Exploring Health Disparities and Victimization Among Multiply Minoritized Populations with Disabilities

by

Rikki K. Wheatley

A dissertation accepted and approved in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

in Special Education and Clinical Sciences

Dissertation Committee:

Dr. Lillian Durán, Chair

John Seeley, Core Member

Cengiz Zopluoglu, Core Member

Emily L. Lund, Core Member

Jenefer Husman, Institutional Representative

University of Oregon

Fall 2025

DISSERTATION ABSTRACT

Rikki K. Wheatley

Doctor of Philosophy in Special Education and Clinical Services

Title: Exploring Health Disparities and Victimization Among Multiply Minoritized Populations with Disabilities

Health equity is the condition in which all people have a fair and just opportunity to achieve their full health potential through the removal of preventable, systemic barriers related to increased risk. This two-article dissertation examines how holding multiple marginalized identities—disability status in combination with sexual and gender minority (SGM) identity and/or non-White racial/ethnic identity—shaped exposure to traumatic and stressful events. Guided by the socioecological model (SEM), Minority Stress Theory, and the Social Determinants of Health (SDOH) framework, analyses assess how compound disadvantages operate across interpersonal and institutional contexts. Data derive from a national online survey conducted during the COVID-19 pandemic (N = 604), with focal comparisons in a disabled subsample (n = 278).

Article One focuses on disabled respondents' experiences of discrimination, domestic abuse (physical and psychological), and sexual victimization as a function of SGM status and race. Results show SGM identity was associated with higher psychological victimization; findings for sexual victimization were mixed across models, and physical victimization did not differ by SGM status. Non-White identity predicted greater odds of healthcare discrimination, while the SGM × race interaction was not significant

Article Two compares disabled SGM and non-SGM adults across six domains: overall well-being; access to basic needs (medication/therapy, food, daily-task assistance); depression (CES-D); anxiety (GAD-7); post-traumatic stress (PCL-5); and mental-health–related functional impairment. Groups did not differ in global well-being. However, disabled SGM participants reported significantly greater levels of unmet needs for help with daily tasks (odds ≈ 6–7 times higher). While greater difficulty accessing medication/therapy and adequate food did not reach statistical significance a clear trend emerged. Lastly, SGM participants reported higher depression and anxiety (small-to-medium effects), a PTSD difference that did not remain significant after correction, and greater functional impairment (small-to-medium association).

Together, the studies illuminate how structural conditions and day-to-day contexts combine to shape risk, resource access, and participation in daily life for people with disabilities who also hold other minoritized identities. The findings help by identifying the domains where disparities are most pronounced and by underscoring the need for approaches that are disability-competent and SGM-affirming, attentive to racial/ethnic inequities, and responsive to basic-needs constraints.

Table of Contents

CHAPTER I: INTRODUCTION

Health equity is defined by the Centers for Disease Control and Prevention (CDC) as the state in which all people have the opportunity to achieve their full health potential without being disadvantaged by social position or other socially determined circumstances (Centers for Disease Control and Prevention [CDC], 2022). Achieving health equity requires valuing all individuals equally and addressing preventable inequalities and systemic injustices that contribute to health disparities (U.S. Department of Health and Human Services [HHS], 2022).

This research adopts a conceptual framework recognizing that individuals are products of interconnected systems influenced by physical, emotional, societal, and environmental factors. The socioecological model (SEM) and minority stress theory offer key theoretical underpinnings, emphasizing that many adverse health outcomes arise from societal and environmental pressures rather than individual shortcomings. Together with the social determinants of health (SDOH) perspective, these frameworks shift responsibility from individuals to the structures that produce inequity.

The Socioecological Model

The socioecological model (SEM) is based on Bronfenbrenner's ecological paradigm, which emphasizes that health outcomes result from the interplay between personal, interpersonal, and environmental factors (Bronfenbrenner, 1994). The SEM expands this perspective by considering the broader social, organizational, community, and policy influences on health outcomes (Liburd & Sniezek, 2007). This model is widely applied in public health initiatives to better understand the challenges faced by marginalized populations navigating healthcare systems (Salihu et al., 2015).

Minority Stress Theory

The minority stress theory (Meyer, 2003) provides a complementary framework, explaining how stigma, prejudice, and systemic discrimination negatively affect health outcomes for individuals with marginalized identities (Figure1). For SGM populations, external stressors and internalized stigma elevate risk for adverse mental and physical health outcomes (Frost et al., 2015; Meyer et al., 2008). These frameworks guide the present focus on disability, SGM identity, and race/ethnicity in relation to health equity, victimization, and quality of life.

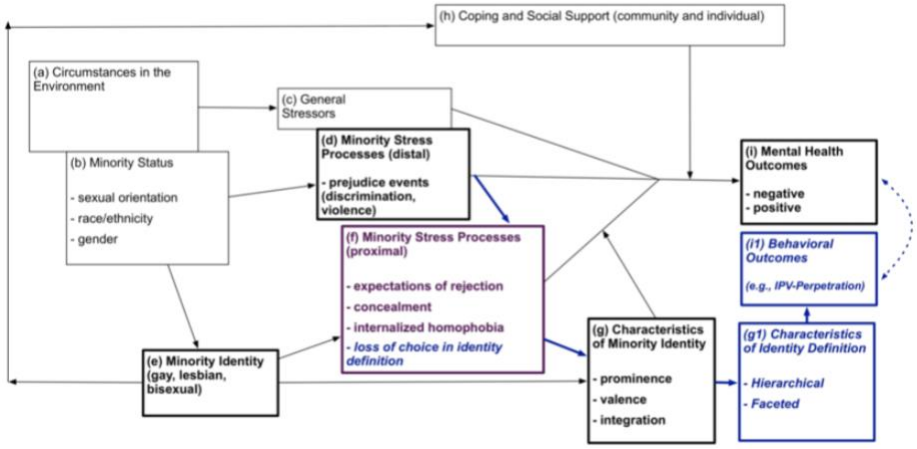

Figure 1. A visual representation of Minority Stress Theory.

Social Determinants of Health (SDOH)

Health disparities stem from inequities directly linked to the present and historically unequal allocation of social, political, economic, and environmental resources. The vast majority of health disparities are directly linked to poverty, environmental threats, inadequate access to healthcare, and educational inequities. According to the World Health Organization (WHO), failure to achieve health equity arises from preventable and unfair disparities in the Social Determinants of Health (SODH) (Marmot, 2007). The WHO's model for social determinants of health (SDOH) acknowledges the importance of several non-medical factors that impact health

outcomes (Figure 2). These factors include the circumstances under which individuals are born, raised, employed, reside, and age, along with the broader social structures that shape their daily existence including economic policies and systems, development objectives, societal norms, social policies, and political systems and politics (World Health Organization, 2024b). Studies indicate that SDOH often have a more significant influence on health outcomes than either healthcare or individual lifestyle choices. For instance, several research findings suggest that SDOH explain between 30-55% of the variance in health outcomes (World Health Organization, 2024a). Moreover, estimates reveal that sectors beyond healthcare play a more substantial role in determining population health outcomes compared to the healthcare sector.

The consideration of these factors helps explain how, despite a 30-year rise in average life expectancy for the general population, marginalized people experience increased rates of illness and death due to chronic conditions, and lower ratings of overall well-being and life expectancy (National Center for Health Statistics (US), 2021).

Racial/Ethnic Identity and Health Disparities

Racially and ethnically diverse populations constitute a significant and growing portion of the United States. According to the U.S. Census Bureau (2020), approximately 40% of the population identifies as non-White, with projections indicating that these groups will collectively become the majority by 2045. These communities include individuals from Black/African American, Hispanic/Latino, Asian, Native American, and other racial or ethnic backgrounds, all of whom face persistent health disparities. These disparities manifest across a variety of health metrics, including higher rates of chronic diseases (such as diabetes and hypertension), adverse birth outcomes, and lower life expectancy (Williams & Mohammed, 2009).

Barriers to equitable healthcare access play a critical role in these disparities. Structural

racism, implicit bias in healthcare delivery, and historical inequities contribute to delayed or inadequate treatment for racial and ethnic minorities (Bailey et al., 2017). For example, Black and Hispanic individuals report lower access to preventative healthcare services, such as cancer screenings and vaccinations, as well as higher rates of healthcare mistrust stemming from historical abuses in medical research and treatment (Jacobs et al., 2006).

Compounding these disparities, social determinants of health—including poverty, housing instability, and limited educational opportunities—further exacerbate the inequities faced by these populations (Braveman et al., 2011). Additionally, stressors related to discrimination and marginalization are associated with poorer mental health outcomes, including higher rates of depression and anxiety, as well as increased risks of substance use (Kaholokula et al., 2017).

SGM Identity and Health Disparities

Sexual and gender minority (SGM) individuals also comprise a substantial portion of the United States population, and according to recent Gallup news report, (Jones, 2024) it continues to grow with the estimated number of SGM adults currently at 7.6%. In the latest polls, one in five Gen Z adults (ages 18 – 26) identify as LGBTQ+; for millennials (ages 27-42) the reported number is one in ten. Current trends in increasing SGM identifiers are likely to continue resulting in rates over 10% of the U.S. population, more than 33 million adults, in the next couple of decades.

SGM individuals, including those who identify as non-heterosexual or non-cisgender, have also long been recognized as facing significant health disparities (ODPHP, 2020). These disparities impact various health aspects, including risk factors, outcomes, and healthcare access.

Additionally, this group experiences reduced access to and utilization of preventative healthcare services (Johnson et al., 2020), including cancer screenings (Dilley et al., 2010).

As a result of these disparities, SGM individuals experience higher rates of substance abuse such as cigarette smoking and heavy drinking (Gonzalez et al., 2017; Medley et al., 2016), mental health conditions (Medley et al., 2016), suicide attempts, and deaths by suicide (Goldbach et al., 2014; Marshal et al., 2011; Plöderl et al., 2013; Ward et al., 2014). This, accompanied by heightened rates of certain infectious diseases and sexually transmitted infections (Everett, 2013) further exacerbates negative health outcomes and results in reports of poorer quality of life (Cochran & Mays, 2007).

While access to regular and consistent healthcare has improved somewhat for sexual minority groups, considerable barriers persist, particularly for transgender and non-binary patients' access to sufficient, routine, and stable healthcare (Johnson et al., 2020). These individuals also have limited access to medical services related to gender and sex transition and affirmation (Bradford et al., 2013; Garcia & Crosby, 2020). It should also be acknowledged that, as reported in Lund & Burgess (2021), there are significant differences in the ways in which subpopulations within the SGM community are impacted by health disparities.

Prompted by these concerns, in October 2016, the National Institute for Minority Health and Health Disparities declared sexual and gender minorities (SGM) as an officially recognized health disparity population for research purposes (LGBT Policy Coordinating Committee, 2016). This designation incentivizes researchers to gather and assess data related to SGM individuals, enhancing comprehension of variances or gaps between different SGM subgroups and other demographic groups of interest.

Additionally, SGM people may lack access to support groups, therapy, and other

activities that promote inclusion and provide important social outlets. While this is true for the general population, SGM people are more highly impacted due to the lack of acceptance and affirmation displayed by many family members of SGM individuals. They are one of the few minoritized groups that do not share minority characteristics with their family members. Many SGM people rely on support outside of the home as a social outlet.

Rationale and Purpose of the Research

The COVID-19 pandemic brought heightened attention to health disparities, particularly for minoritized populations. The increased demand for healthcare services during this period revealed systemic inequities in healthcare access, quality, and outcomes. While existing data provide insights into how marginalized populations were affected, much of this information remains aggregated, obscuring the specific experiences of subpopulations, such as disabled SGM individuals. This study seeks to address this gap by exploring how intersecting identities—disability, SGM status, and racial/ethnic minority status—contribute to health disparities, victimization, and mental health outcomes.

This research builds on previous calls for expanded investigations into the experiences of multiply marginalized individuals (Lund & Burgess, 2021), especially those with disabilities. These studies also provide a model for future research examining such comparisons and increasing the ability to better understand the complex relationship between variables such as disability, SGM identity, race and ethnicity, intersectionality, victimization, discrimination, functional impairment, depression, and PTSD.

The primary benefit of this research, however, remains its ability to inform policies, interventions, and support systems designed to address these disparities and promote health equity. This study also contributes to the broader understanding of how systemic inequities shape

health outcomes, offering actionable insights for researchers, practitioners, and policymakers working to reduce harm and improve well-being for minoritized communities.

This dissertation uses a single U.S. dataset (December 2021, Prolific) and is organized as two complementary articles:

Article 1 (Chapter II) examines whether SGM status and non-White identity, independently and jointly, predict victimization (physical, psychological, sexual), domestic violence, and healthcare discrimination among disabled adults.

Article 2 (Chapter III) compares disabled SGM adults with disabled non-SGM peers on overall well-being, access to basic needs (medication/therapy, food, assistance with daily tasks), depression/anxiety/posttraumatic stress, and mental health–related functional impairment.

Across both articles, global ratings are paired with domain-specific indicators to avoid masking important nuance.

References

Alang, S., McAlpine, D., McCreedy, E., & Hardeman, R. (2017). Police brutality and Black health: Setting the agenda for public health scholars. *American Journal of Public Health, 107*(5), 662–665. https://doi.org/10.2105/AJPH.2017.303691

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet, 389*(10077), 1453–1463. https://doi.org/10.1016/S0140-6736(17)30569-X

Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality—An important theoretical framework for public health. *American Journal of Public Health, 102*(7), 1267–1273. https://doi.org/10.2105/AJPH.2012.300750

Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: Results from the Virginia Transgender Health Initiative Study. *American Journal of Public Health, 103*(10), 1820–1829. https://doi.org/10.2105/AJPH.2012.300796

Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husén & T. N. Postlethwaite (Eds.), *International Encyclopedia of Education* (2nd ed., Vol. 3, pp. 1643–1647). Pergamon Press.

Burgess, D. J., Lee, R., Tran, A., & Van Ryn, M. (2007). Effects of perceived discrimination on mental health and mental health services utilization among gay, lesbian, bisexual, and transgender persons. *Journal of LGBT Health Research, 3*(4), 1–14. https://doi.org/10.1080/15574090802226626

Centers for Disease Control and Prevention. (2022). *Health equity.* U.S. Department of Health and Human Services. https://www.cdc.gov/healthequity/

Cochran, S. D., & Mays, V. M. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: Results from the California Quality of Life Survey. *American Journal of Public Health, 97*(11), 2048–2055. https://doi.org/10.2105/AJPH.2006.087254

Dilley, J. A., Simmons, K. W., Boysun, M. J., Pizacani, B. A., & Stark, M. J. (2010). Demonstrating the importance and feasibility of including sexual orientation in public health surveys: Health disparities in the Pacific Northwest. *American Journal of Public Health, 100*(3), 460–467. https://doi.org/10.2105/AJPH.2007.130336

Everett, B. G. (2013). Changes in neighborhood characteristics and depression among sexual minority young adults. *American Journal of Public Health, 103*(9), 1588–1596. https://doi.org/10.2105/AJPH.2012.301133

Garcia, S. C., & Crosby, R. A. (2020). Perceived barriers to health care access and their association with unmet needs among transgender people. *Transgender Health, 5*(1), 13–17. https://doi.org/10.1089/trgh.2019.0042

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among Blacks and Whites in the United States. *American Journal of Public Health, 96*(5), 826–833. https://doi.org/10.2105/AJPH.2004.060749

Goldbach, J. T., Tanner-Smith, E. E., Bagwell, M., & Dunlap, S. (2014). Minority stress and substance use in sexual minority adolescents: A meta-analysis. *Prevention Science, 15*(3), 350–363. https://doi.org/10.1007/s11121-013-0393-7

Gonzales, G., & Henning-Smith, C. (2017). Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly, 95*(4), 726–748. https://doi.org/10.1111/1468-0009.12297

Hughes, R. B., Lund, E. M., Gabrielli, J., Powers, L. E., & Curry, M. A. (2002). Prevalence and correlates of violence against women with disabilities. *American Journal of Public Health, 92*(4), 640–646. https://doi.org/10.2105/AJPH.92.4.640

Jacobs, E. A., Rolle, I., Ferrans, C. E., Whitaker, E. E., & Warnecke, R. B. (2006). Understanding African Americans' views of the trustworthiness of physicians. *Journal of General Internal Medicine, 21*(6), 642–647. https://doi.org/10.1111/j.1525-1497.2006.00485.x

Johnson, S. E., Blake, S. M., Kahn, R. E., & Slopen, N. (2020). Sexual and gender minority disparities in health and health care access. *American Journal of Preventive Medicine, 59*(6), 832–841.

Kaholokula, J. K., Ing, C. T., Look, M. A., Delafield, R., & Sinclair, K. A. (2017). Culturally responsive approaches to health promotion for Native Hawaiians and Pacific Islanders. *Annals of Human Biology, 44*(4), 275–283. https://doi.org/10.1080/03014460.2017.1339675

Liburd, L. C., & Sniezek, J. E. (2007). Changing health behaviors: The role of the socioecological model in public health practice. *American Journal of Public Health, 97*(1), 131–135. https://doi.org/10.2105/AJPH.2006.090660

LGBT Policy Coordinating Committee. (2016). *NIH FY 2016–2020 Strategic Plan to Advance Research on the Health and Well-Being of Sexual and Gender Minorities.* National Institutes of Health. https://dpcpsi.nih.gov/sgmro/strategicplan

Lund, E. M., & Burgess, C. M. (2021). Sexual and gender minority people with disabilities: Experiences of violence and discrimination. *Rehabilitation Psychology, 66*(3), 278–288. https://doi.org/10.1037/rep0000396

Marmot, M. (2007). Achieving health equity: From root causes to fair outcomes. *The Lancet, 370*(9593), 1153–1163. https://doi.org/10.1016/S0140-6736(07)61385-3

Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A. R., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*(2), 115–123. https://doi.org/10.1016/j.jadohealth.2011.02.005

Medley, G., Lipari, R. N., Bose, J., Cribb, D. S., Kroutil, L. A., & McHenry, G. (2016). *Sexual orientation and estimates of adult substance use and mental health: Results from the 2015 National Survey on Drug Use and Health.* Substance Abuse and Mental Health Services Administration (SAMHSA). https://www.samhsa.gov/data/sites/default/files/NSDUH-SexualOrientation-2015.htm

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H. (2015). Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity, 2*(3), 209–213. https://doi.org/10.1037/sgd0000132

National Center for Health Statistics (US). (2021). *Health, United States, 2020–2021: Annual Perspective.* Centers for Disease Control and Prevention. https://www.cdc.gov/nchs/hus/

Plöderl, M., & Tremblay, P. (2015). Mental health of sexual minorities: A systematic review. *International Review of Psychiatry, 27*(5), 367–385. https://doi.org/10.3109/09540261.2015.1083949

Salihu, H. M., Wilson, R. E., King, L. M., Marty, P. J., & Whiteman, V. E. (2015). Socioecological model as a framework for overcoming barriers and challenges in randomized control trials in minority and underserved communities. *International Journal of MCH and AIDS, 3*(1), 85–95. https://doi.org/10.21106/ijma.39

Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.). (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care.* National Academies Press. https://doi.org/10.17226/12875

Tjaden, P. G., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey.* U.S. Department of Justice, National Institute of Justice & Centers for Disease Control and Prevention. NCJ 181867

Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). Poly-victimization in a national sample of children and youth. *American Journal of Preventive Medicine, 38*(3), 323–330. https://doi.org/10.1016/j.amepre.2009.11.012

U.S. Census Bureau. (2020). *QuickFacts: United States.* https://www.census.gov/quickfacts/fact/table/US/PST045222

U.S. Department of Health and Human Services. (2022). *Healthy People 2030: Health equity.* https://health.gov/healthypeople

Ward, B. W., Dahlhamer, J. M., Galinsky, A. M., & Joestl, S. S. (2014). Sexual orientation and health among U.S. adults: National Health Interview Survey, 2013. *National Health Statistics Reports, 77*, 1–10. https://www.cdc.gov/nchs/data/nhsr/nhsr077.pdf

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20–47. https://doi.org/10.1007/s10865-008-9185-0

World Health Organization. (2024a). *Social determinants of health.* https://www.who.int/health-topics/social-determinants-of-health

World Health Organization. (2024b). *A conceptual framework for action on the social determinants of health.* https://www.who.int/publications/i/item/9789241500852

CHAPTER II: ARTICLE ONE

Intersecting Marginalization: The Role of Disability, Sexual and Gender Minority, and Non-White Identity in Victimization

Disability status is strongly associated with health disparities, reflecting differences in access to care, social determinants of health, and overall health outcomes. People with disabilities are more likely to experience poverty, unemployment, and limited educational opportunities, all of which contribute to poorer health outcomes (World Health Organization, 2011). Additionally, people with disabilities often face significant barriers to accessing healthcare, including physical inaccessibility, provider bias, and insufficient insurance coverage (Krahn et al., 2015). These barriers lead to higher rates of chronic health conditions, increased mental health challenges, and reduced quality of life compared to the general population (CDC, 2020).

The Role of Health Equity

In response, recent policy changes underscore the need to prioritize disability as a health equity issue. In 2023, the National Institutes of Health designated individuals with disabilities as a population experiencing health disparities, calling attention to the structural barriers they face and supporting future research and action (NIH, 2023). In 2024, the final rule under Section 1557 of the Affordable Care Act prohibited discrimination in healthcare based on intersecting identities, including disability, race, sex, and gender identity (NHeLP, 2024). Together, these developments not only provide a legal and institutional framework for recognition but also create opportunities for equity-focused interventions that can improve health outcomes across marginalized groups.

Disability and Victimization

In addition to decreased healthcare access, people with disabilities also experience significantly higher rates of victimization than their non-disabled peers, a trend well-documented in education, health, and social science literature. According to a large-scale study by Dammeyer and Chapman (2018), a survey of 44,000 adults reported people with mental disabilities were three times more likely to experience violence than their non-disabled peers. Other research shows adults with disabilities, particularly those with intellectual and developmental disabilities, are also more likely to experience interpersonal violence and exploitation (Hughes et al., 2012). Additionally, children with disabilities are two to three times more likely to be bullied than their peers without disabilities, resulting in poorer academic performance, psychological distress, and diminished well-being (Rose et al., 2015).

Victimization in Other Marginalized Populations

SGM and non-White populations also face elevated risks of bullying, hate crimes, and violence; structural racism further shapes quality of care (Meyer, 2015; Smedley et al., 2003; Sue et al., 2007). Non-White individuals encounter persistent systemic inequities that manifest in settings such as healthcare, where racial disparities in treatment and quality of care remain well-documented (Smedley, Stith, & Nelson, 2003). However, these marginalized identities may not always combine in simple or additive ways (Crenshaw, 1989; Bowleg, 2012). At the same time, despite disproportionate exposure to risks, many individuals demonstrate resilience that complicates assumptions about compounded disadvantages. As a whole, this indicates the need to investigate not only risks but also pathways of resilience in multiply marginalized groups.

In addition to the risks faced by SGM populations, non-white individuals also encounter systemic forms of harm. They are disproportionately affected by racism, microaggressions, and structural inequities, which increase their susceptibility to violence and discrimination (Sue et al.,

2007). For example, Black and Indigenous people are more likely to experience police violence—an institutional form of victimization rooted in structural racism (Alang et al., 2017).

Consequences of Victimization

Victimization has far-reaching consequences for marginalized communities. For individuals with disabilities, victimization is linked to depression, anxiety, PTSD, suicidal ideation, and worsening of existing conditions (Hughes et al., 2002). SGM individuals who experience violence report increased substance abuse, mental health disorders, and suicidality due to persistent stigma and discrimination (Meyer, 2015). Non-white populations also experience heightened chronic stress and adverse health outcomes as a result of racial discrimination (Lewis et al., 2015). These consequences are often compounded for individuals with intersecting marginalized identities, such as being both disabled and SGM or disabled and non-white (Burgess et al., 2007).

Conceptual Frameworks

Minority Stress Theory further clarifies how chronic stress stemming from stigmatization, discrimination, and systemic exclusion adversely impacts both mental and physical health (Meyer, 2013). This theory highlights the role of both external stressors and internalized stigma in perpetuating health inequities across marginalized groups. Figure 1 outlines these processes.

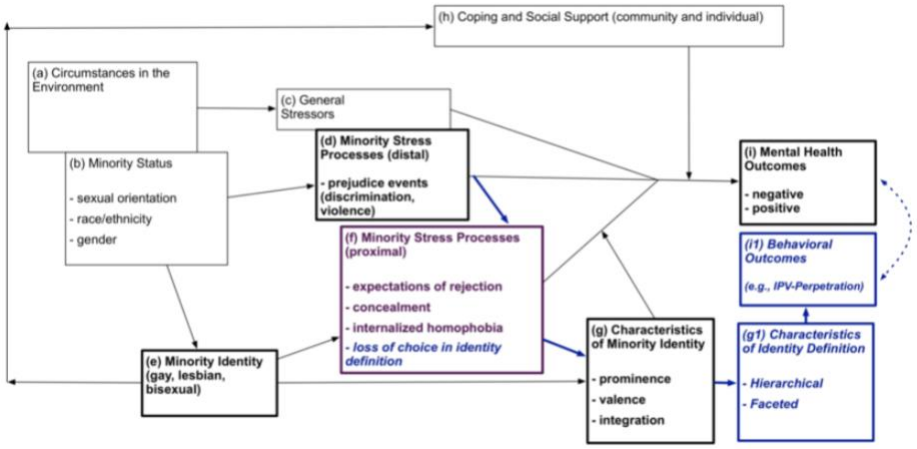

Figure 1. A visual representation of Minority Stress Theory.

The weathering hypothesis provides an additional framework for understanding health disparities among marginalized populations, explaining how long-term exposure to discrimination and inequities accelerates biological aging and worsens health outcomes (Geronimus et al., 2006). It suggests that the cumulative burden of chronic stressors, including structural inequities, discrimination, and economic disadvantage, hastens the onset of illness. This perspective is especially relevant for disabled and chronically ill individuals, particularly those who also identify as SGM or belong to other historically marginalized groups, as it illustrates how overlapping marginalizations influence both vulnerability to victimization and long-term health decline. The combined use of Minority Stress Theory and the weathering hypothesis allows for a deeper understanding of how systemic oppression operates and can inform the development of more effective, inclusive interventions.

Building on these theoretical perspectives, the present study investigates the impacts of victimization on multiply marginalized individuals with disabilities, namely those who also identify as SGM and/or non-white. Previous research demonstrates that multiply marginalized individuals face heightened risks for victimization and discrimination. Pyo and Hayes (2024)

found that LGBTQ+ individuals with disabilities reported increased perceptions of threat related to hate crimes. Similarly, the Urban Institute (2023) reported that nearly 40% of adults with disabilities faced unfair treatment, with rates even higher among those who were Black or Hispanic. Considering these findings, this study underscores the urgency of examining how intersecting identities shape experiences of interpersonal violence and discrimination in ways that affect health and well-being.

Despite growing recognition of disparities affecting people with disabilities, less is known about how intersecting marginalized identities shape risk for abuse, violence, and healthcare discrimination within this group. Existing research has documented higher rates of victimization among SGM populations (Freeman & Hamilton, 2020), but limited attention has been paid to how these risks manifest specifically among disabled populations. Moreover, while intersectionality theory has often been used to describe compounded disadvantage, this study explores whether marginalized identities operate independently or interactively in shaping these experiences, offering a more nuanced view of compound risk.

In addition to societal structures, other environmental factors or disasters, like the COVID-19 pandemic, further intensify existing disparities, disproportionately impacting disabled populations across multiple domains, including access to medical care, economic stability, and experiences of violence (Goggin & Ellis, 2020; Turk et al., 2020). During this time, disabled individuals faced barriers to routine healthcare, disruptions in services, and increased social isolation. For SGM individuals, the pandemic exacerbated risks of victimization, particularly in unsafe home environments, while racial and ethnic minority communities bore disproportionate burdens of COVID-19 infection, hospitalization, and mortality (CDC, 2021).

Collectively, these intersecting conditions created a context in which disabled people at the margins of multiple identities were especially vulnerable.

These patterns highlight the need to investigate how disability, SGM identity, and non-White identity—individually and in combination—shape experiences of victimization and discrimination. This study addresses that gap by examining these dynamics during the COVID-19 pandemic to determine whether overlapping marginalized identities influence exposure to victimization. The following research questions guided this analysis:

Research Questions (Article I)

1. Do people with disabilities who are SGM differ from their non-SGM counterparts in the frequency and type of victimization (physical, psychological, and sexual violence) that they report?
2. How do people with disabilities who identify as non-white differ from their white counterparts in the frequency and type of victimization (physical, psychological, and sexual violence) that they report?
3. How do SGM status and non-white identity, together or separately contribute to the frequency of domestic abuse (physical and psychological) among individuals with disabilities?
4. How do SGM status and non-white identity, together or separately, contribute to the frequency of discrimination (e.g., reporting receiving lower quality healthcare) in the healthcare setting?

This study aims to uncover how overlapping marginalized identities influence exposure to victimization and inform future efforts to reduce victimization, abuse, and discrimination.

Method

Recruitment and Data Cleaning

Participants were recruited in December 2021 on the Prolific research platform (https://www.prolific.co/) as part of a larger study by Lund and Thomas (2023) regarding traumatic and stressful experiences and mental health during the COVID-19 pandemic. Recruitment occurred during the Delta wave and early Omicron wave in the United States, when vaccines were widely available and heavy lockdowns had been lifted, but mask mandates were still common. The study was advertised as an anonymous online survey about pandemic experiences, mental health, and well-being. Although the electronic consent form mentioned "difficult events," it did not specifically reference trauma or domestic violence.

Eligibility criteria required participants to be age 18 or older, reside in the United States, and correctly answer comprehension questions about their rights before beginning the survey. All participants completed the same questionnaire, could only participate once, and were compensated USD 3.50 for their time. On Prolific, all participants are pre-screened and verified by platform administrators and complete demographic questions to enable targeted sampling. Recruitment was carried out in four targeted waves as outlined in Figure 2; these waves resulted in oversampling of target groups, ensuring a more diverse sample. For each wave, Prolific users who met the criteria for that wave (e.g., U.S. resident, non-white and/or Hispanic/Latino and having a disability or chronic health condition) could see the announcement and participate. Participants could not participate in more than one wave to prevent duplicate responses.

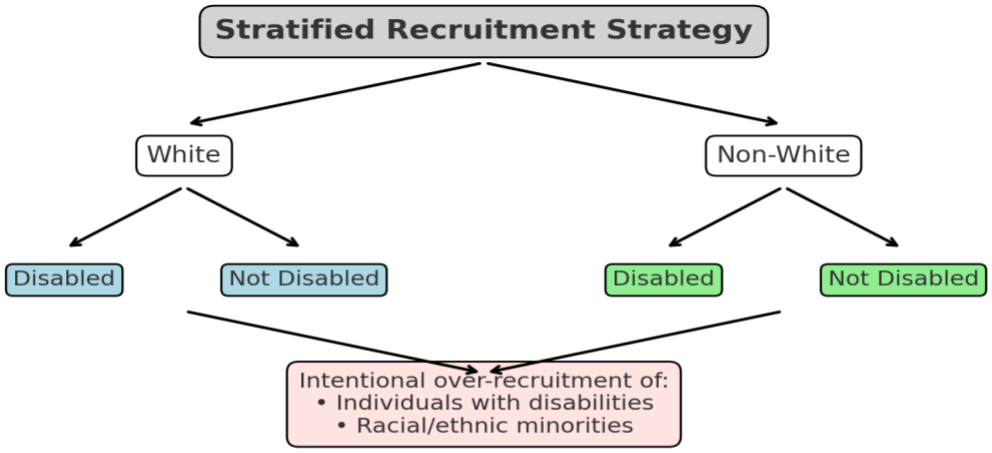

Figure 2. Representation of the stratified recruitment strategy used to ensure diverse representation in the sample.

A total of 661 individuals completed the survey. Fifteen participants (2.7%) were excluded for poor-quality data, including failed attention checks, inconsistent responses to repeated items, or nonsensical answers to qualitative questions. An additional 42 participants (6.4%) were excluded for missing responses on domestic violence, depressive symptoms, or post-traumatic stress symptom items. The final sample consisted of 604 participants. A condensed summary of participant demographics from that sample is presented in Table 1 below.

Table 1. Participant demographics (condensed).

Category	n	%
Gender		
Female	397	65.7
Male	186	30.8
Outside binary	21	3.5
Sexual Orientation		
Heterosexual	405	67.1
Sexual minority[1]	199	32.9

Disability/Health[2]		
Has disability	150	24.8
Chronic condition	212	35.1
Both	106	40
Race/Ethnicity		
White/Caucasian	247	40.9
Non-White[3]	317	52.5
Not reported	40	6.6
Education		
Bachelor's or higher	291	48.2
Some college	232	38.4
Employment		
Full-time	244	40.4
Part-time/student	187	31.0
Unemployed	149	24.7

Note. Percentages are based on the final analytic sample ($N = 604$). Some categories are not mutually exclusive (i.e., disability and chronic health condition; race/ethnicity).
[1] Includes bisexual/pansexual, gay/lesbian, asexual, and other.
[3]Participants could indicate that they had a disability, a chronic health condition, both, or neither.
3 Includes Asian/Pacific Islander, Hispanic/Latino, African American/Black, Native American/Alaskan Native, Arab/Middle Eastern, and Other

Participants

For the present analysis, the focus was narrowed to include the subset of respondents who reported having a disability, a chronic health condition, or both. Figure 3, below, outlines the breakout of individuals reporting each response. While this information provides context, the current study does not distinguish between these groups in the analysis, as the subset was chosen based on an increased likelihood of needing more frequent contact with the healthcare system.

Participant Disability and Chronic Health Condition Breakout (N = 278)

Variable/Category	n	%
Disability/Chronic Illness		
Disability Only	53	18
Chronic Illness Only	119	42
Both	106	40

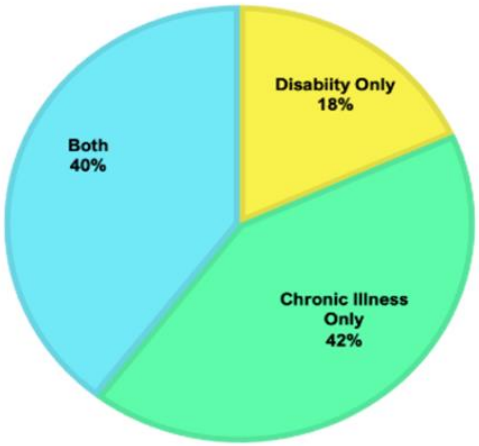

Figure 3. Table and chart visuals illustrate the breakout of participants in the subset by reported disability/chronic health condition category.

Of the 278 participants in these analyses, 5.8% selected "other " for their gender identity. These written descriptions included agender, demigirl, genderfluid, non-binary/nonbinary, and trans man. Because these gender identities are generally recognized as being under the sexual and gender minority (SGM) umbrella, they were classified as such for the analysis. Similarly, the "other" category under sexual orientation included reports of omnisexual, queer, and questioning; consistent with analytic practice, these identities were grouped with bisexual/pansexual, gay/lesbian, and asexual participants under the SGM category. Relevant demographic data are outlined in Table 2 below.

Table 2. Participant demographics (N = 278) for current research sample.

Variable	n	%
Gender		
Male	85	30.6
Female	177	63.7
Other (specified)[1]	16	5.8

Gender – Self-Specified Text[2]		
Agender	2	0.7
Demigirl	1	0.4
Genderfluid	1	0.4
Non-binary / Nonbinary[3]	10	3.6
Trans man	1	0.4
Sexual Orientation		
Heterosexual/straight	169	60.8
Bisexual/pansexual	65	23.4
Gay/lesbian	25	9.0
Asexual	16	5.8
Other	3	1.1
Race/Ethnicity		
Arab/Middle Eastern	9	3.2
Hispanic/Latino	37	13.3
Native American/Alaskan	20	7.2
White/Caucasian	131	47.1
Other (described)	19	6.8
Do not wish to say	19	6.8

Note. [1] "Other" refers to participants who selected the option to self-describe their gender identity.
[2] The self-specified text field includes participants' written-in gender identities.
[3] Includes all spellings of "non-binary / nonbinary."
[4] Participants could select more than one racial/ethnic identity; therefore, percentages do not sum to 100%.

Due to the oversampling algorithms specified in Prolific during initial data collection, reported racial/ethnic identity was varied, with more than half of the participant group reporting identities that are not white/Caucasian

Measures

All measures were administered through an online survey hosted on a secure Qualtrics platform maintained by a university. All analysis was conducted using IBM SPSS Statistics 30.0.0.0 (172).

Demographic Survey

Demographic information was collected on participants' race/ethnicity, disability status and type(s) of disability, sexual and romantic orientation, employment status (including recency of employment), income range, marital status, and additional background variables.

Stress and Trauma Questionnaire

A pandemic-related stress and trauma questionnaire was developed for this study to assess adverse experiences during the COVID-19 pandemic. The measure included items spanning multiple domains of stress and trauma, such as physical and psychological abuse, sexual victimization, identity-based discrimination (e.g., related to race/ethnicity, disability status, or chronic health condition), and other pandemic-related hardships (e.g., social isolation, financial difficulties, health concerns). Participants rated the frequency of each experience using a 5-point Likert scale ranging from 1-5 with responses including: never, once, a few times, often, very frequently.

Variables

SGM Identity. SGM identity was derived from two separate questions on the questionnaire assessing gender identity and sexual orientation. Participants who identified as lesbian, gay, bisexual, pansexual, asexual, transgender, nonbinary, or another minoritized sexual or gender identity were coded as SGM. Participants identifying as heterosexual and cisgender were coded as non-SGM. This binary classification was used in all regression analyses.

Victimization. For the purposes of the current analyses, two items addressing domestic violence and one item addressing sexual abuse were examined. The domestic physical abuse item asked whether participants had ever been "hit, kicked, punched, or otherwise physically harmed by a family member, significant other, housemate, or caregiver." The domestic

psychological abuse item asked whether they had been "yelled at, insulted, or screamed at by a family member, significant other, housemate, or caregiver", and for the item assessing sexual victimization, participants indicated how often they had been ‘sexually assaulted’ using the same 5-point Likert scale specified above.

These items were chosen for their direct relevance to domestic and interpersonal violence and were analyzed separately to examine differences in frequency of victimization based on SGM identity. Higher scores reflected more frequent victimization experiences.

Discrimination. Healthcare-related discrimination was assessed with an item from the pandemic-related stress and trauma questionnaire that asked participants to reflect on their experiences accessing medical services during the COVID-19 pandemic. Specifically, participants were asked whether they felt they had received a lower quality of care because of their disability or health condition. Responses were recorded on the 5-point scale as indicated in other measures.

Higher scores indicated more frequent perceptions of discriminatory treatment in healthcare contexts. This variable was included to capture inequities in access to and quality of care for individuals with disabilities.

Data Analysis

The primary analyses examined whether sexual and gender minority (SGM) identity predicted differences in victimization and discrimination. Given the ordinal nature of the outcome variables, ordinal logistic regression (OLR) was planned as the primary analytic approach for all victimization and discrimination items. This method allows for estimation of the log odds of reporting higher levels of victimization or discrimination as a function of SGM identity while preserving the ordered categorical structure of the response scales.

The proportional-odds OLR model was specified as:

$$\log\left(\frac{P(Y \leq j)}{P(Y > j)}\right) = \theta_j - \beta_1(\text{SGM})$$

where *Y* is the ordinal outcome (1 = "never" to 5 = "very frequently"), *j* indexes the cumulative thresholds, θj are threshold parameters, and X is the predictor (e.g., SGM identity coded 0 = non-SGM, 1 = SGM).

Prior to interpretation, the distribution of each outcome variable was examined to determine whether model assumptions were adequately supported. In cases where responses were highly skewed and reports of higher-frequency categories were rare, the OLR model produced unstable or difficult-to-interpret estimates. These sparse counts can undermine the validity of ordinal logistic regression models, leading to unstable estimates and convergence problems (Harrell, 2015; Menard, 2010). Dichotomizing variables in these circumstances provides a more reliable and interpretable analytic strategy.

Additionally, from a conceptual perspective, the literature on trauma and victimization highlights that the *presence* of abuse or assault is clinically meaningful regardless of its frequency. Even a single instance of physical or sexual assault may have lasting psychological and functional consequences (Kilpatrick et al., 2003; Walsh et al., 2010). Thus, distinguishing between "never" versus "any experience" aligns with a trauma-informed perspective that recognizes the significance of victimization irrespective of frequency. This approach has been used in prior research on interpersonal violence and trauma exposure, where binary measures are often employed to capture whether participants were exposed to an adverse event at all (e.g., Turner, Finkelhor, & Ormrod, 2010).

Given this established statistical and conceptual backing, outcomes were recoded into dichotomous indicators, and binary logistic regression (BLR) was conducted as a secondary analysis. This dual approach ensured that the most appropriate statistical model was applied to each research question.

The BLR model was specified as:

$$\log\left(\frac{P(Y=1)}{P(Y=0)}\right) = \alpha + \beta_1(\text{SGM})$$

Where Y is the dichotomous outcome, α is the intercept, and β1 represents the effect of SGM/non-white identity. Odds ratios ($e^{\beta 1}$) were calculated to quantify differences in the likelihood of reporting victimization or discrimination between the participant groups.

Model Evaluation.

Model fit for the regression analyses was evaluated using several standard indices appropriate to the analytic approach. For the ordinal logistic regression (OLR) models, the likelihood ratio chi-square test compared the final model against the intercept-only model, with a significant result indicating that inclusion of the predictor (e.g., SGM identity) improved model fit. Pseudo-R^2 values (Cox and Snell, Nagelkerke, and McFadden) were reported as indicators of effect size, providing approximate estimates of the proportion of variance in the outcome explained by the predictor. In addition, the proportional odds assumption was tested using the test of parallel lines. Nonsignificant results indicated that the assumption was not violated, supporting the appropriateness of the OLR model.

For the binary logistic regression (BLR) models, overall model fit was first assessed using the model chi-square test, with a significant result suggesting improved fit of the final model relative to the intercept-only model. As with the OLR models, pseudo-R^2 values (Cox and Snell, Nagelkerke, and McFadden) were reported to provide approximate effect size estimates.

Results

SGM Identity and Victimization

The first research question examined whether sexual and gender minority (SGM) identity predicted the frequency and type of victimization (physical, psychological, and sexual) among individuals with disabilities. The frequency data in each category are shown in Table 3 below.

Table 3. Frequency of reported victimization experiences during the COVID-19 pandemic.

Victimization Type	Category	N	% of Valid
Physical	Never	233	83.8
(N = 278)	Once	19	6.8
	A few times	20	7.2
	Often	2	0.7
	Very frequently	4	1.4
Psychological	Never	137	49.3
(N = 278)	Once	21	7.6
	A few times	84	30.2
	Often	28	10.1
	Very frequently	8	2.9
Sexual	Never	241	86.7
(N = 276)	Once	12	64.3
	A few times	22	7.9
	Often	0	0
	Very frequently	1	0.4

Note. Responses were originally rated on a 5-point Likert scale ranging from 1 ("never") to 5 ("very frequently"). Due to limited variance and low responses of higher-frequency categories (e.g., *often*, *very frequently*), distributions are presented only for categories with valid responses. The number of valid cases (N) varied by item due to missing data.

Physical Victimization

Analyses first examined the association between SGM identity and physical victimization. The ordinal logistic regression model did not yield a significant association, $\chi^2(1) = 2.20$, $p = .138$, with SGM identity not emerging as a significant predictor, B = 0.49, SE = 0.33, Wald = 2.22, $p = .136$. The model explained a negligible proportion of the variance (Nagelkerke

$R^2 \approx .011$). As shown in Table 4, SGM participants were somewhat more likely to report physical victimization compared to non-SGM participants (OR = 1.62, 95% CI [0.86, 3.08]), but this association was not statistically significant.

Table 4. Ordinal logistic regression predicting physical victimization from SGM identity.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM (1 = SGM, 0 = non-SGM)	0.49	0.33	2.22	.136	1.62	0.86 – 3.08

Note. χ^2 (1) = 2.20, p = .138; Nagelkerke $R^2 \approx .011$. DV = physical victimization (ordinal).

The binary logistic regression model for physical victimization (Table 5) also indicated no significant association. SGM participants had slightly higher odds of reporting physical victimization (OR = 1.11, 95% CI [0.34, 3.63]), but this association was not significant, B = 0.11, SE = 0.60, Wald = 0.03, p = .862. The model explained minimal variance. Results from both approaches converged, suggesting no significant link between SGM identity and physical victimization.

Table 5. Binary logistic regression predicting physical victimization from SGM identity.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM identity	0.11	0.60	0.03	.862	1.11	0.34 – 3.63

Note. DV = physical victimization (0 = never, 1 = at least once).

Psychological Victimization

Next, models tested whether SGM identity predicted psychological victimization. The ordinal logistic regression model revealed a significant association of SGM identity, χ^2 (1) = 5.53, p = .019. As outlined in Table 6, SGM participants reported greater odds of psychological victimization, B = 0.54, SE = 0.23, Wald = 5.56, p = .018, OR = 1.72, 95% CI [1.09, 2.71]. The model explained a small proportion of the variance (Nagelkerke $R^2 \approx .022$).

Table 6. Ordinal logistic regression predicting psychological victimization from SGM identity.

Predictor	B	SE	Wald χ^2	p	OR	95% CI

SGM (1 = SGM, 0 = non-SGM)	0.54	0.23	5.56	.018	1.72	1.09 – 2.71

Note. χ^2 (1) = 5.53, p = .019; Nagelkerke $R^2 \approx .022$. DV = psychological victimization (ordinal).

The binary logistic regression model also indicated a significant association of SGM identity, $\chi^2(1) = 7.10$, p = .008 (Table 7). SGM participants were over four times as likely as non-SGM participants to report any psychological victimization, B = 1.41, SE = 0.59, Wald = 5.84, p = .016, OR = 4.11, 95% CI [1.31, 12.94]. Both OLR and BLR converged in showing that SGM identity significantly predicted psychological victimization, though the binary model suggested a stronger association.

Table 7. Binary Logistic Regression Predicting Psychological Victimization from SGM Identity

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM identity	1.41	0.59	5.84	.016	4.11	1.31 – 12.94

Note. DV = psychological victimization (0 = never, 1 = at least once).

Sexual Victimization

Finally, analyses assessed whether SGM identity was associated with sexual victimization. The ordinal logistic regression model demonstrated a significant association of SGM identity, as indicated in Table 8, χ^2 (1) = 5.77, p = .016. SGM participants had higher odds of sexual victimization, B = 0.87, SE = 0.37, Wald = 5.71, p = .017, OR = 2.40, 95% CI [1.17, 4.91]. The model explained a modest proportion of the variance (Nagelkerke $R^2 \approx .034$).

Table 8. Ordinal logistic regression predicting sexual victimization from SGM identity.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM (1 = SGM, 0 = non-SGM)	0.87	0.37	5.71	.017	2.40	1.17 – 4.91

Note. χ^2 (1) = 5.77, p = .016; Nagelkerke $R^2 \approx .034$. DV = sexual victimization (ordinal).

In contrast, the binary logistic regression model, shown in Table 9, did not yield a significant association, χ^2 (1) = 1.78, p = .182. SGM participants had higher odds of reporting

any sexual victimization (OR = 2.63, 95% CI [0.63, 11.00]), but the association was not statistically significant, B = 0.97, SE = 0.73, Wald = 1.74, p = .187. This divergence likely reflects sparse data, particularly the very small number of cases in the higher-frequency sexual victimization categories.

Table 9. Binary Logistic Regression Predicting Sexual Victimization from SGM Identity.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM identity	0.97	0.73	1.74	.187	2.63	0.63 – 11.00

Note. DV = sexual victimization (0 = never, 1 = at least once).

Racial Identity and Domestic Abuse Victimization

The second research question examined whether racial identity (Non-White vs. White) predicted the frequency and type of victimization (physical, psychological, and sexual) among individuals with disabilities.

Physical Abuse Victimization

Analyses first examined the association between race and physical victimization. The ordinal logistic regression model did not yield a significant association, χ^2 (1) = 0.07, p = .787, with race not emerging as a significant predictor, B = -0.08, SE = 0.29, Wald = 0.07, p = .787. The model explained almost no variance (Nagelkerke R^2 < .001). As shown in Table 10, participants identifying as non-White did not significantly differ from White participants in odds of reporting physical victimization (OR = 0.92, 95% CI [0.52, 1.62]).

Table 10. Ordinal logistic regression predicting physical victimization from race

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race (1 = non-White, 0 = White)	-0.08	0.29	0.07	.787	0.92	0.52 – 1.62

Note. χ^2 (1) = 0.07, p = .787; Nagelkerke R^2 < .001. DV = physical victimization (ordinal).

The binary logistic regression model for physical victimization (Table 11) also indicated no significant association of race, χ^2 (1) = 0.51, p = .475. Participants identifying as non-White

had somewhat higher odds of reporting any physical victimization compared to White participants, but the association was not statistically significant, B = 0.46, SE = 0.65, Wald = 0.51, p = .475, OR = 1.58, 95% CI [0.46, 5.42]. Results from OLR and BLR converged, suggesting no association between race and physical victimization.

Table 11. Binary logistic regression predicting physical victimization from race.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race (1 = non-White, 0 = White)	0.46	0.65	0.51	.475	1.58	0.46 – 5.42

Note. DV = physical victimization (0 = never, 1 = at least once).

Psychological Abuse Victimization

Next, models tested whether race predicted psychological victimization. The ordinal logistic regression model did not reveal a significant association, $\chi^2(1) = 0.22$, p = .643. As shown in Table 12, race was not a significant predictor, B = 0.13, SE = 0.27, Wald = 0.22, p = .643, OR = 1.14, 95% CI [0.67, 1.94].

Table 12. Ordinal logistic regression predicting psychological victimization from race.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race (1 = non-White, 0 = White)	0.13	0.27	0.22	.643	1.14	0.67 – 1.94

Note. $\chi^2(1) = 0.22$, p = .643; Nagelkerke $R^2 \approx .001$. DV = psychological victimization (ordinal).

The binary logistic regression model for psychological victimization (Table 13) also indicated no significant association of race, $\chi^2(1) = 0.72$, p = .397. Participants identifying as non-White had slightly higher odds of reporting any psychological victimization compared to White participants, but the association was not significant, B = 0.30, SE = 0.35, Wald = 0.72, p = .397, OR = 1.35, 95% CI [0.67, 2.70]. Both OLR and BLR findings converged, indicating that race was not a significant predictor of psychological victimization.

Table 13. Binary logistic regression predicting psychological victimization from race.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race	0.30	0.35	0.72	.397	1.35	0.67 – 2.70

Note. DV = psychological victimization (0 = never, 1 = at least once).

Sexual Victimization

Finally, analyses assessed whether race was associated with sexual victimization. The ordinal logistic regression model indicated no significant association, $\chi^2(1) = 0.46$, $p = .499$. As shown in Table 14, non-White participants were not significantly more likely to report sexual victimization, B = 0.24, SE = 0.35, Wald = 0.46, $p = .499$, OR = 1.27, 95% CI [0.67, 2.42].

Table 14. Ordinal logistic regression predicting sexual victimization from race.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race (1 = non-White, 0 = White)	0.24	0.35	0.46	.499	1.27	0.67 – 2.42

Note. $\chi^2(1) = 0.46$, $p = .499$; Nagelkerke $R^2 \approx .002$. DV = sexual victimization (ordinal).

The binary logistic regression model (Table 15) similarly revealed no significant association of race, $\chi^2(1) = 0.13$, $p = .717$. Participants identifying as non-White were not more likely to report any sexual victimization compared to White participants, B = 0.21, SE = 0.59, Wald = 0.13, $p = .717$, OR = 1.23, 95% CI [0.39, 3.92]. Results from OLR and BLR converged, indicating no association between race and sexual victimization.

Table 15. Binary logistic regression predicting sexual victimization from race.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
Race	0.21	0.59	0.13	.717	1.23	0.39 – 3.92

Note. DV = sexual victimization (0 = never, 1 = at least once).

SGM Identity, Racial Identity, and Domestic Abuse Victimization

Analyses first examined whether SGM status, race, and their interaction predicted physical domestic violence victimization. The ordinal logistic regression model did not yield a

significant association of SGM identity, $\chi^2(1) = 1.42$, $p = .233$. Race was also not significant, $\chi^2(1) = 0.54$, $p = .462$. The interaction term was not significant, $\chi^2(1) = 0.29$, $p = .590$. As shown in Table 16, none of the predictors significantly explained physical abuse experiences. Nagelkerke $R^2 \approx .008$, indicating negligible variance explained.

Table 16. Ordinal logistic regression predicting physical domestic violence victimization.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.41	0.34	1.42	.233	1.51	0.76 – 2.99
Race	0.22	0.30	0.54	.462	1.25	0.70 – 2.23
SGM × Race	-0.19	0.36	0.29	.590	0.83	0.41 – 1.70

Note. DV = physical domestic violence victimization (ordinal).

The binary logistic regression model for physical domestic violence victimization (Table 17) also showed no significant predictors. SGM identity, race, and their interaction were nonsignificant (all $p > .10$). The overall model was not significant, $\chi^2(3) = 1.62$, $p = .655$, Nagelkerke $R^2 \approx .009$.

Table 17. Binary logistic regression predicting physical domestic violence victimization.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.38	0.61	0.38	.538	1.46	0.45 – 4.72
Race	0.29	0.50	0.33	.564	1.34	0.50 – 3.56
SGM × Race	-0.25	0.58	0.18	.669	0.78	0.25 – 2.47

Note. DV = physical domestic violence victimization (0 = never, 1 = at least once).

Psychological Domestic Abuse Victimization

Next, models tested whether SGM identity, race, and their interaction predicted psychological domestic violence victimization. The ordinal logistic regression model did not reveal significant associations for SGM status, $\chi^2(1) = 2.03$, $p = .154$, race, $\chi^2(1) = 0.88$, $p = .348$, or the interaction term, $\chi^2(1) = 0.35$, $p = .556$. As shown in Table 18, none of the predictors significantly explained psychological abuse. Nagelkerke $R^2 \approx .012$.

Table 18. Ordinal logistic regression predicting psychological domestic violence victimization.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.47	0.33	2.03	.154	1.60	0.85 – 3.01
Race	0.28	0.30	0.88	.348	1.32	0.73 – 2.38
SGM × Race	-0.21	0.36	0.35	.556	0.81	0.40 – 1.64

Note. DV = psychological domestic violence victimization (ordinal).

The binary logistic regression model (Table 19) likewise showed no significant predictors of psychological domestic violence victimization. The overall model was not significant, $\chi^2(3) = 2.31$, $p = .510$, Nagelkerke $R^2 \approx .013$. Results from both OLR and BLR converged, indicating no significant contribution of SGM status, race, or their interaction to psychological abuse.

Table 19. Binary logistic regression predicting psychological domestic violence victimization.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.44	0.54	0.65	.421	1.55	0.54 – 4.42
Race	0.36	0.48	0.56	.455	1.43	0.56 – 3.65
SGM × Race	-0.28	0.53	0.28	.598	0.76	0.27 – 2.18

Note. DV = psychological domestic violence victimization (0 = never, 1 = at least once).

SGM Identity, Racial Identity, and Discrimination in Healthcare Settings

The fourth research question investigated whether SGM status and non-White identity, separately and in interaction, predicted experiences of discrimination in healthcare settings (e.g., reporting lower quality care) among individuals with disabilities.

The first analysis examined whether SGM status, race, and their interaction predicted discrimination in healthcare. The ordinal logistic regression model did not yield a significant association of SGM identity, $\chi^2(1) = 0.48$, $p = .488$. Race was significant, $\chi^2(1) = 5.77$, $p = .016$, with individuals identifying as non-White reporting greater odds of healthcare discrimination. The interaction term was not significant, $\chi^2(1) = 0.19$, $p = .663$. As shown in Table 20, non-White identity significantly predicted greater odds of healthcare discrimination. Nagelkerke $R^2 \approx .099$.

Table 20. Ordinal logistic regression predicting healthcare discrimination.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.27	0.39	0.48	.488	1.31	0.61 – 2.82
Race	0.97	0.40	5.77	.016	2.64	1.20 – 5.82
SGM × Race	-0.21	0.47	0.19	.663	0.81	0.32 – 2.04

Note. DV = healthcare discrimination (ordinal).

The binary logistic regression model for healthcare discrimination (Table 21) showed a consistent pattern. SGM identity was not significant, $\chi^2(1) = 0.46$, $p = .497$. Race was significant, $\chi^2(1) = 6.24$, $p = .013$, with non-White participants more likely to report discrimination. The interaction was not significant, $\chi^2(1) = 0.21$, $p = .646$. The model explained a modest portion of variance (Nagelkerke $R^2 \approx .104$).

Table 21. Binary logistic regression predicting healthcare discrimination.

Predictor	B	SE	Wald χ^2	p	OR	95% CI
SGM status	0.32	0.47	0.46	.497	1.37	0.55 – 3.40
Race	1.09	0.44	6.24	.013	2.98	1.26 – 7.06
SGM × Race	-0.26	0.57	0.21	.646	0.77	0.25 – 2.36

Note. DV = healthcare discrimination (0 = never, 1 = at least once).

Discussion

The purpose of this study was to examine how sexual and gender minority (SGM) status and non-White racial identity, individually and in combination, contributed to experiences of victimization, domestic violence, and healthcare discrimination among individuals with disabilities during the COVID-19 pandemic. The analyses addressed four research questions focused on the role of SGM status and race in shaping patterns of physical, psychological, and sexual victimization; domestic violence victimization; and healthcare discrimination. Ordinal logistic regression served as the primary analytic strategy, with binary logistic regression models used as robustness checks in cases of sparse data or assumption violations. Overall, the findings highlight both risks and strengths among participants, underscoring the importance of visibility

for marginalized groups and the contribution of this work to filling critical gaps in existing research.

To better understand these patterns, the discussion examines how SGM identity was linked to victimization experiences, followed by the role of race, domestic violence outcomes, and finally, healthcare discrimination.

SGM Identity and Victimization

The first research question investigated whether SGM identity predicted experiences of victimization. Results indicated no significant association with physical victimization; however, SGM status significantly predicted psychological victimization. Findings for sexual victimization were mixed: the ordinal logistic regression demonstrated a significant association, while the binary model did not, likely reflecting sparse data in higher-frequency response categories. These findings align with prior studies showing that SGM individuals are disproportionately exposed to psychological and sexual victimization compared to non-SGM peers (Edwards et al., 2015; Meyer, 2013). At the same time, the lack of association with physical victimization is consistent with some literature suggesting that differences by sexual orientation and gender identity may be more pronounced for psychological and sexual forms of abuse (Roberts et al., 2010). Collectively, these results expand visibility for disabled SGM populations—groups often left out of victimization research—and identify specific domains where supportive interventions and resilience-building strategies are most urgently needed.

Race and Victimization

The second research question examined whether non-White identity predicted victimization experiences. Whereas SGM identity emerged as a meaningful factor in specific types of abuse, race showed a different pattern of association. Across models, race was not a

significant predictor of physical or psychological victimization. Moving beyond individual forms of victimization, it is important to consider the role of marginalized identities within domestic violence contexts. This finding diverges from prior studies documenting heightened risks of victimization among racial and ethnic minorities (Sabbath et al., 2017; Tjaden & Thoennes, 2000). One possible explanation is that disability status represents a shared risk context within this sample, which may overlap or overshadow racial differences. From a strengths-based perspective, these results suggest that disability-focused prevention and intervention efforts could serve as common pathways to reduce harm across racial groups. At the same time, the absence of observed disparities underscores the need for larger and more racially diverse samples in future work, ensuring that potential inequities are not obscured by sample composition or underreporting.

Domestic Violence Victimization

The third research question explored whether SGM status, race, or their interaction predicted physical and psychological domestic violence victimization. Moving beyond individual forms of victimization, it is important to consider the role of multiple marginalized identities within domestic violence contexts. Neither individual predictors nor the interaction term achieved significance. While these null results might initially suggest a lack of association, they also provide an important contribution to intersectionality scholarship. Specifically, they highlight that intersecting marginalized identities do not always combine to create compounded disadvantages (Crenshaw, 1989; Bowleg, 2012). Instead, disability itself may represent a stronger contextual factor in shaping vulnerability to domestic violence. This pattern underscores the complexity of lived experiences and the importance of frameworks that specify when and how identities interact, rather than assuming uniform multiplicative associations. It also

underscores the resilience of participants whose experiences do not align neatly with theoretical expectations, challenging researchers to refine models to better capture this nuance.

Healthcare Discrimination

The fourth research question assessed whether SGM status, race, or their interaction predicted discrimination in healthcare settings. In contrast to domestic violence, where predictors were nonsignificant, healthcare settings revealed inequities. Results demonstrated that race was a significant predictor, with non-White participants reporting significantly higher odds of experiencing discrimination in healthcare, such as receiving lower quality care. In contrast, SGM status and the interaction were not significant. These findings are consistent with extensive literature documenting persistent racial disparities in healthcare quality and treatment (Smedley, Stith, & Nelson, 2003; Yearby, 2018). While these disparities remain concerning, they also provide a clear and actionable target for equity-focused policy and institutional change. The lack of an SGM association may reflect underrepresentation of SGM participants in the sample or barriers to disclosure in healthcare settings. From a strengths-based perspective, these findings underscore opportunities to design inclusive care systems that affirm diverse identities while addressing systemic racism.

Summary

When examined together, the results reveal distinct patterns of risk and resilience. SGM status was consistently associated with increased psychological and sexual victimization, while race emerged as the key driver of healthcare discrimination. Interaction effects between SGM status and race were consistently nonsignificant, suggesting that these identities may exert independent rather than multiplicative effects within this sample. Viewed pragmatically, this independence supports interventions tailored to the unique needs of SGM and non-White groups

without presuming compounded risk in every context. By elevating voices of disabled participants across diverse identity groups, this study advances a more inclusive understanding of multiple minoritization, showing that marginalized identities contribute in distinct and context-specific ways to experiences of harm and resilience. At the same time, these findings should be interpreted with caution given the study's limitations, including sample size, reliance on self-report, and the unique context of the COVID-19 pandemic. Recognizing these constraints creates space for future research to expand on the patterns observed here, particularly through larger and more diverse samples and longitudinal designs.

Limitations

Several limitations should be noted. First, the sample size limited statistical power, particularly for analyses involving interaction terms and less frequent outcomes such as sexual victimization. Second, data were based on self-report, which may be subject to recall bias and underreporting due to stigma. Third, the cross-sectional design precludes causal inference and limits the ability to examine changes over time. Finally, the data were collected during the COVID-19 pandemic, a unique context that may not generalize to non-pandemic periods. Nonetheless, the inclusion of disabled SGM and non-White individuals, groups that are rarely centered in empirical research, represents a key strength of this study.

Directions for Future Research

Future research should pursue larger and more racially diverse samples to better capture intersectional effects. Longitudinal studies would allow examination of how victimization and discrimination patterns evolve over time. Additionally, qualitative research could provide deeper insights into the lived experiences and resilience strategies of disabled SGM and non-White individuals, contextualizing statistical findings. Finally, future studies should evaluate the impact

of policy and institutional changes aimed at reducing disparities, particularly in healthcare contexts, with an emphasis on amplifying strengths and supporting advocacy within these communities.

Conclusion

This study found that SGM identity was a significant predictor of psychological victimization and showed evidence of association with sexual victimization, though this association did not consistently replicate across models. No relationship was observed between SGM identity and physical victimization. Race did not significantly predict physical or psychological victimization, nor did it contribute meaningfully to domestic violence victimization in this sample. However, race was a robust predictor of healthcare discrimination, with non-White participants reporting significantly higher odds of experiencing inequitable treatment. Interaction effects between SGM status and race were consistently nonsignificant across analyses. Overall, the risks associated with SGM identity appear most salient for psychological and sexual victimization, whereas race remains a primary driver of healthcare discrimination. At the same time, this research demonstrates the resilience and visibility of disabled SGM and non-White individuals, groups often left at the margins of scholarship. By centering their experiences, this study advances the broader goal of equity-focused research and provides a foundation for practices that affirm strengths while addressing structural inequities.

References

Alang, S., McAlpine, D., McCreedy, E., & Hardeman, R. (2017). Police brutality and Black health: Setting the agenda for public health scholars. *American Journal of Public Health, 107*(5), 662–665. https://doi.org/10.2105/AJPH.2017.303691

Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality—An important theoretical framework for public health. *American Journal of Public Health, 102*(7), 1267–1273. https://doi.org/10.2105/AJPH.2012.300750

Burgess, D., Lee, R., Tran, A., & van Ryn, M. (2007). Effects of perceived discrimination on mental health and mental health services use. *Journal of Health Care for the Poor and Underserved, 18*(3), 890–910. https://doi.org/10.1353/hpu.2007.0099

Centers for Disease Control and Prevention. (2020). *CDC health disparities & inequalities report—United States, 2020*. U.S. Department of Health and Human Services. https://www.cdc.gov/healthyyouth/disparities

Centers for Disease Control and Prevention. (2021). *Risk for COVID-19 infection, hospitalization, and death by race/ethnicity*. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities

Cochran, S. D., & Mays, V. M. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: Results from the California Quality of Life Survey. *American Journal of Public Health, 97*(11), 2048–2055. https://doi.org/10.2105/AJPH.2006.087254

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139–167.

Dammeyer, J., & Chapman, M. (2018). A national survey on violence and discrimination among people with disabilities. *BMC Public Health, 18*, 355. https://doi.org/10.1186/s12889-018-5277-0

Edwards, K. M., Sylaska, K. M., & Neal, A. M. (2015). Intimate partner violence among sexual minority populations: A critical review of the literature and agenda for future research. *Psychology of Violence, 5*(2), 112–121. https://doi.org/10.1037/a0038656

Freeman, L. C., & Hamilton, D. (2020). LGBTQ+ victimization in the United States: Prevalence, trends, and policy implications. *Journal of Interpersonal Violence, 35*(21–22), 4503–4523. https://doi.org/10.1177/0886260517715022

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among Blacks and Whites in the United States. *American Journal of Public Health, 96*(5), 826–833. https://doi.org/10.2105/AJPH.2004.060749

Goggin, G., & Ellis, K. (2020). Disability, communication, and life itself in the COVID-19 pandemic. *Health Sociology Review, 29*(2), 168–176. https://doi.org/10.1080/14461242.2020.1784020

Harrell, F. E. (2015). *Regression modeling strategies* (2nd ed.). Springer.

Hughes, K., Bellis, M. A., Jones, L., Wood, S., Bates, G., Eckley, L., McCoy, E., Mikton, C., Shakespeare, T., & Officer, A. (2012). Prevalence and risk of violence against adults with disabilities: A systematic review and meta-analysis of observational studies. *The Lancet, 379*(9826), 1621–1629. https://doi.org/10.1016/S0140-6736(11)61851-5

Hughes, T. L. (2002). Substance use and abuse in lesbian, gay, bisexual and transgender populations. *Journal of Primary Prevention, 22*(3), 263–298.

Kilpatrick, D. G., Resnick, H. S., Ruggiero, K. J., Conoscenti, L. M., & McCauley, J. (2003). *Drug-facilitated, incapacitated, and forcible rape: A national study*. National Institute of Justice.

Krahn, G. L., Walker, D. K., & Correa-De-Araujo, R. (2015). Persons with disabilities as an unrecognized health disparity population. *American Journal of Public Health, 105*(S2), S198–S206. https://doi.org/10.2105/AJPH.2014.302182

Lewis, T. T., Cogburn, C. D., & Williams, D. R. (2015). Self-reported experiences of discrimination and health: Scientific advances, ongoing controversies, and emerging issues. *Annual Review of Clinical Psychology, 11*, 407–440. https://doi.org/10.1146/annurev-clinpsy-032814-112728

Lund, E. M., & Thomas, K. B. (2023). The association between physical and psychological domestic violence experienced during the COVID-19 pandemic and mental health symptoms. *International Journal of Environmental Research and Public Health, 20*(4), 3312. https://doi.org/10.3390/ijerph20043312

Menard, S. (2010). *Logistic regression: From introductory to advanced concepts and applications*. Sage.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H. (2015). Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity, 2*(3), 209–213. https://doi.org/10.1037/sgd0000132

National Health Law Program. (2024). *NHeLP statement on Section 1557 final rule*. https://healthlaw.org/section-1557/

National Institutes of Health. (2023). *NIH designates people with disabilities as a population with health disparities*. U.S. Department of Health and Human Services. https://www.nih.gov/news-events/news-releases/nih-designates-people-disabilities-population-health-disparities

Pyo, S., & Hayes, B. E. (2024). Intersecting identities and the perceived threat of hate crimes among individuals with disabilities. *Feminist Criminology, 19*(1), 57–78.

Pyo, S., & Hayes, S. C. (2024). Intersectional discrimination: The compounded effects of disability and LGBTQ+ identity on perceptions of safety. *Journal of Social Issues, 80*(2), 355–374. https://doi.org/10.1111/josi.12601

Roberts, A. L., Austin, S. B., Corliss, H. L., Vandermorris, A. K., & Koenen, K. C. (2010). Pervasive trauma exposure among US sexual orientation minority adults and risk of posttraumatic stress disorder. *American Journal of Public Health, 100*(12), 2433–2441. https://doi.org/10.2105/AJPH.2009.168971

Rose, C. A., Espelage, D. L., & Monda-Amaya, L. E. (2015). Bullying and victimization among students in special education and general education: A meta-analytic review. *Remedial and Special Education, 36*(5), 260–275.

Sabbath, E. L., Arora, K. S., Buchbinder, M., McKetchnie, S. M., *et al.* (2024). US obstetrician-gynecologists' perceived impacts of post–Dobbs v Jackson state abortion bans. *JAMA Network Open, 7*(1), e2352109. https://doi.org/10.1001/jamanetworkopen.2023.52109

Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.). (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. National Academies Press.

Sue, D. W., Capodilupo, C. M., & Holder, A. M. B. (2007). Racial microaggressions in the life experience of Black Americans. *Professional Psychology: Research and Practice, 39*(3), 329–336.

Tjaden, P. G., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey*. U.S. Department of Justice; Centers for Disease Control and Prevention.

Turk, M. A., Landes, S. D., Formica, M. K., & Goss, K. D. (2020). Intellectual and developmental disability and COVID-19 case-fatality trends: TriNetX analysis. *Disability and Health Journal, 13*(3), 100942. https://doi.org/10.1016/j.dhjo.2020.100942

Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). Poly-victimization in a national sample of children and youth. *American Journal of Preventive Medicine, 38*(3), 323–330. https://doi.org/10.1016/j.amepre.2009.11.012

Urban Institute. (2023). *People with disabilities experience widespread discrimination*. https://www.urban.org

Walsh, K., Danielson, C. K., McCauley, J., Saunders, B. E., Kilpatrick, D. G., & Resnick, H. S. (2010). National prevalence of posttraumatic stress disorder among sexually revictimized adolescent, college, and adult household-residing females. *Archives of General Psychiatry, 67*(9), 905–912. https://doi.org/10.1001/archgenpsychiatry.2010.85

World Health Organization. (2011). *World report on disability*. WHO Press. https://iris.who.int/bitstream/handle/10665/44575/9789240685215_eng.pdf

Yearby, R. (2018). Racial disparities in health status and access to healthcare: The continuation of inequality in the United States due to structural racism. *American Journal of Economics and Sociology, 77*(3–4), 1113–1152. https://doi.org/10.1111/ajes.12230

CHAPTER III: ARTICLE TWO

Health Disparities and Access to Care Among Sexual and Gender Minority Individuals with Disabilities

Health disparities stem from inequities directly linked to the present and historically unequal allocation of social, political, economic, and environmental resources. The majority of health inequities stem from broad societal issues beyond the affected individuals' control, including poverty, inadequate healthcare infrastructure, and the social determinants of health (World Health Organization, 2008). The social determinants of health (SDOH) include several factors—medical and non-medical—that impact health outcomes, for example, the circumstances under which individuals are born, raised, employed, and reside. The SDOH also encompass broader social structures that shape daily existence including economic policies and systems, development objectives, societal norms, social policies, and political systems (World Health Organization, 2024a).

These disparities disproportionately affect marginalized groups based on factors like race, socioeconomic status, sexual orientation, and gender identity. For example, individuals in low-income communities experience higher rates of chronic diseases, such as diabetes and hypertension as a result of limited access to healthy food and quality healthcare (Williams & Mohammed, 2013). Additionally, systemic barriers to healthcare, combined with the negative effects of discrimination-based stress, lead to elevated risks for heart disease and cancer in many racially and ethnically minoritized groups (Cunningham et al., 2017; Bailey et al., 2017).

Sexual and gender minority (SGM) individuals, (LGBTQ+, non-heterosexual, and non-cisgender) have long been identified as experiencing substantial health disparities (ODPHP, 2020). These disparities affect multiple areas of health, encompassing both risk factors and

outcomes. For example, many SGM individuals lack access to preventive healthcare, such as regular check-ups and cancer screenings (Johnson et al., 2020; Dilley et al., 2010). Additionally, increased levels of substance use (Gonzales & Henning-Smith, 2017; Medley et al., 2016) and higher rates of mental health challenges (Meyer, 2003; Medley et al., 2016) are associated with lower reported quality of life (Cochran & Mays, 2007) and increased risk of suicide attempts and suicide-related deaths (Marshal et al., 2011; Plöderl et al., 2013). Unfortunately, these disparities also surface in day-to-day life as greater loneliness and smaller social-emotional support networks (Nguyen et al., 2024), and barriers to accessing practical and social support services—particularly among transgender and gender-nonconforming people with disabilities (Kattari et al., 2017). These outcomes are especially salient for disabled SGM adults (Phan, Graham, Moffett, & Flatt, 2023).

The negative patterns in health outcomes observed in SGM populations are often interpreted using Minority Stress Theory. This theory, introduced by Ilan Meyer in 2003, proposes that individuals who experience stigma, prejudice, and discrimination due to their minority status are at increased risk for negative health outcomes. This theory is grounded in the core concept that many public health issues arise from broader social problems beyond an individual's control (Meyer & Schwartz, 2000). Applying this framework to the sexual and gender minority (SGM) population offers insight into the intricate link between the social challenges SGM individuals face and the resulting adverse health and mental health outcomes (Brooks, 1981; Meyer, 2001).

While the predictive power of the minority stress theory regarding the negative health outcomes for SGM individuals is supported by research (Frost et al., 2015; Frost & Meyer, 2023; Meyer et al., 2008), little is known about the ways these processes operate for multiply minoritized populations, such as those with SGM identity and disability, particularly with respect

to basic needs and day-to-day functioning. Accordingly, more research is needed to delineate mechanisms and to define the parameters of successful interventions.

The current study examines whether disabled SGM adults differ from their non-SGM disabled peers across global well-being, access to basic needs (medication/therapy, food, assistance with daily tasks), mental health symptoms (depression, anxiety, posttraumatic stress), and mental health–related functional impairment. This approach allows comparisons between broad evaluations and domain-specific indicators directly linked to participation and daily living.

This research compares the experiences of disabled sexual and gender minority (SGM) individuals to those of their non-SGM disabled peers to better understand the unique impact of SGM identity on physical and mental health outcomes. Guided by Minority Stress Theory and prior disparities research, several research questions have been developed to accomplish this aim:

Research Questions

1. Were there any reported differences in overall well-being between SGM and non-SGM people who identify as having a disability or chronic health condition?
2. Were there any reported differences in lack of access to basic needs (necessary medication or therapy, access to food, and assistance with daily tasks) between SGM and non-SGM people who identify as having a disability or chronic health condition?
3. Were there any reported differences in rates of depression, anxiety, or post-traumatic stress between SGM and non-SGM people who identify as having a disability or chronic health condition?

4. Were there any reported differences in mental health related functional impairment between SGM and non-SGM people who identify as having a disability or chronic health condition?

Methods

Recruitment

Data collection took place in December 2021 using the Prolific research platform (https://www.prolific.co/) as part of a broader project conducted by Lund and Thomas (2023) that explored stressful and potentially traumatic events and their mental health impact during the COVID-19 pandemic. Recruitment occurred during the late Delta surge and emergence of the Omicron variant in the United States, a period marked by widespread vaccine availability, the end of strict lockdowns, and continued use of mask mandates. The study was advertised as an anonymous survey focusing on pandemic experiences, mental health, and overall well-being. Although the consent form referenced "difficult events," it did not explicitly mention trauma or domestic violence.

To participate, individuals were required to be 18 years of age or older, currently reside in the United States, and correctly answer comprehension items regarding their rights before beginning the survey. Every participant completed the same questionnaire, could only take part once, and received $3.50 USD for their time. Prolific prescreens and verifies participants and maintains demographic information that allows for targeted recruitment. Recruitment was conducted in four distinct waves, shown in Figure 2, which enabled oversampling of groups that were central to the study. In each wave, individuals who matched the eligibility criteria (e.g., U.S. residents identifying as non-White and/or Hispanic/Latino and reporting a disability or

chronic health condition) were able to view the study posting. Participation across multiple waves was not permitted, ensuring unique respondents.

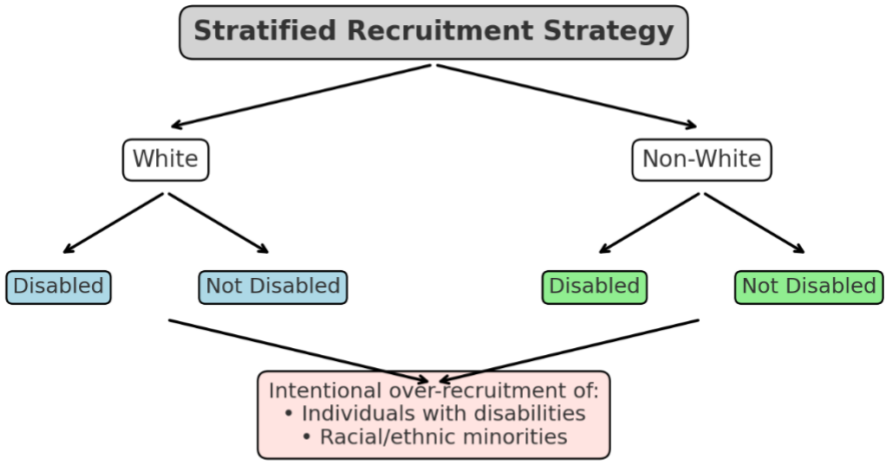

Figure 2. Diagram of stratified recruitment strategy for the sample population.

In total, 661 individuals completed the survey. Fifteen participants (2.7%) were excluded for poor-quality data, which included failing attention checks, giving inconsistent answers to repeated items, or providing nonsensical responses to open-ended questions. An additional 42 individuals (6.4%) were excluded due to missing responses on key measures, including domestic violence, depression, or post-traumatic stress symptom items. After these exclusions, the final dataset consisted of 604 participants. Table 1 provides a summary of demographic characteristics for this sample.

Table 1. Participant demographics (condensed)

Category	n	%
Gender		
Female	397	65.7
Male	186	30.8
Outside binary	21	3.5

Sexual Orientation		
Heterosexual	405	67.1
Sexual minority[1]	199	32.9
Disability/Health[2]		
Has disability	150	24.8
Chronic condition	212	35.1
Both	106	40
Race/Ethnicity		
White/Caucasian	247	40.9
Non-White[3]	317	52.5
Not reported	40	6.6
Education		
Bachelor's or higher	291	48.2
Some college	232	38.4
Employment		
Full-time	244	40.4
Part-time/student	187	31.0
Unemployed	149	24.7

Note. Percentages are based on the final analytic sample (N = 604). Some categories are not mutually exclusive (i.e., disability and chronic health condition; race/ethnicity).
[1] Includes bisexual/pansexual, gay/lesbian, asexual, and other.
[3]Participants could indicate that they had a disability, a chronic health condition, both, or neither.
3 Includes Asian/Pacific Islander, Hispanic/Latino, African American/Black, Native American/Alaskan Native, Arab/Middle Eastern, and Other

Participants

The final analytic sample for the present study consisted of 278 participants drawn from the larger dataset who indicated that they were living with a disability, a chronic health condition, or both (Table 2). Within this group, 53 participants reported a disability only, 119 reported a chronic illness only, and 106 identified as experiencing both a disability and a chronic condition.

Table 2. Participant demographics (N = 278)**.**

Variable	n	%
Gender		
Male	85	30.6

Female	177	63.7
Other (specified)[1]	16	5.8
Gender – Self-Specified Text[2]		
Agender	2	0.7
Demigirl	1	0.4
Genderfluid	1	0.4
Non-binary / Nonbinary[3]	10	3.6
Trans man	1	0.4
Sexual Orientation		
Heterosexual/straight	169	60.8
Bisexual/pansexual	65	23.4
Gay/lesbian	25	9.0
Asexual	16	5.8
Other	3	1.1
Race/Ethnicity		
Arab/Middle Eastern	9	3.2
Hispanic/Latino	37	13.3
Native American/Alaskan Native	20	7.2
White/Caucasian	131	47.1
Other (described)	19	6.8
Do not wish to say	19	6.8

Note. [1] "Other" refers to participants who selected the option to self-describe their gender identity.
[2] The self-specified text field includes participants' written-in gender identities.
[3] Includes all spellings of "non-binary / nonbinary."
[4] Participants could select more than one racial/ethnic identity; therefore, percentages do not sum to 100%.

A majority of the sample identified as female (63.7%), while 30.6% identified as male and 5.8% selected another gender identity. Among participants who wrote in their gender identity, responses included agender (0.7%), demigirl (0.4%), genderfluid (0.4%), non-binary/nonbinary (3.6%), and trans man (0.4%). Because each of these gender identities is typically recognized within the sexual and gender minority (SGM) spectrum, these respondents were classified as SGM for analysis purposes.

For sexual orientation, 60.4% of participants described themselves as heterosexual, 23.5% as bisexual or pansexual, 9% as gay or lesbian, 6% as asexual, and 1.1% chose "other." Among those who selected "other," one participant self-identified as omnisexual, one as queer, and one as questioning. Consistent with the analytic plan, participants identifying as bisexual/pansexual, gay/lesbian, asexual, omnisexual, queer, or questioning were grouped within the SGM category.

Participants represented a racially and ethnically diverse sample. Nearly half identified as White or Caucasian (47.1%), followed by African American/Black (19.1%), Hispanic/Latino (13.3%), Asian/Pacific Islander (11.5%), Native American/Alaskan Native (7.2%), and Arab/Middle Eastern (3.2%). Additionally, 6.8% indicated a category not listed, and another 6.8% declined to disclose their race or ethnicity. Because participants could select multiple categories, percentages sum to more than 100%.

Measures

All instruments were administered online using a secure Qualtrics survey platform hosted and maintained by the affiliated university. Data analysis was conducted in IBM SPSS Statistics (Version 30.0.0.0, Build 172).

Demographic Survey

Participants completed a demographic questionnaire that collected detailed information on race and ethnicity, disability status and type of disability, sexual and romantic orientation, employment status and recent work history, income range, marital status, and other relevant sociodemographic characteristics.

Physical and Psychological Domestic Violence Questionnaire

Questions about physical and psychological abuse experienced during the pandemic were included in a questionnaire developed specifically for the original study to evaluate experiences of stress and trauma during the COVID-19 pandemic. Participants were asked to indicate how often they encountered each event in response to the prompt: *"During the pandemic (from March 2020 to the present), how frequently did you experience the following events?"* Responses were rated on a five-point Likert-type scale, with options ranging from *Never*, *Once*, *A Few Times*, *Often*, to *Very Frequently*.

Center for Epidemiologic Studies Depression Scale (CES-D)

The CES-D is a concise self-report instrument designed to measure depressive symptoms in the general population. Its items reflect symptoms linked to depression that were adapted from previously validated, longer scales (Radloff, 1977). The CES-D consists of 20 items assessing depressive experiences during the prior week. Each item is rated on a four-point frequency scale from 0 (*one day or less*) to 3 (*five to seven days*). Total scores can range from 0 to 60, with higher scores indicating greater depressive symptom severity. A cutoff score of 16 or higher is typically used to identify individuals likely to meet criteria for major depressive disorder.

Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5)

The PCL-5 (Weathers et al., 2013) is a 20-item self-report measure assessing the presence and intensity of posttraumatic stress symptoms based on DSM-5 criteria. It is commonly used to screen, provisionally diagnose, and track changes in PTSD symptoms over time. Participants rated the extent to which they were affected by each symptom during the past month on a five-point scale from 0 (*not at all*) to 4 (*extremely*), producing total scores between 0 and 80. Cutoff values of 31–33 suggest probable PTSD. To ensure that participants' responses reflected

pandemic-related trauma specifically, they were instructed to base their ratings on the events listed in the pandemic stress and trauma questionnaire.

Generalized Anxiety Disorder 7-Item Scale (GAD-7)

The GAD-7 is a brief, validated screening tool used to evaluate both the presence and severity of generalized anxiety symptoms in the general population. It includes seven items, each rated on a four-point scale ranging from 0 (*not at all*) to 3 (*nearly every day*), yielding total scores between 0 and 21. Composite scores of 0–4 reflect minimal or low anxiety, 5–9 indicate mild anxiety, 10–14 correspond to moderate anxiety, and 15 or higher represent severe anxiety. Although the original authors recommended a cutoff of 10, subsequent validation studies have demonstrated that a threshold as low as 8 maintains strong sensitivity and specificity (Plummer et al., 2016).

Data Analysis

The goal of this analysis was to examine differences between sexual and gender minority (SGM) individuals and non-SGM individuals with disabilities or chronic health conditions across multiple health and well-being outcomes.

All analyses were conducted using IBM SPSS Statistics (Version 30.0.0.0, Build 172). The significance level for all tests was set at $\alpha = .05$ unless otherwise noted. Bonferroni corrections were applied for analyses involving multiple comparisons to control the familywise error rate. Effect sizes were reported using Cramer's V, Phi (φ), Cohen's *d*, and odds ratios (ORs) with 95% confidence intervals (CIs), as appropriate.

Data Analysis for Overall Well-Being

The first research question examined whether there were differences in overall current well-being between sexual and gender minority (SGM) and non-SGM participants. Overall well-

being was measured using a five-level ordinal item (1 = very poor, 2 = poor, 3 = okay, 4 = good, 5 = very good). Because the variable was ordinal and met proportional odds assumptions, ordinal logistic regression (OLR) with a logit link function was used as the primary analytic method to test whether SGM status predicted higher or lower odds of better well-being.

To provide a nonparametric comparison and verify the OLR findings, a Pearson's chi-square test of independence was also conducted using the same five-level outcome. Association sizes for both analyses were reported using Cramer's V and Nagelkerke R^2, respectively. Statistical significance was defined as $p < .05$.

Data Analysis for Access to Basic Needs

The second research question examined whether there were significant differences between sexual and gender minority (SGM) and non-SGM individuals with disabilities in their reported access to basic needs during the COVID-19 pandemic, including: (1) access to necessary medication or therapy, (2) access to adequate food, and (3) assistance with daily tasks (e.g., cooking, cleaning, or mobility support). Each indicator was coded dichotomously (0 = no lack, 1 = any lack), representing whether participants reported experiencing any difficulty meeting that specific need.

For each indicator, Pearson's chi-square tests of independence were performed to examine the association between SGM status and reported lack of access. When expected cell counts were below five, Fisher's Exact Test was used as a more conservative estimate of significance. Effect sizes were calculated using Phi (φ) for 2×2 contingency tables, with benchmarks of .10 (small), .30 (medium), and .50 (large) following Cohen's (1988) guidelines. To provide additional context for the strength and direction of associations, odds ratios (ORs) and 95% confidence intervals (CIs) were computed.

Because three separate chi-square analyses were conducted (one per domain of basic needs), a Bonferroni correction was applied to adjust for multiple comparisons. This resulted in an adjusted significance threshold of $p < .017$ (.05/3). All tests were two-tailed.

Data Analysis for Depression, Anxiety, and Post-Traumatic Stress

The third research question examined whether sexual and gender minority (SGM) and non-SGM individuals with disabilities differed in symptoms of depression, anxiety, and post-traumatic stress during the COVID-19 pandemic. Depression was measured using the Center for Epidemiological Studies Depression Scale (CES-D), anxiety was measured using the Generalized Anxiety Disorder 7-item Scale (GAD-7), and post-traumatic stress was measured using the PTSD Checklist for DSM-5 (PCL-5). All three variables were treated as continuous measures.

Independent samples *t*-tests were conducted to compare mean scores between SGM and non-SGM participants for each of the three outcomes. Prior to conducting the *t*-tests, assumptions of normality and homogeneity of variances were assessed using standard diagnostic procedures. Levene's Test for Equality of Variances was used to evaluate homogeneity; when this assumption was violated ($p < .05$), Welch's *t*-test was reported as a correction.

For each comparison, the *t* statistic, degrees of freedom, and two-tailed *p*-value were reported. Effect sizes were calculated using Cohen's *d*, with 0.20, 0.50, and 0.80 interpreted as small, medium, and large associations, respectively. To minimize the risk of Type I error across the three comparisons, a Bonferroni correction was applied, resulting in an adjusted significance threshold of $p < .0167$.

Data Analysis for Mental Health-Related Functional Impairment

Research Question 4 examined whether sexual and gender minority (SGM) and non-SGM individuals with disabilities differed in mental health–related functional impairment during the COVID-19 pandemic.

Functional impairment was assessed using three items corresponding to the CES-D, GAD-7, and PCL-5 measures. Each item asked participants, "How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?" Response options ranged from 1 (*not difficult at all*) to 4 (*extremely difficult*). The three items were highly correlated (all $r \geq .78$, $p < .001$), supporting their combination into a single composite variable. Scores were averaged to create a combined index of mental health–related functional impairment, with higher values indicating greater impairment.

An independent-samples *t*-test was conducted to compare mean impairment scores between SGM and non-SGM participants. Levene's Test for Equality of Variances was used to assess homogeneity; when this assumption was violated ($p < .05$), Welch's *t*-test was applied. Effect size was calculated using Cohen's *d*, with thresholds of 0.20, 0.50, and 0.80 indicating small, medium, and large associations, respectively.

Results

The analyses compare SGM and non-SGM participants with disabilities across overall well-being, basic needs (medication/therapy, food, daily-task assistance), depression, anxiety, post-traumatic stress, and mental health–related functional impairment. Tests were selected to match outcome type (ordinal/nominal vs. continuous) and included appropriate corrections for multiple comparisons where applicable.

To do this, the analyses first evaluated group differences in overall well-being, then tested disparities in basic needs (access to medication/therapy, adequate food, and assistance with daily

tasks). Next, differences in depression (CES-D), anxiety (GAD-7), and post-traumatic stress (PCL-5) were assessed, and, finally, mental health–related functional impairment among participants with disabilities—by SGM status—was examined.

Results for Overall Well-Being

To address the first research question, an ordinal logistic regression (OLR) was conducted to examine whether sexual and gender minority (SGM) status predicted overall current well-being among participants with disabilities or chronic health conditions. The dependent variable, overall well-being, was measured on a 5-point Likert scale ranging from 1 (*very poor*) to 5 (*very good*). SGM status (1 = SGM, 0 = non-SGM) served as the independent variable.

The ordinal logistic regression model was not statistically significant, χ^2 (1) = 1.62, p = .204, indicating that SGM status did not significantly predict differences in reported well-being. The test of parallel lines was nonsignificant, χ^2 (3) = 1.96, p = .580, confirming that the proportional odds assumption was met. Model fit indices suggested minimal explanatory power (Nagelkerke R^2 = .006). The regression coefficient for SGM status was positive but nonsignificant (B = 0.29, SE = 0.23, p = .205, 95% CI [–0.16, 0.74]), indicating that SGM participants were not more or less likely than non-SGM peers to report higher levels of well-being (Table 3). These results suggest that, within this sample, SGM identity did not significantly contribute to differences in self-reported overall well-being among disabled or chronically ill adults.

Table 3. Ordinal logistic regression predicting overall current well-being by SGM status

Parameter	B	SE	Wald χ^2	df	p	95% CI for B
SGM status (1 = SGM, 0 = non-SGM)	0.29	0.23	1.60	1	.205	[-0.16, 0.74]

Model Fit Statistics. Model $\chi^2(1) = 1.62$, p = .204, -2 Log Likelihood = 35.32, Nagelkerke R^2 = .006, Test of Parallel Lines: $\chi^2(3) = 1.96$, p = .580
Note. Dependent variable: overall current well-being (1 = very poor → 5 = very good). The proportional odds assumption was met (p = .580).

To further evaluate the association between SGM status and self-rated well-being, a Chi-Square Test of Independence was performed. Results indicated no significant association between SGM status and well-being category, $\chi^2(4, N = 278) = 3.51$, $p = .476$, with a small effect size (Cramér's $V = .11$). Two cells (20%) had expected counts below 5, but the overall distribution met assumptions for chi-square interpretation.

Descriptive data revealed that both SGM and non-SGM participants most frequently rated their well-being as "okay" or "good." Among non-SGM respondents, 45.0% selected "okay" and 30.8% selected "good," while 51.4% of SGM participants selected "okay" and 21.1% selected "good." These findings reinforce the regression results, suggesting that overall well-being ratings did not differ significantly by SGM status.

Table 4. Chi-Square Test of Independence Between SGM Status and Overall Current Well-Being

Test	Value	*df*	*p*	Effect Size (Cramér's V)
Pearson Chi-Square	3.51	4	.476	.11
Likelihood Ratio	3.58	4	.466	—
Linear-by-Linear Association	1.04	1	.308	—

Descriptive Summary

SGM Status	Very Poor	Poor	Okay	Good	Very Good	Total
Non-SGM	3.6%	16.6%	45.0%	30.8%	4.1%	100%
SGM	2.8%	20.2%	51.4%	21.1%	4.6%	100%

Note. Two cells (20%) had expected counts below 5 (minimum = 3.53). The result was not statistically significant ($p = .476$), indicating similar distributions of well-being across SGM and non-SGM participants.

Results for Access to Basic Needs

To address Research Question 2, chi-square analyses were conducted to examine whether sexual and gender minority (SGM) and non-SGM participants with disabilities differed in access to basic needs during the COVID-19 pandemic (Table 5). Three domains were assessed: (1) access to medication or therapy, (2) access to adequate food, and (3) assistance with daily tasks.

Table 5. Group differences in reported access to basic needs by SGM status.

Domain of Basic Need	χ^2	*df*	*p*	φ	*N*
Access to Medication or Therapy	2.79	1	.095	.10	260
Access to Adequate Food	1.78	1	.182	.08	276
Assistance with Daily Tasks	13.84	1	< .001*	.23	273

Note. Analyses were conducted using Pearson's chi-square test of independence. When expected cell counts were below 5, Fisher's Exact Test was examined. A Bonferroni correction was applied ($p < .017$). *$p < .017$.

For access to medication or therapy, no significant difference was observed between groups, χ^2 (1, $N = 260$) = 2.79, $p = .095$, φ = .10. Fisher's Exact Test corroborated this result ($p = .120$). The odds ratio indicated that SGM participants had 1.54 times the odds of reporting lack of access compared to non-SGM peers (95% CI [0.93, 2.55]). Although not statistically significant, this suggests a modest trend toward greater unmet need among SGM individuals.

A similar pattern was observed for access to adequate food. While 23.1% of SGM participants reported food insecurity compared to 16.7% of non-SGM participants, the difference did not reach statistical significance, χ^2 (1, $N = 276$) = 1.78, $p = .182$, φ = .08. Fisher's Exact Test yielded a comparable result ($p = .211$). The odds ratio revealed that SGM participants were about 1.5 times more likely than non-SGM individuals to experience food-related unmet needs (OR = 1.51, 95% CI [0.83, 2.77]).

In contrast, a significant association was found for assistance with daily tasks. Lack of assistance was reported by 14.2% of SGM participants compared to only 2.4% of non-SGM

participants, $\chi^2(1, N = 273) = 13.84$, $p < .001$, $\varphi = .23$. Fisher's Exact Test produced a similar result ($p < .001$), confirming the robustness of this association. The odds ratio indicated that SGM individuals were more than six times more likely than non-SGM individuals to report inadequate help with cooking, cleaning, or mobility (OR = 6.73, 95% CI [2.17, 20.82]). This association remained statistically significant after Bonferroni correction ($p < .017$), underscoring a substantial disparity in this domain.

Overall, odds ratio analyses demonstrated that disparities in access to basic needs were not evenly distributed. SGM participants were significantly more likely to lack assistance with daily tasks, and although differences in access to medication, therapy, and food did not reach statistical significance, the direction of associations consistently suggested heightened vulnerability among SGM individuals with disabilities. Odds ratios and 95% confidence intervals are presented in Table 6. Supplementary descriptive statistics are provided in Appendix Table A1.

Table 6. Odds ratios and confidence intervals for lack of access to basic needs.

Domain of Basic Need	Odds Ratio	95% CI	Interpretation
Access to Medication or Therapy	1.51	[0.82, 2.75]	Trend toward higher unmet need among SGM participants
Access to Adequate Food	1.54	[0.93, 2.55]	Trend toward higher unmet need among SGM participants
Assistance with Daily Tasks	6.72	[2.16, 20.84]	Significantly higher unmet need among SGM participants

Note. Odds ratios represent the likelihood of SGM participants reporting unmet needs relative to non-SGM peers. Values greater than 1 indicate higher odds of lacking access to basic needs among SGM participants.

Results for Depression, Anxiety, and Post-Traumatic Stress

To address Research Question three, independent-samples *t*-tests were conducted to examine whether SGM and non-SGM participants with disabilities differed in levels of depression, anxiety, and post-traumatic stress (Table 7). Levene's Test for Equality of Variances was used to assess homogeneity of variance, and where the assumption was violated, Welch's *t*-

test was applied. A Bonferroni correction was implemented to account for multiple comparisons (α = .0167). Effect sizes were estimated using Cohen's *d*.

For depression (*CES-D* total), SGM participants (M = 29.43, SD = 12.59) reported significantly higher scores than non-SGM participants (M = 24.27, SD = 14.29), $t(270) = 3.05$, $p = .003$, $d = 0.38$. Levene's Test was nonsignificant ($p = .056$), so equal variances were assumed. This difference remained significant after Bonferroni correction, indicating a meaningful disparity in depressive symptoms between groups.

For anxiety (*GAD-7* total), SGM participants (M = 10.44, SD = 5.77) also reported significantly higher scores compared to non-SGM participants (M = 7.98, SD = 6.16), $t(276) = 3.33$, $p < .001$, $d = 0.41$. Levene's Test was nonsignificant ($p = .714$). This association remained significant after Bonferroni correction, further supporting a greater anxiety burden among SGM participants.

For post-traumatic stress (*PCL-5* total), SGM participants (M = 32.03, SD = 20.44) reported higher scores than non-SGM participants (M = 26.55, SD = 19.51), $t(267) = 2.21$, $p = .028$, $d = 0.28$. Levene's Test was nonsignificant ($p = .499$). However, this difference did not remain statistically significant after Bonferroni correction, suggesting that PTSD disparities were less robust than those observed for depression and anxiety.

Overall, SGM participants with disabilities exhibited significantly greater levels of depressive and anxiety symptoms than non-SGM peers, while differences in post-traumatic stress were in the same direction but did not remain significant after correction.

Table 7. Group differences in depression (CES-D), anxiety (GAD-7), and post-traumatic stress (PCL-5) by SGM status

Measure	Group	*n*	M	SD	*t(df)*	*p*	Cohen's *d*
Depression	Non-SGM	164	24.27	14.29	3.05 (270)	.003	0.38
	SGM	108	29.43	12.59			

Anxiety	Non-SGM	169	7.98	6.16	3.33 (276)	< .001	0.41
	SGM	109	10.44	5.77			
Post-Traumatic Stress	Non-SGM	162	26.55	19.51	2.21 (267)	.028	0.28
	SGM	107	32.03	20.44			

Note. SGM = sexual and gender minority. Equal variances were assumed for all analyses. Bonferroni-adjusted α = .0167.

Results for Mental Health-Related Functional Impairment

To address Research Question four, an independent-samples *t*-test was conducted to examine whether SGM and non-SGM participants with disabilities differed in reported mental health–related functional impairment (Table 8). Functional impairment was measured using a composite variable averaging responses to three items assessing how much difficulties related to depression, anxiety, and post-traumatic stress interfered with daily functioning (e.g., work, home responsibilities, or relationships). Higher scores indicated greater impairment.

Results indicated a significant group difference, $t(271) = -2.65$, $p = .009$, $d = 0.33$. Levene's Test for Equality of Variances was nonsignificant ($F(1, 271) = 0.073$, $p = .787$), indicating that the assumption of equal variances was met. SGM participants ($M = 2.35$, $SD = 0.85$) reported significantly greater levels of functional impairment compared to non-SGM participants ($M = 2.07$, $SD = 0.86$). This small-to-moderate association suggests that, on average, SGM individuals with disabilities experienced more difficulty managing daily activities due to mental health symptoms during the COVID-19 pandemic.

Table 8. Independent-samples t-test for functional impairment by SGM status

Measure	Group	*n*	*M*	*SD*	*t*(df)	*p*	*d*
Functional Impairment	Non-SGM	166	2.07	0.86	-2.65 (271)	.009	0.33
	SGM	107	2.35	0.85			

Note. M = mean; SD = standard deviation; *d* = Cohen's *d*; *n* = subsample size.

Discussion

This study compared disabled sexual and gender minority (SGM) adults with their non-SGM disabled peers across global well-being, access to basic needs, mental health symptoms, and mental health–related functional impairment. Overall, the pattern that emerged was one of similar global well-being but meaningful domain-specific disparities—particularly in assistance with daily tasks, depression and anxiety symptoms, and functional impairment. These findings are considered in relation to each research question and then discussed in relation to Minority Stress Theory and the social determinants of health.

Discussion of Overall Well-Being

The first research question explored whether there were differences in reported overall well-being between SGM and non-SGM individuals with disabilities or chronic health conditions. Although there were no significant differences in self-reported overall well-being between SGM and non-SGM groups (ordinal logistic model $\chi^2 = 1.62$, $p = .204$; 5×2 chi-square $\chi^2(4) = 3.51$, $p = .476$), this result is not entirely unexpected.

On the surface, this finding suggests disabled SGM individuals rate their general quality of life similarly to their non-SGM peers. However, broad self-report measures may not fully capture the extent of disparities in daily life and mental health. This may reflect what has been described as a "masking effect," in which global self-evaluations obscure more domain-specific inequities. Prior research suggests global well-being ratings are influenced not only by objective conditions but also by adaptive coping strategies and resilience factors (Snyder, 2020; Ungar, 2019). Disabled SGM individuals may draw on community support, identity-based resilience, or reframing strategies that help sustain overall evaluations of well-being even while specific challenges remain pronounced.

Discussion of Access to Basic Needs

The second research question investigated differences in access to basic needs, including medication or therapy, adequate food, and assistance with daily tasks. Findings related to access to resources demonstrated significant disparities only in daily-task assistance. Disabled SGM individuals were significantly more likely to report unmet needs for help with daily tasks than non-SGM peers ($\chi^2(1) = 13.84$, $p < .001$, $\varphi = .23$; OR = 6.72, 95% CI [2.16, 20.84]). Although higher proportions of SGM participants also reported unmet needs for access to medications and food, these differences did not reach statistical significance after correction (medication/therapy $\chi^2(1) = 2.79$, $p = .095$; food $\chi^2(1) = 1.78$, $p = .182$), though point estimates suggested modestly higher odds among SGM participants.

These findings align with existing literature documenting higher levels of structural vulnerability among SGM populations with disabilities, particularly in relation to healthcare access, caregiving, and economic security (Fredriksen-Goldsen et al., 2014; Hughes et al., 2018). The unmet needs observed here may point to barriers such as discrimination in healthcare and social service systems, economic marginalization, and gaps in caregiving support structures. Importantly, the tangible disparity in daily assistance provides critical context for understanding differences in psychological outcomes and functioning.

Discussion of Depression, Anxiety, and Post-Traumatic Stress

The third research question examined whether SGM and non-SGM disabled individuals differed in mental health outcomes. In this study, disabled SGM individuals reported significantly higher symptoms of depression and anxiety compared to their non-SGM peers (CES-D: $t(270) = 3.05$, $p = .003$, $d = 0.38$; GAD-7: $t(276) = 3.33$, $p < .001$, $d = 0.41$). Group

differences in posttraumatic stress were in the same direction but did not remain statistically significant after Bonferroni correction (t (267) = 2.21, p = .028, d = 0.28).

These findings are consistent with prior studies showing elevated mental health risks among SGM populations due to minority stress, discrimination, and reduced access to affirming mental health care (Meyer et al., 2008; Frost & Meyer, 2023). For disabled SGM individuals, these stressors may intersect with ableism and the challenges of managing chronic conditions, creating compounded vulnerability to psychological distress. Given the elevated rates of depression and anxiety in the SGM-disabled population, interventions that are both disability-affirming and SGM-affirming are warranted.

Discussion of Mental Health-Related Functional Impairment

The fourth research question assessed whether SGM and non-SGM disabled individuals differed in mental health–related functional impairment, adding another critical dimension to the results. According to the results, disabled SGM participants were more likely to report difficulties in daily functioning compared to non-SGM participants (composite functioning: $t(271) = -2.65$, $p = .009$, $d = 0.33$).

This pattern demonstrates that the disparities observed in mental health outcomes are not limited to symptom severity but extend to how these symptoms interfere with everyday life. Greater impairment in functioning can have cascading effects on independence, employment, and community participation, intensifying the impact of health inequities. The unique challenges faced by SGM individuals with disabilities create not only emotional distress but also practical barriers to full participation in social and economic life.

Addressing functional impairment in these populations require more than symptom reduction—it necessitates structural and social supports that enable individuals to maintain

autonomy and participate fully in their communities (MACPAC, 2023; World Health Organization, 2010). Evidence shows that pairing clinical care with practical supports—IPS and peer support may be particularly effective (de Winter et al., 2022; Cooper et al., 2024; Smit et al., 2022)

Implications

The pattern of findings—no group difference in global well-being but clear disparities in daily-task assistance, depression and anxiety, and functional impairment—argues for moving beyond siloed approaches and addressing the compounded impact of multiple marginalized identities. Interventions should pair SGM-affirming, disability-competent mental health care with practical supports that directly affect day-to-day functioning (e.g., care coordination, skills training, supported employment, peer support, and linkage to home- and community-based services). Service delivery should also reflect diverse household structures and chosen-family networks common among disabled SGM adults so that assistance with cooking, cleaning, mobility, and other instrumental activities is reliably available. At the systems level, strengthening inclusive HCBS infrastructure and ensuring provider training in both disability competence and LGBTQ+-affirming care align with the domains in which statistically robust differences were observed.

Future Research

For research and evaluation, global well-being measures should be routinely paired with domain-specific indicators—validated symptom scales, concrete basic-needs items, and functioning composites—to avoid masking meaningful disparities and to track outcomes that matter for participation and autonomy. Because group differences in access to medication/therapy and food did not reach statistical significance in this sample, those areas

should be monitored and explored in larger studies rather than used here as the basis for strong recommendations. Policy efforts can prioritize enforcing nondiscrimination protections (e.g., Section 1557 of the Affordable Care Act), expanding workforce training at the intersection of disability and SGM health, and investing in integrated models that target both symptoms and everyday functioning—consistent with the study's significant findings on daily assistance, internalizing symptoms, and functional impairment.

Conclusion

Because food access and medication/therapy access did not differ significantly in this sample, they should be treated as watch areas and revisited with larger, higher-powered studies rather than used here as the basis for strong recommendations. However, the strongest relationships concern daily functioning and assistance with everyday tasks; practice should therefore prioritize integrated care that is both SGM-affirming and disability-competent, paired with concrete supports for daily living (e.g., help with household tasks, mobility support, supported employment, peer support).

References

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet, 389*(10077), 1453–1463. https://doi.org/10.1016/S0140-6736(17)30569-X

Brooks, V. R. (1981). *Minority stress and lesbian women*. Lexington Books.

Cochran, S. D., & Mays, V. M. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: Results from the California Quality of Life Survey. *American Journal of Public Health, 97*(11), 2048–2055. https://doi.org/10.2105/AJPH.2006.087254

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum.

Cooper, R. E., Mota, P., Ennis, E., Fitzpatrick, M., & Murphy, R. (2024). The effectiveness, implementation, and experiences of paid peer support for mental health: An umbrella review. *BMC Medicine, 22*, 120. https://doi.org/10.1186/s12916-024-03260-y

Cunningham, T. J., Croft, J. B., Liu, Y., Lu, H., Eke, P. I., & Giles, W. H. (2017). Vital signs: Racial disparities in age-specific mortality among Blacks or African Americans—United States, 1999–2015. *Morbidity and Mortality Weekly Report, 66*(17), 444–456. https://doi.org/10.15585/mmwr.mm6617e1

de Winter, L., Couwenbergh, C., van Weeghel, J., Sanches, S., Michon, H., & Bond, G. R. (2022). Who benefits from individual placement and support? A meta-analysis. *Epidemiology and Psychiatric Sciences, 31*, e50. https://doi.org/10.1017/S2045796022000300

Dilley, J. A., Simmons, K. W., Boysun, M. J., Pizacani, B. A., & Stark, M. J. (2010). Demonstrating the importance and feasibility of including sexual orientation in public health surveys: Health disparities in the Pacific Northwest. *American Journal of Public Health, 100*(3), 460–467. https://doi.org/10.2105/AJPH.2007.130336

Fredriksen-Goldsen, K. I., Kim, H.-J., Shiu, C., Goldsen, J., & Emlet, C. A. (2014). Successful aging among LGBT older adults: Physical and mental health-related quality of life by age group. *The Gerontologist, 55*(1), 154–168. https://doi.org/10.1093/geront/gnu081

Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of Behavioral Medicine, 38*(1), 1–8. https://doi.org/10.1007/s10865-013-9523-8

Frost, D. M., & Meyer, I. H. (2023). Minority stress and the health of sexual and gender minorities. *Annual Review of Psychology, 74*, 1–25. https://doi.org/10.1146/annurev-psych-032420-031237

Gonzales, G., & Henning-Smith, C. (2017). Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly, 95*(4), 726–748. https://doi.org/10.1111/1468-0009.12297

Hughes, T. L., Veldhuis, C. B., Drabble, L. A., Wilsnack, S. C., Kristjanson, A. F., & Hagger-Johnson, G. (2018). Research on the health of sexual minority women: Where are we and where do we need to go? *Journal of Lesbian Studies, 22*(2), 127–146. https://doi.org/10.1080/10894160.2017.1399485

Johnson, S. E., Blake, S. M., Kahn, R. E., & Slopen, N. (2020). Sexual and gender minority disparities in health and health care access. *American Journal of Preventive Medicine, 59*(6), 832–841.

Kattari, S. K., Walls, N. E., & Speer, S. R. (2017). Differences in experiences of discrimination in accessing social services among transgender/gender nonconforming individuals by (dis)ability. *Journal of Social Work in Disability & Rehabilitation, 16*(2), 116–140. https://doi.org/10.1080/1536710X.2017.1299661

Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A. R., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*(2), 115–123. https://doi.org/10.1016/j.jadohealth.2011.02.005

Medicaid and CHIP Payment and Access Commission. (2023). *Chapter 4: Access to home- and community-based services*. MACPAC.

Medley, G., Lipari, R. N., Bose, J., Cribb, D. S., Kroutil, L. A., & McHenry, G. (2016). *Sexual orientation and estimates of adult substance use and mental health: Results from the 2015 National Survey on Drug Use and Health*. Substance Abuse and Mental Health Services Administration (SAMHSA). https://www.samhsa.gov/data/sites/default/files/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015.htm

Meyer, I. H. (2001). Why lesbian, gay, bisexual, and transgender public health? *American Journal of Public Health, 91*(6), 856–859. https://doi.org/10.2105/AJPH.91.6.856

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H., & Schwartz, S. (2000). Social issues as public health: Promise and peril. *American Journal of Public Health, 90*(8), 1189–1191. https://doi.org/10.2105/AJPH.90.8.1189

Meyer, I. H., Schwartz, S., & Frost, D. M. (2008). Social patterning of stress and coping: Does disadvantaged social status confer more stress and fewer coping resources? *Social Science & Medicine, 67*(3), 368–379. https://doi.org/10.1016/j.socscimed.2008.03.012

Nguyen, K. H., Levengood, T. W., Gordon, A. R., Menard, L., Allen, H. L., & Gonzales, G. (2024). Inequities in self-reported social risk factors by sexual orientation and gender identity. *JAMA Health Forum, 5*(9), e243176. https://doi.org/10.1001/jamahealthforum.2024.3176

Office of Disease Prevention and Health Promotion. (2020). *Lesbian, gay, bisexual, and transgender health—Healthy People 2030*. U.S. Department of Health and Human Services. https://health.gov/healthypeople/objectives-and-data/browse-objectives/lgbt

Phan, M., Graham, C., Moffett, T., & Flatt, J. (2023, September). *Meeting the health and social needs of LGBTQ+ older adults through Medicaid*. Center for Health Care Strategies. https://www.chcs.org/resource/meeting-the-health-and-social-needs-of-lgbtq-older-adults-through-medicaid/

Plöderl, M., & Tremblay, P. (2015). Mental health of sexual minorities: A systematic review. *International Review of Psychiatry, 27*(5), 367–385. https://doi.org/10.3109/09540261.2015.1083949

Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety disorders with the GAD-7 and GAD-2: A systematic review and diagnostic meta-analysis. *General Hospital Psychiatry, 39*, 24–31. https://doi.org/10.1016/j.genhosppsych.2015.11.005

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385–401. https://doi.org/10.1177/014662167700100306

Smit, D., Miguel, C., Vrijsen, J. N., Groeneweg, B., Spijker, J., & Cuijpers, P. (2023). The effectiveness of peer support for individuals with mental illness: Systematic review and meta-analysis. *Psychological Medicine, 53*(11), 5332–5341. https://doi.org/10.1017/S0033291722002422

Snyder, C. R. (2020). *Psychology of hope: You can get there from here*. Free Press.

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097. https://doi.org/10.1001/archinte.166.10.1092

Ungar, M. (2019). Designing resilience research: Using multiple methods to investigate risk exposure, promotive and protective processes, and contextually relevant outcomes for

children and youth. *Child Abuse & Neglect, 96*, 104098. https://doi.org/10.1016/j.chiabu.2019.104098

Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM–5 (PCL–5)*. National Center for PTSD. https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

Williams, D. R., & Mohammed, S. A. (2013). Racism and health I: Pathways and scientific evidence. *American Behavioral Scientist, 57*(8), 1152–1173. https://doi.org/10.1177/0002764213487340

World Health Organization. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health*. World Health Organization. https://iris.who.int/bitstream/handle/10665/69832/WHO_IER_CSDH_08.1_eng.pdf

World Health Organization. (2010). *Community-based rehabilitation: CBR guidelines*. World Health Organization.

World Health Organization. (2024a). *Social determinants of health*. https://www.who.int/health-topics/social-determinants-of-health

APPENDIX

Appendix Table A1

Descriptive Crosstab Frequencies for Access to Basic Needs by SGM Status

Domain of Basic Need	Group	No Lack (%)	Any Lack (%)	Total N
Access to Medication or Therapy	Non-SGM	62.5	37.5	160
Access to Medication or Therapy	SGM	52.0	48.0	100
Access to Adequate Food	Non-SGM	83.3	16.7	168
Access to Adequate Food	SGM	76.9	23.1	108
Assistance with Daily Tasks	Non-SGM	97.6	2.4	167
Assistance with Daily Tasks	SGM	85.8	14.2	106

Note. Percentages reflect the proportion of participants within each SGM group who reported either no unmet needs or any unmet needs for each domain during the COVID-19 pandemic. Percentages may not total 100% due to rounding.

Appendix Table A1 presents the descriptive crosstab frequencies showing the proportion of sexual and gender minority (SGM) and non-SGM participants who reported either no unmet needs or any unmet needs across three domains: (1) access to medication or therapy, (2) access to adequate food, and (3) assistance with daily tasks. These values complement the chi-square and odds ratio results reported in the main text (Tables 5 and 6).

CHAPTER IV: OVERALL DISCUSSION

Integrated Findings

The combined results from both studies underscore the compounding effects of intersecting marginalized identities—specifically disability, sexual and gender minority (SGM) status, and non-White racial/ethnic identity—on victimization, access to resources, mental health, functioning, and healthcare experiences. Drawing on the socioecological model (SEM) and Minority Stress Theory the findings indicate that these outcomes are embedded within broader structural and systemic inequities rather than arising from individual factors alone. At the same time, risks were context-specific: different identities mattered in different domains, and effects were generally independent rather than uniformly multiplicative.

Across both studies, disability consistently emerged as a core vulnerability factor, associated with greater exposure to victimization, discrimination, and unmet day-to-day needs. When disability intersected with SGM status—or, in some settings, with non-White identity—elevated risk became most apparent in particular domains. This pattern aligns with the SEM's emphasis on multi-level influences (from interpersonal abuse to institutional discrimination) and with Minority Stress Theory's assertion that chronic stigma and prejudice accumulate to harm health and well-being.

Victimization and Interpersonal Harm

Findings from Article I showed that disabled SGM adults experienced disproportionately high psychological victimization and some evidence of higher sexual victimization (significant in ordinal models, weaker in binary contrasts). By contrast, race did not consistently predict

physical or psychological victimization in this sample. Caregiver-perpetrated abuse showed weaker and less consistent patterns overall.

Within the SEM, these results illustrate how immediate social environments—family, caregiving relationships, and community interactions—are shaped by larger systems of ableism, heteronormativity, and (in other contexts) racism. They are also consistent with Minority Stress Theory: individuals carrying stigmatized identities face additional, identity-related stressors that heighten vulnerability to interpersonal harm

Access to Basic Needs and Social Determinants of Health

Article II extended these insights by examining basic needs. Disabled SGM adults were significantly more likely to report unmet assistance with daily tasks; differences in access to medication/therapy and food trended unfavorably for SGM participants but were not statistically significant in this sample. These tangible gaps in everyday support likely compound health inequities and help explain differences observed in mental health and functioning.

These findings echo the SEM's recognition that macro-level systems—policy, economics, and cultural norms—filter down to daily living conditions. For disabled SGM adults, structural exclusion across multiple domains translated into concrete deficits in health-sustaining resources during the COVID-19 period.

Mental Health and Functional Impairment

Across studies, mental health disparities were pronounced. Article II found that disabled SGM participants reported higher depression and anxiety (small-to-moderate associations) and greater mental-health–related functional impairment than their non-SGM disabled peers; group differences in post-traumatic stress were directionally similar but less robust after correction.

These results indicate not only elevated symptom burden but also more interference with work, home responsibilities, and relationships.

Viewed alongside Article I's victimization and discrimination findings, a reinforcing cycle emerges: interpersonal harm and structural barriers contribute to worse mental health, which, in turn, increases vulnerability to further victimization and care barriers. This dynamic mirrors Minority Stress Theory's model of stigma-related stressors perpetuating adverse outcomes across the life course.

Healthcare Discrimination and Institutional Barriers

Both articles identified healthcare as a critical institutional setting. In Article I, non-White identity robustly predicted discrimination in healthcare (e.g., reports of lower-quality care), whereas the SGM main association and the SGM × race interaction were not significant; descriptively, SGM participants sometimes reported higher levels, but estimates did not reach significance. Article II's basic-needs analysis further highlighted constraints relevant to healthcare access (e.g., trends for medication/therapy access), though only daily-task assistance reached statistical significance.

Taken together, these results suggest that disabled individuals at the intersection of marginalized identities encounter both interpersonal prejudice and structural barriers in healthcare systems. They point to a gap between formal nondiscrimination protections (e.g., Section 1557 of the ACA) and lived experiences. Within the SEM, this reflects how institutional-level bias cascades into unmet needs and poorer outcomes—and why enforcement, accountability, and workforce training are essential for translating policy into practice.

Understanding Disparities for People with Multiply Marginalized Identities

The findings from both studies demonstrate the value of applying multiple frameworks to health equity research. This emphasizes that the overlapping nature of social identities such as disability, race, sexual orientation, and gender identity produces experiences of discrimination and harm that cannot be understood through single-axis analyses. The current results illustrate this clearly: SGM identity was uniquely tied to sexual victimization and healthcare discrimination, while non-white identity was most strongly associated with psychological victimization. In other words, different identities carried different risks depending on the context, underscoring that vulnerabilities are not uniform across marginalized groups but emerge at the intersections of identity, environment, and systemic forces.

The socioecological model (SEM) provides further insight by situating these disparities within nested layers of influence. At the individual level, participants reported elevated depression, anxiety, and PTSD symptoms, reflecting the psychological toll of marginalization.

At the interpersonal level, participants described higher rates of sexual and psychological victimization, including abuse within caregiving relationships, pointing to how prejudice and power dynamics manifest in close relationships. At the institutional level, disabled SGM and non-white individuals reported discrimination in healthcare and difficulty accessing essential resources, exposing persistent gaps between policy protections and real-world practice. Finally, at the societal level, ableism, racism, and heteronormativity intersect to create the structural conditions that sustain these disparities. The SEM makes clear that inequities are not isolated incidents but the cumulative product of forces operating across levels.

Minority Stress Theory also deepens understanding of these findings by emphasizing the cumulative effects of stigma, discrimination, and prejudice. SGM participants with disabilities, for example, reported both greater exposure to victimization and higher mental health symptom

burden, a pattern consistent with the theory's prediction that chronic minority stressors elevate psychological distress. The trends in healthcare discrimination similarly reflect minority stress processes, whereby repeated experiences of exclusion and bias erode trust in institutions and undermine access to affirming care. Importantly, the theory also points to the role of protective factors—such as chosen family, community support, or affirming services—which may explain unexpected results like the lower reported odds of caregiver abuse among some SGM participants.

Taken together, these theories offer complementary perspectives that help explain not just *whether* disparities exist, but *why* they persist and how they are perpetuated across contexts. SEM shows how those risks are embedded in interconnected social and institutional systems. Minority Stress Theory explains the psychological and health-related consequences of chronic exposure to stigma and bias. By applying these frameworks in combination, the present research illustrates the necessity of multi-level, context-specific, and identity-conscious approaches to reducing health inequities.

Conclusion

Across two complementary studies, disability functioned as a central vulnerability, while SGM status and non-White identity conferred domain-specific risks: SGM identity was most closely tied to psychological (and some sexual) victimization, higher internalizing symptoms, and greater functional impairment; non-White identity most clearly predicted discrimination in healthcare. Global well-being appeared similar across groups, but domain-specific indicators revealed inequities—especially in daily-task assistance and mental health—that matter for participation and autonomy.

Importantly, the results illustrate that different marginalized identities carry different risks depending on context. SGM identity emerged as a critical predictor of sexual victimization and healthcare discrimination, while non-white identity was most salient for psychological victimization. These context-specific vulnerabilities demonstrate that intersectional harms are not interchangeable or additive but uniquely shaped by the interaction of identities and environments. Without an intersectional lens, such patterns remain invisible, and interventions risk being too narrow to address the compounded realities of marginalized groups.

The implications are clear: without sustained, multi-level, and informed action, disabled SGM and non-white individuals will continue to bear a disproportionate burden of harm. Existing anti-discrimination laws and policies, while necessary, are insufficient unless paired with robust enforcement, structural reforms, and culturally responsive practices. Public health, healthcare, and social service systems must be transformed to actively dismantle the structural ableism, racism, and heterosexism that perpetuate inequities.

This dissertation makes a critical contribution by clarifying where and how overlapping marginalized identities shape risk, and by offering a framework to guide policy, practice, and research toward more inclusive and effective solutions. The evidence presented here underscores that health equity for multiply marginalized populations is not a peripheral issue but a central requirement for achieving equity in health and social systems. Ignoring these disparities allows structural harms to persist; addressing them through deliberate, informed action offers a concrete path toward more just and equitable outcomes.

References

Alang, S., McAlpine, D., McCreedy, E., & Hardeman, R. (2017). Police brutality and Black health: Setting the agenda for public health scholars. *American Journal of Public Health, 107*(5), 662–665. https://doi.org/10.2105/AJPH.2017.303691

Azagba, S., Shan, L., & Latham, K. (2019). Overweight and obesity among sexual minority adults in the United States. *International Journal of Environmental Research and Public Health, 16*(10), 1828. https://doi.org/10.3390/ijerph16101828

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet, 389*(10077), 1453–1463. https://doi.org/10.1016/S0140-6736(17)30569-X

Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality—An important theoretical framework for public health. *American Journal of Public Health, 102*(7), 1267–1273. https://doi.org/10.2105/AJPH.2012.300750

Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: Results from the Virginia Transgender Health Initiative Study. *American Journal of Public Health, 103*(10), 1820–1829.

Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health, 32*, 381–398.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*(7), 513–531. https://doi.org/10.1037/0003-066X.32.7.513

Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education* (2nd ed., Vol. 3). Elsevier.

Brooks, V. R. (1981). *Minority stress and lesbian women*. Lexington Books.

Burgess, D., Ding, Y., Hargreaves, M., van Ryn, M., & Phelan, S. (2007). The association between discrimination and physical health in a multi-ethnic sample. *American Journal of Public Health, 98*(7), 1276–1282.

Centers for Disease Control and Prevention. (2020). *CDC health disparities & inequalities report—United States, 2020*. U.S. Department of Health and Human Services. https://www.cdc.gov/healthyyouth/disparities

Cochran, S. D., & Mays, V. M. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: Results from the California Quality of Life Survey. *American Journal of Public Health, 97*(11), 2048–2055. https://doi.org/10.2105/AJPH.2006.087254

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139–167.

Cunningham, T. J., Croft, J. B., Liu, Y., Lu, H., Eke, P. I., & Giles, W. H. (2017). Vital signs: Racial disparities in age-specific mortality among Blacks or African Americans—United States, 1999–2015. *Morbidity and Mortality Weekly Report, 66*(17), 444–456. https://doi.org/10.15585/mmwr.mm6617e1

Dammeyer, J., & Chapman, M. (2018). A national survey on violence and discrimination among people with disabilities. *BMC Public Health, 18*(1), 355. https://doi.org/10.1186/s12889-018-5277-0

Dilley, J. A., Simmons, K. W., Boysun, M. J., Pizacani, B. A., & Stark, M. J. (2010). Demonstrating the importance and feasibility of including sexual orientation in public health surveys: Health disparities in the Pacific Northwest. *American Journal of Public Health, 100*(3), 460–467. https://doi.org/10.2105/AJPH.2007.130336

Everett, B. G. (2013). Sexual orientation disparities in sexually transmitted infections: Examining the intersection between sexual identity and sexual behavior. *Archives of Sexual Behavior, 42*(2), 225–236. https://doi.org/10.1007/s10508-012-9902-1

Fitzpatrick, S. L., Glenn, B. A., Duru, O., & Ford, C. L. (2023). Health equity in dissemination and implementation science. In R. C. Brownson, G. A. Colditz, & E. K. Proctor (Eds.), *Dissemination and implementation research in health*. Oxford University Press.

Fredriksen-Goldsen, K. I., Kim, H.-J., Shiu, C., Goldsen, J., & Emlet, C. A. (2014). Successful aging among LGBT older adults: Physical and mental health-related quality of life by age group. *The Gerontologist, 55*(1), 154–168. https://doi.org/10.1093/geront/gnu081

Frost, D. M., & Meyer, I. H. (2023). Minority stress and the health of sexual and gender minorities. *Annual Review of Psychology, 74*, 1–25. https://doi.org/10.1146/annurev-psych-032420-031237

Frost, D. M., & Meyer, I. H. (2023). Minority stress theory: Application, critique, and continued relevance. *Current Opinion in Psychology, 51*, 101579.

Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of Behavioral Medicine, 38*(1), 1–8. https://doi.org/10.1007/s10865-013-9523-8

Garcia, J., & Crosby, R. A. (2020). Social determinants of discrimination and access to health care among transgender women in Oregon. *Transgender Health, 5*(4), 225–233.

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among Blacks and Whites in the United States. *American Journal of Public Health, 96*(5), 826–833. https://doi.org/10.2105/AJPH.2004.060749

Goldbach, J. T., Tanner-Smith, E. E., Bagwell, M., & Dunlap, S. (2014). Minority stress and substance use in sexual minority adolescents: A meta-analysis. *Prevention Science, 15*(3), 350–363. https://doi.org/10.1007/s11121-013-0393-7

Gonzales, G., & Henning-Smith, C. (2017). Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly, 95*(4), 726–748. https://doi.org/10.1111/1468-0009.12297

Gonzalez, C. A., Gallego, J. D., & Bockting, W. O. (2017). Demographic characteristics, sexuality and gender components, minority stress, and their associations with substance use among a large sample of transgender people in the United States. *Journal of Primary Prevention, 38*(5), 419–445.

Gonzalez, D., Kenney, G. M., Karpman, M., & Morriss, S. (2023). *Four in ten adults with disabilities experienced unfair treatment in health care settings, at work, or when applying for public benefits in 2022*. Urban Institute.

Haas, A. P., Eliason, M., Mays, V. M., & Mathy, R. M. (2010). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality, 58*(1), 10–51.

Hacker, K., & Houry, D. (2022). Social needs and social determinants: The role of the Centers for Disease Control and Prevention and public health. *Public Health Reports, 137*(6), 1049–1052.

Herbst, J. H., Jacobs, E. D., Finlayson, T. J., McKleroy, V. S., Neumann, M. S., & Crepaz, N. (2008). Estimating HIV prevalence and risk behaviors of transgender persons in the United States: A systematic review. *AIDS and Behavior, 12*(1), 1–17.

Hong, J. S., & Garbarino, J. (2012). Risk and protective factors for homophobic bullying in schools: An application of the social-ecological framework. *Educational Psychology Review, 24*(2), 271–285.

Hughes, K., Bellis, M. A., Jones, L., Wood, S., Bates, G., Eckley, L., McCoy, E., Mikton, C., Shakespeare, T., & Officer, A. (2012). Prevalence and risk of violence against adults with disabilities: A systematic review and meta-analysis of observational studies. *The Lancet, 379*(9826), 1621–1629. https://doi.org/10.1016/S0140-6736(11)61851-5

Hughes, T. L. (2002). Substance use and abuse in lesbian, gay, bisexual and transgender populations. *Journal of Primary Prevention, 22*(3), 263–298.

Hughes, T. L., Veldhuis, C. B., Drabble, L. A., Wilsnack, S. C., Kristjanson, A. F., & Hagger-Johnson, G. (2018). Research on the health of sexual minority women: Where are we and where do we need to go? *Journal of Lesbian Studies, 22*(2), 127–146.

Jacobs, E. A., Rolle, I., Ferrans, C. E., Whitaker, E. E., & Warnecke, R. B. (2006). Understanding African Americans' views of the trustworthiness of physicians. *Journal of General Internal Medicine, 21*(6), 642–647.

Johnson, A. H., Hill, I., Beach-Ferrara, J., Rogers, B. A., & Bradford, A. (2020). Common barriers to healthcare for transgender people in the U.S. Southeast. *International Journal of Transgender Health, 21*(1). https://doi.org/10.1080/15532739.2019.1700203

Johnson, S. E., Blake, S. M., Kahn, R. E., & Slopen, N. (2020). Sexual and gender minority disparities in health and health care access. *American Journal of Preventive Medicine, 59*(6), 832–841.

Kaholokula, J. K., Ing, C. T., Look, M. A., Delafield, R., & Sinclair, K. (2017). Culturally responsive approaches to health promotion for Native Hawaiians and Pacific Islanders. *Annals of Human Biology, 44*(3), 249–254.

Krahn, G. L., Walker, D. K., & Correa-De-Araujo, R. (2015). Persons with disabilities as an unrecognized health disparity population. *American Journal of Public Health, 105*(S2), S198–S206. https://doi.org/10.2105/AJPH.2014.302182

Lewis, T. T., Cogburn, C. D., & Williams, D. R. (2015). Self-reported experiences of discrimination and health: Scientific advances, ongoing controversies, and emerging issues. *Annual Review of Clinical Psychology, 11*, 407–440. https://doi.org/10.1146/annurev-clinpsy-032814-112728

LGBT Policy Coordinating Committee. (2016). *Advancing LGBT health and well-being: 2016 report*.

Liburd, L. C., & Sniezek, J. E. (2007). Changing times: New possibilities for community health and well-being. *Preventing Chronic Disease, 4*(3).

Liburd, L. C., Ehlinger, E., Liao, Y., & Lichtveld, M. (2016). Strengthening the science and practice of health equity in public health. *Journal of Public Health Management and Practice, 22*(Suppl 1), S4–S7.

Lund, E. M., & Burgess, C. M. (2021). Sexual and gender minority health care disparities: Barriers to care and strategies to bridge the gap. *Primary Care: Clinics in Office Practice, 48*(2), 179–189.

Lund, E. M., & Ross, S. W. (2021). Retrospective and current peer victimization in college students with disabilities: Examining the intersectionality of sexual orientation and gender. *Sexuality and Disability, 39*(1), 97–111.

Lund, E. M., & Thomas, K. B. (2023). Disability, victimization, and mental health during the COVID-19 pandemic: A national study. *Rehabilitation Psychology, 68*(1), 45–57. https://doi.org/10.1037/rep0000465

Lund, E. M., & Thomas, K. B. (2023). The association between physical and psychological domestic violence experienced during the COVID-19 pandemic and mental health symptoms. *International Journal of Environmental Research and Public Health, 20*(4), 3312. https://doi.org/10.3390/ijerph20043312

Marani, M., Katul, G. G., Pan, W. K., & Parolari, A. J. (2021). Intensity and frequency of extreme novel epidemics. *Proceedings of the National Academy of Sciences, 118*(35), e2105482118.

Marmot, M. (2007). Achieving health equity: From root causes to fair outcomes. *The Lancet, 370*(9593), 1153–1163.

Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A. R., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*(2), 115–123. https://doi.org/10.1016/j.jadohealth.2011.02.005

McCabe, S. E., Hughes, T. L., Bostwick, W. B., West, B. T., & Boyd, C. J. (2009). Sexual orientation, substance use behaviors, and substance dependence in the United States. *Addiction, 104*(8), 1333–1345.

McGee, M. G. (2014). Lost in the margins? Intersections between disability and other nondominant statuses with regard to peer victimization. *Journal of School Violence, 13*(4), 396–421.

Medley, G., Lipari, R. N., Bose, J., Cribb, D. S., Kroutil, L. A., & McHenry, G. (2016). *Sexual orientation and estimates of adult substance use and mental health: Results from the 2015 National Survey on Drug Use and Health*. Substance Abuse and Mental Health Services Administration (SAMHSA).

Meyer, I. H. (2001). Why lesbian, gay, bisexual, and transgender public health? *American Journal of Public Health, 91*(6), 856–859. https://doi.org/10.2105/AJPH.91.6.856

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H. (2015). Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity, 2*(3), 209–213. https://doi.org/10.1037/sgd0000132

Meyer, I. H., & Schwartz, S. (2000). Social issues as public health: Promise and peril. *American Journal of Public Health, 90*(8), 1189–1191. https://doi.org/10.2105/AJPH.90.8.1189

Meyer, I. H., Schwartz, S., & Frost, D. M. (2008). Social patterning of stress and coping: Does disadvantaged social status confer more stress and fewer coping resources? *Social Science & Medicine, 67*(3), 368–379. https://doi.org/10.1016/j.socscimed.2008.03.012

National Academies of Sciences, Engineering, and Medicine. (2020). *Understanding the well-being of LGBTQI+ populations* (C. J. Patterson, M.-J. Sepúlveda, & J. White, Eds.). The National Academies Press.

National Center for Health Statistics (U.S.). (2021). *Health, United States, 2019*. Centers for Disease Control and Prevention.

National Health Law Program. (2024). NHeLP statement on Section 1557 final rule. https://healthlaw.org/section-1557/

National Institutes of Health. (2023). *NIH designates people with disabilities as a population with health disparities*. https://www.nih.gov/news-events/news-releases/nih-designates-people-disabilities-population-health-disparities

Newlin Lew, K., Dorsen, C., & Melkus, G. D. (2018). Prevalence of obesity, prediabetes, and diabetes in sexual minority women of diverse races/ethnicities: Findings from the 2014–2015 BRFSS surveys. *The Diabetes Educator, 44*(4), 348–360.

Office of Disease Prevention and Health Promotion. (2020). *Healthy People 2020 leading health indicators: Progress update*.

Office of Disease Prevention and Health Promotion. (2017). *Healthy People 2020: Lesbian, gay, bisexual, and transgender health*. https://www.healthypeople.gov/2020/

Operario, D., Gamarel, K. E., Grin, B. M., et al. (2015). Sexual minority health disparities in adult men and women in the United States: NHANES 2001–2010. *American Journal of Public Health, 105*(10), e27–e34.

Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety disorders with the GAD-7 and GAD-2: A systematic review and diagnostic meta-analysis. *General Hospital Psychiatry, 39*, 24–31. https://doi.org/10.1016/j.genhosppsych.2015.11.005

Plöderl, M., & Tremblay, P. (2015). Mental health of sexual minorities: A systematic review. *International Review of Psychiatry, 27*(5), 367–385. https://doi.org/10.3109/09540261.2015.1083949

Plöderl, M., Wagenmakers, E. J., Tremblay, P., Ramsay, R., Kralovec, K., Fartacek, C., & Fartacek, R. (2013). Suicide risk and sexual orientation: A critical review. *Archives of Sexual Behavior, 42*(5), 715–727.

Pyo, S., & Hayes, B. E. (2024). Intersecting identities and the perceived threat of hate crimes among individuals with disabilities. *Feminist Criminology, 19*(1), 57–78.

Pyo, S., & Hayes, S. C. (2024). Intersectional discrimination: The compounded effects of disability and LGBTQ+ identity on perceptions of safety. *Journal of Social Issues, 80*(2), 355–374. https://doi.org/10.1111/josi.12601

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385–401. https://doi.org/10.1177/014662167700100306

Rose, C. A., Espelage, D. L., & Monda-Amaya, L. E. (2015). Bullying and victimization among students in special and general education: A meta-analytic review. *Remedial and Special Education, 36*(5), 260–275.

Salihu, H. M., Wilson, R. E., King, L. M., Marty, P. J., & Whiteman, V. E. (2015). Socio-ecological model as a framework for overcoming barriers and challenges in randomized controlled trials in minority and underserved communities. *International Journal of MCH and AIDS, 3*(1), 85–95.

Shpigelman, C.-N., & Ayalon, L. (2016). Violence and abuse of people with disabilities: A review of the literature. *Aggression and Violent Behavior, 28*, 75–86.

Silverman, M. M., Fisher, P. W., Hughes, T., Rosario, M., Russell, S. T., Malley, E., Reed, J., Litts, D. A., Haller, E., Sell, R. L., Remafedi, G., Bradford, J., Beautrais, A. L., & Clayton, P. J. (2010). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality, 58*(1), 10–51.

Snyder, C. R. (2020). *Psychology of hope: You can get there from here*. Free Press.

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097.

Sue, D. W., Capodilupo, C. M., & Holder, A. M. B. (2007). Racial microaggressions in the life experience of Black Americans. *Professional Psychology: Research and Practice, 39*(3), 329–336.

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist, 62*(4), 271–286. https://doi.org/10.1037/0003-066X.62.4.271

Trinh, M. H., Agénor, M., Austin, S. B., & Jackson, C. L. (2017). Health and healthcare disparities among U.S. women and men at the intersection of sexual orientation and race/ethnicity: A nationally representative cross-sectional study. *BMC Public Health, 17*(1), 964.

U.S. Census Bureau. (2020). *QuickFacts: United States*.

U.S. Department of Health and Human Services. (2022). *Health equity and health disparities environmental scan*.

Ungar, M. (2019). Designing resilience research: Using multiple methods to investigate risk exposure, promotive and protective processes, and contextually relevant outcomes for children and youth. *Child Abuse & Neglect, 96*, 104098. https://doi.org/10.1016/j.chiabu.2019.104098

Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM–5 (PCL–5)*. National Center for PTSD. https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

Weinstein, J. N., Geller, A., Negussie, Y., & Baciu, A. (2017). *Communities in action: Pathways to health equity*. National Academies Press. https://doi.org/10.17226/24624

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20–47.

Williams, D. R., & Mohammed, S. A. (2013). Racism and health I: Pathways and scientific evidence. *American Behavioral Scientist, 57*(8), 1152–1173. https://doi.org/10.1177/0002764213487340

World Health Organization. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health*. World Health Organization.

World Health Organization. (2011). *World report on disability*. WHO Press. https://iris.who.int/bitstream/handle/10665/44575/9789240685215_eng.pdf

World Health Organization. (2024a). *Operational framework for monitoring the social determinants of health equity*.

World Health Organization. (2024b). *Social determinants of health*. https://www.who.int/health-topics/social-determinants-of-health