourself as or identify as transgender and/or transsexual?

[ ] Yes

[ ] No

[ ] I don't know.

6. In your own words, how would you describe your gender identity?

7. Do you live as your self-identified gender in your everyday life?

[ ] yes

[ ] no

[ ] somewhat

8. If no, what is the reason that you do not live in your self-identified gender?

[ ] my gender identity is fluid so I would not live in one gender all of the time.

[ ] my gender identity means that I live in many genders at the same time.

[ ] I am not ready to live all of the time in my gender.

[ ] my spouse and/or children might reject me.

[ ] my parents/family might reject me.

[ ] my friends might reject me.

[ ] my faith or church community might reject me.

[ ] I might lose my job or not be able to get a job.

[ ] I might face discrimination.

[ ] I might have difficulty getting medical care.

[ ] not listed _____ (please specify)

9. Which of the following best describes your sexuality?

[ ] asexual

[ ] bisexual

[ ] homosexual/lesbian/gay

[ ] heterosexual

[ ] pansexual

[ ] queer

[ ] not listed _____ (please specify)

10. Which racial/ethnic label best describes you?

[ ] American Indian/Native American/Alaskan Native

[ ] Asian/Asian-American/Pacific Islander

[ ] Black/African American

[ ] Latino(a/x/e)/Hispanic

[ ] White/European-American

[ ] not listed _____ (please specify)

11. What is your highest level of education completed?

[ ] Grade school

[ ] High school/GED

[ ] 2-year/technical degree

[ ] 4-year college degree

[ ] Master's degree

[ ] Doctorate degree

12. What is your current religious or spiritual identity? Mark all that apply.

[ ] Agnostic

[ ] Atheist

[ ] Buddhist

[ ] Christian

[ ] Confucianist

[ ] Druid

[ ] Hindu

[ ] Jewish

[ ] Muslim

[ ] Native American Traditional Practices

[ ] Pagan

[ ] Pantheist

[ ] Taoist

[ ] Unitarian

[ ] Wiccan

[ ] Spiritual but no religious affiliation

[ ] No affiliation

[ ] Not listed _____ (please specify)

13. What is your household's annual income (including salary, disability, social security, etcetera)?

[ ] less than $10,000

[ ] between $10,000 and $24,999

[ ] between $25,000 and $39,999

[ ] between $40,000 and $54,999

[ ] between $55,000 and $69,999

[ ] between $70,000 and $84,999

[ ] between $85,000 and $99,999

[ ] $100,000 or more

14. What is your relationship status?
[ ] single, never been married.

[ ] married

[ ] committed relationship.

[ ] in an open relationship

[ ] separated/divorced, currently single.

[ ] widowed

15. Which of the following describes your current employment status?
[ ] part-time employment

[ ] full-time employment

[ ] employed but on temporary leave.

[ ] on permanent disability

[ ] unemployed but currently looking for work.

[ ] unemployed and not looking for work.

[ ] retired

[ ] not listed _____ (please specify)

16. Which of the following best categorizes the state in which you live?
[ ] historically conservative/Republican

[ ] historically liberal/Democratic

[ ] historically neither

17. In which state do you currently reside?

_____

Disability Demographics Screening

https://www.cdc.gov/ncbddd/disabilityandhealth/datasets.html

This asks for your views about your health status. If you are unsure how to answer a question, please give the best answer you can.

16. Are you deaf or do you have serious difficulty hearing?

[ ] Yes

[ ] No

17. Are you blind or do you have serious difficulty seeing, even when wearing glasses?

[ ] Yes

[ ] No

18. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

[ ] Yes

[ ] No

19. Do you have serious difficulty walking or climbing stairs?

[ ] Yes

[ ] No

20. Do you have difficulty dressing or bathing?

[ ] Yes

[ ] No

21. Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

[ ] Yes

[ ] No

22. Are your above disability/conditions:

[ ] Acquired

[ ] Congenital

[ ] Both

[ ] Not applicable

23. How old were you when the disability that causes you the most daily difficulty became apparent? [Please put N/A if not applicable]

24. How visible is your disability that causes you the most daily difficulty to other people?

[ ] Visible

[ ] Semi-visible

[ ] Invisible

[ ] Other

[ ] Not Applicable

25. How severe would you rate your disability that causes you the most daily difficulty?

[ ] Mild

[ ] Moderate

[ ] Severe

[ ] Very Severe

[ ] Not Applicable

Gend Identity Microaggressions Scale

Think about your experiences with gender identity. Please read each item and think of how many times this event has happened to you in the PAST 6 MONTHS.

0= I did not experience this event

1= I experienced this event 1 time in the past 6 months

2= I experienced this event 2 times in the past 6 months

3= I experienced this event 3 times in the past 6 months

4= I experienced this event 4 times in the past 6 months

5= I experienced this event 5 or more times in the past 6 months

A loved one (e.g., family or friend) has told me that my gender nonconformity is just a phase.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone told me that my transgender identity or my gender nonconformity was just a phase.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

I was told that I made a family member uncomfortable because of my gender nonconformity or transgender identity.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

LGB people have told me that my gender nonconformity is just a phase.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Strangers and acquaintances have called me by the wrong personal pronoun.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

A loved one (e.g. friend or family) has called me by the wrong personal pronoun.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone wanted to engage in a sexual act with me only because they view transgender people as exotic.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone (e.g., family, friend, co-worker) has asked me personal questions about gender reassignment.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone (e.g., family, friend, coworker) has asked me if I feel like I'm trapped in the body of another sex.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone avoided sitting next to me in a public or government setting (e.g., DMV, courthouses, libraries).

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

Someone avoided sitting next to me at a bar or restaurant because I am gender nonconforming.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

My employer or co-worker was unfriendly to me because I dress gender nonconforming.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

I was told that I complain too much about societal discrimination against gender nonconforming people.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

The Ableist Microaggression Scale

Please read the following statements and indicate HOW OFTEN (never to very frequently) you have had this experience in your LIFETIME.

How often has this happened to you? Rate from 0-5 with 0 meaning never and 5 meaning very frequently.

83. People minimize my disability or suggest that it could be worse

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

84. People do not expect me to have a job or volunteer activities because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

85. People feel that they need to do something to help me because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

86. People assume I have low intelligence because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

87. Because I have a disability, people assume I have an extraordinary gift or talent

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

88. People offer me unsolicited, unwanted, or unneeded help because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

89. People act as if I am nothing more than my disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

90. People don’t see me as a whole person because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

91. People speak to me as if I am a child or do not take me seriously because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

92. Because I have a disability, people attempt to make decisions for me that I could make for myself

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

93. People express admiration for me or describe me as inspirational simply because I live with a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

94. People express pity for me because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

95 People suggest that living with a disability would need be a worthwhile existence.

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

96. People stare at me because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

97. People think I should not date or pursue sexual relationships because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

98. People indicate that they would not date a person with a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

99. People suggest that I cannot or should not have children because I have a disability

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

100. People act as if accommodations for my disability are unnecessary

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

101. Because I have a disability, people seem surprised to see me outside my home

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

102. People are unwilling to accept that I have a disability because I appear able-bodied

[ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

Internalized Ableism Inventory (IAI)

Please indicate how much you agree or disagree with each of the following statements on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree). These statements are designed to measure how you see yourself as a person with one or more disabilities. Although the term “disability” is used throughout these statements, if you have multiple disabilities, please think of “disability” as referring to more than one. Remember, there are no right or wrong answers. We are interested in your honest opinion.

I believe my disability will stand in the way of my personal goals.

I believe my disability limits my career opportunities.

I believe my disability restricts the types of jobs or roles I can pursue.

I can't lead the life I imagined because of my disability.

I have to give up certain dreams or aspirations because of my disability.

I believe my disability will prevent me from reaching my professional goals.

I believe my disability restricts the life experiences I can have.

I believe my disability diminishes my power or control in various situations.

I believe my disability will prevent me from achieving financial independence.

I grieve for the life I might have had without my disability.

My disability makes me feel like I'm missing out on life.

I worry about the future because of my disability.

I believe my disability makes me less able to fulfill family roles or responsibilities.

It's hard for me to stay positive when thinking about my disability.

When I think about my disability, I feel inadequate.

I believe my disability impacts my family's view of my capabilities.

I believe my disability holds me back in life.

I am less confident because of my disability.

I feel frustrated or angry because of the challenges my disability presents.

I feel sad or depressed because of my disability.

Isolation due to Shame and Embarrassment: tendency to avoid social situations and discussions due to or

I avoid discussing my disability with others.

I find myself trying to hide or not let others know I have a disability.

I feel embarrassed when others notice my disability.

I avoid social situations for fear of drawing attention to my disability.

I feel ashamed when people find out about supports I need for my disability (e.g., medication, assistive devices, etc.).

I feel uncomfortable identifying as a person with a disability.

I prefer to be alone to avoid discomfort caused by my disability.

I feel embarrassed when others need to accommodate my disability.

Isolation due to Perceived Burden: tendency to distance oneself from social situations or relationships du related to disability

I avoid making plans with friends or family because I don't want to slow them down.

I hesitate to enter or maintain relationships with friends or family because I fear being a burden to the other pers

I push people away because I think they deserve better than dealing with my disability.

I find myself spending more time alone to avoid making others adjust their activities to my disability.

Stereotype Endorsement: negative beliefs about disability in general

I think people with disabilities are less likely to find happiness.

I believe that people with disabilities are less successful.

I believe people with disabilities lead less fulfilling lives.

I believe that people with disabilities have lower quality of life.

I believe that people with disabilities are a burden to society.

I believe that being disabled is a disadvantage in life.

I think that disabilities make people less resilient.

Negative Self-Perception: feelings of inadequacy and inferiority related to one's disability

My disability makes me less of a person.

I am less worthy of success because of my disability.

I believe I deserve less than non-disabled people.

I think less of myself because of my disability.

My disability makes me unlovable.

Fear of Association: discomfort and avoidance of other people with disabilities

I avoid people with disabilities because they remind me of my own disability.

I feel uncomfortable around other people with disabilities.

I avoid other people even with similar disabilities because I don’t fit in with them.

Associating with other people with disabilities will make others view me negatively.

I think that people with disabilities are less intelligent.

Denial of Disability: difficulty in acknowledging and accepting one's disability

Internalized Transphobia (from GMSR)

Please indicate how much you agree with the following statements.

	Strongly disagree	**Somewhat disagree**	**Neither agree nor disagree**	**Somewhat agree**	**Strongly agree**

I resent my gender identity or expression.	[ ]	[ ]	[ ]	[ ]	[ ]
My gender identity or expression makes me feel like a freak.	[ ]	[ ]	[ ]	[ ]	[ ]
When I think about my gender identity or expression, I feel depressed	[ ]	[ ]	[ ]	[ ]	[ ]
When I think about my gender identity or expression, I feel unhappy	[ ]	[ ]	[ ]	[ ]	[ ]
Because of my gender identity or expression, I feel like an outcast	[ ]	[ ]	[ ]	[ ]	[ ]
I often ask myself: Why can't my gender identity or expression	[ ]	[ ]	[ ]	V	[ ]

just be normal?					
I feel that my gender identity or expression is embarrassing	[ ]	[ ]	[ ]	[ ]	[ ]
I envy people who do not have a gender identity or expression like mine	[ ]	[ ]	[ ]	[ ]	[ ]

Depression (PHQ-9)

The following questions assess mental health. Please answer as openly and honestly as you can.

Over the *last 2 weeks*, how often have you been bothered by any of the following problems?

	Not at all	**Several Days**	**More than half the days**	**Nearly every day**
275. Little interest or pleasure in doing things	[ ] 0	[ ] 1	[ ] 2	[ ] 3
276. Feeling down, depressed, or hopeless	[ ] 0	[ ] 1	[ ] 2	[ ] 3
277. Trouble falling asleep, staying asleep, or sleeping too much	[ ] 0	[ ] 1	[ ] 2	[ ] 3
278. Feeling tired or having little energy	[ ] 0	[ ] 1	[ ] 2	[ ] 3
279. Poor appetite or overeating	[ ] 0	[ ] 1	[ ] 2	[ ] 3
280. Feeling bad about yourself or that you're a failure or have let yourself or your family down	[ ] 0	[ ] 1	[ ] 2	[ ] 3
281. Trouble concentrating on things, such as reading the newspaper or watching television	[ ] 0	[ ] 1	[ ] 2	[ ] 3

282. Moving or speaking so slowly that other people could have noticed. Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
283. Thoughts that you would be better off dead or of hurting yourself in some way.	[ ] 0	[ ] 1	[ ] 2	[ ] 3

Generalized Anxiety Scale (GAD-7)

Over the *last 2 weeks,* how often have you been bothered by any of the following problems?

	Not at All	**Several Days**	**More than Half the Days**	**Nearly Every Day**
284. Feeling nervous, anxious, or on edge.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
285. Not being able to stop or control worrying.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
286. Worrying too much about different things.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
287. Trouble Relaxing.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
288. Being so restless that it is hard to sit still.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
289. Becoming easily annoyed or irritable.	[ ] 0	[ ] 1	[ ] 2	[ ] 3
290. Feeling afraid as if something awful might happen.	[ ] 0	[ ] 1	[ ] 2	[ ] 3

Columbia-Suicide Severity Rating Scale (C-SSRS)

The following questions ask you to respond yes or no to both having ever experienced in your lifetime or to having experienced in the past month.

Suicidal Ideation			
		Lifetime:	Past 1 month
1	***Have you ever wished you were dead or wished you could go to sleep and not wake up?***	**YES | NO**	**YES | NO**
2	***Have you actually had any thoughts of killing yourself?***	**YES | NO**	**YES | NO**
3	***Have you been thinking about how you might do this?***	**YES | NO**	**YES | NO**
4	***Have you had these thoughts and had some intention of acting on them?***	**YES | NO**	**YES | NO**
5	***Have you started to work out or worked out the details of how you would kill yourself? Do you intend to carry out this plan?***	**YES | NO**	**YES | NO**

Suicidal Behavior *(Check all that apply, so long as these are separate events; must ask about all types)*	Lifetime	Past 3 months
A suicide attempt is a potentially self-injurious act committed with at least some wish to die, *as a result of the act.* ***There does not have to be any injury or harm,*** just the potential for injury or harm. ***How many suicide attempts have you made (put 0 if none)?***	Total # of Attempts: _____	Total # of Attempts: _____