Summer 8-2023

Assessing Sexual Minority Women's Barriers and Facilitators to Seeking and Accessing Mental and Physical Healthcare: A Mixed Methods Study

Charlotte A. Dawson
Old Dominion University, cdaws001@odu.edu

ASSESSING SEXUAL MINORITY WOMEN'S BARRIERS AND FACILITATORS TO SEEKING AND ACCESSING MENTAL AND PHYSICAL HEALTHCARE: A MIXED METHODS STUDY

by

Charlotte A. Dawson
B.A. May 2016, University of Virginia
M.S. December 2020, Old Dominion University

A Dissertation Submitted to the Faculty of
the Virginia Consortium Program in Clinical Psychology
in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

CLINICAL PSYCHOLOGY

VIRGINIA CONSORTIUM PROGRAM IN CLINICAL PSYCHOLOGY
August 2023

Approved by:

Kristin E. Heron (Director)

Richard W. Handel (Member)

Abby L. Braitman (Member)

Robin J. Lewis (Member)

ABSTRACT

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Charlotte A. Dawson
Virginia Consortium Program in Clinical Psychology, 2023
Director: Dr. Kristin E. Heron

Sexual minority women (SMW) experience greater mental and physical health concerns when compared to heterosexual women. Three key areas of health SMW report these disparities are: mental health, binge eating/body size, and sexual and reproductive health. SMW also report difficulties accessing healthcare in these three areas. An exploratory sequential mixed methods design was utilized to assess barriers and facilitators to healthcare access for young SMW. Study 1 included 20 semi-structured interviews with SMW, resulting in themes of barriers and facilitators identified by participants. These themes were converted into scale items. In Study 2, an expert panel of mental and physical health professionals, researchers, and SMW provided feedback on the scale. The revised scale, along with measures of healthcare barriers and health outcomes, was completed by 188 SMW via an online survey. Exploratory factor analysis (EFA) was conducted for the barriers scale items, resulting in three barriers scales: Weight Stigma, General/Environmental, and Discrimination. EFA was also conducted for the facilitator items, resulting in a single scale. The Barriers-Weight Stigma and Barriers- General/Environmental scales were both valid and reliable, and the Barriers- Discrimination and the Facilitator scales were reliable. The Barriers-Weight Stigma scale emerged as the primary barrier factor and had the strongest validity and reliability. The Barriers scales were significantly associated with a variety of health outcomes. Future research should continue to assess barriers to healthcare for SMW and how to reduce these barriers.

This thesis is dedicated to my husband, Chris, and my mother, Laurie.

ACKNOWLEDGEMENTS

Thank you to my mentor, Dr. Kristin Heron and to my dissertation committee for their support. Thank you to Alicia Moulder and Cassidy Sandoval for their assistance with data collection and coding.

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CHAPTER I

INTRODUCTION

The Institute of Medicine (IOM, 2011), the National Academies (2020), and Healthy People 2030 (ODPHP) have identified increased research on sexual minority women (SMW; lesbian, bisexual, queer, etc.) as an area of critical need, to better understand health disparities faced by this population. Lesbian women and women who report sexual behavior with women have elevated mortality risk compared to heterosexual women (Cochran et al., 2016). Specifically, notable disparities exist between SMW and heterosexual women in three key health-related areas: mental health, binge eating/body size, and sexual and reproductive health. For example, SMW experience elevated suicide mortality rates (Cochran & Mays, 2015), are more likely to report mental health concerns (King et al., 2008; Krueger et al., 2018; Operario et al., 2015), and are more likely to be obese or overweight (Conron et al., 2010; Struble et al., 2010) compared to their heterosexual peers. SMW also face unique risks associated with sexual and reproductive health (Hutchinson et al., 2006; Tornello et al., 2014).

On top of disparities in health outcomes, SMW also experience inequalities in access to health care. SMW are more likely to report negative healthcare experiences (Elliot et al., 2015) and heightened difficulties receiving healthcare (e.g., delays in receiving or not receiving healthcare due to cost, no usual source of medical care; Dahlhamer et al., 2016) when compared to their heterosexual counterparts. While there are known disparities in access to general healthcare between sexual minority and heterosexual individuals, disparities in care are pronounced in the areas of mental health, body size/binge eating, and sexual and reproductive health. For example, SMW are more likely to report unmet mental health needs (Burgess et al., 2007; Steele et al., 2017) and less likely to report having sexual and reproductive health screenings (Albuquerque et al., 2016; Charlton et al., 2011) than heterosexual individuals. SMW also experience elevated stigma levels in

care related to binge eating and body size due to multiple sources of stigma (e.g., weight stigma and sexual identity stigma; Paine, 2021; Panza, Olson, Goldstein, Selby, & Lillis, 2020).

Although we know SMW experience more health problems and difficulty receiving care, we know less about their actual experiences and perceptions of why it is difficult to seek or access care. Sexual minority stress theory (Meyer, 2003) posits SMW experience more health problems due to heightened stress related to stigma, discrimination, and prejudice, but little is known about the role of sexual minority stress in SMW's help seeking behaviors and ability to access healthcare. A systematic review suggested that external homophobia (i.e., negative attitudes towards others who identify as sexual minority), internal homophobia (i.e., negative attitude towards self related to one's sexual minority identity), and non-disclosure of sexual identity as barriers to accessing health services for LGBT (lesbian, gay, bisexual, transgender) individuals (Albuquerque et al., 2016), but more research is needed to understand the challenges SMW face in seeking help for their health problems. The current study focuses young SMW between the ages of 18 to 40 due the elevated vulnerability young women face in terms of mental health (Kessler et al., 2005), binge eating (Austin et al., 2009), and overweight/obesity (Struble et al., 2010). In addition, given the focus on sexual and reproductive health, the study includes SMW in this age range as it aligns with the WHO-identified range for women of reproductive age (15-49 years) and encompasses the mean age of 26.3 for first-time mothers in the U.S. in 2014 (Mathews & Hamilton, 2016).

To address these gaps in current research, a measure of SMW's barriers and facilitators in seeking and accessing healthcare is needed. Existing scales that assess general barriers to healthcare do not take into account the unique experiences of SMW. This study utilizes an exploratory sequential mixed methods design to develop and provide initial validation of a scale assessing SMW's barriers and facilitators in seeking and accessing healthcare.

Overview of Key Health Disparities Among SMW

Mental Health Disparities

SMW are at greater risk of experiencing many mental health problems in comparison to heterosexual women, including mood and anxiety disorders (Bostwick et al., 2010). Lesbian and bisexual women are more than three times as likely to have generalized anxiety disorder and more than two times are likely to report comorbid mental illnesses than heterosexual women (Cochran et al., 2003). A systematic review indicated that lesbian and bisexual women were twice as likely as heterosexual women to have made a suicide attempt in the previous year (King et al., 2008). Women who have reported having sex with women are at an increased risk for suicide mortality than presumptively heterosexual women (Cochran & Mays, 2015). These mental health concerns may be particularly pronounced among SMW who identify as bisexual. Bisexual women reported the worst mental health, including anxiety and depressive symptoms, anger, self-injury, and suicidal ideation and attempts compared to lesbian and heterosexual college women, with lesbian women still maintaining a much greater risk than heterosexual women (Kerr, Santurri, & Peters, 2013). There is also evidence to suggest that the risk for mental health concerns among SMW is especially high among young women. Rice and colleagues (2019) examined the associations between sexual minority status and mental health concerns among those ages 18 to 65. The association between sexual minority status and reporting a major depressive episode was three times higher at age 18 and one and a half times higher for women aged between 25 and 40 (Rice et al., 2019). The association between sexual minority status and generalized anxiety disorder was two and a half times higher for women in their late 20s, with the increased risk plateauing around age 40 (Rice et al., 2019). Overall, findings from past research suggests SMW experience many mental health concerns (e.g., anxiety, mood, suicidality) at higher rates than heterosexual women. Previous

research has suggested that among SMW, mental health problems may be particularly notable for those who identify as bisexual and those who are young.

Binge Eating and Body Size Disparities

Disparities between SMW and heterosexual women have also been found in binge eating and body size, which is often operationalized as body mass index (BMI). BMI is a commonly used measure of obesity calculated by dividing weight by height (APA Dictionary of Psychology). BMI corresponds to four categories of weight, including underweight (below 18.5), normal (18.5-24.9), overweight (25.0-29.9), and obesity (30.0 and above; NIH National Heart, Lung, and Blood Institute). In terms of body size, lesbian women are more likely to be obese than heterosexual women (Conron et al., 2010). One study found that lesbian women are more than twice as likely as heterosexual women to be overweight or obese (Boehmer et al., 2007). In addition to SMW identifying who identify lesbian, college women who identified as bisexual and lesbian were more likely to report being overweight or obese (Laska et al., 2015; Struble et al., 2010). These trends have also been studied over time. A longitudinal study following young women from adolescent to early adulthood concluded that lesbian women were twice as likely to be in the developing obesity trajectory group when compared with heterosexual young women (Wood et al., 2017).

Eating behaviors, such as binge eating, can contribute to obesity (Ivezaj et al., 2016; Neumark-Sztainer et al., 2006). In a systematic review of 45 studies examining eating disorder symptoms among SMW, Meneguzzo and colleagues (2017) concluded that SMW experienced a higher occurrence of binge eating and purging symptomatology than their heterosexual counterparts. A study among adolescents found that SMW identifying as lesbian, bisexual, and "mostly heterosexual" were more likely to report binge eating than heterosexual female adolescents (Austin et al., 2009). Among college women those who identified as bisexual or were categorized as "discordant heterosexual" (i.e., report heterosexual identity and report same-sex behavior) were the

most likely groups to binge eat compared to women who identified as heterosexual, lesbian, and unsure (Laska et al., 2015). Overall, SMW appear to be a greater risk of having a larger body size and engaging in binge eating behaviors than heterosexual women. These disparities have been shown to impact young SMW, including adolescents (Austin et al. 2009) and college women (Struble et al., 2010).

Sexual and Reproductive Health Disparities

Another area of health in which SMW experience heightened risk is sexual and reproductive health. SMW report more sexual and reproductive health risks, such that bisexual and lesbian women reported being younger at sexual debut with a male partner, having more female and male partners, and being more likely to have been sexually assaulted by a male partner compared to their heterosexual peers (Tornello et el., 2014). Bisexual women reported the greatest risks compared to both lesbian and heterosexual women, having the earliest sexual debut, highest number of male partners, and highest rates of emergency contraception use and pregnancy termination (Tornello et al., 2014). Compared to heterosexual women, bisexual women are almost twice as likely to report an unwanted pregnancy (Everett et al., 2017). Of those who reported pregnancies, the pregnancies reported by bisexual and lesbian women were more likely to be unwanted when compared to heterosexual women (Everett et al., 2017). Sexual minority status has been significantly associated with having a sexually transmitted infection among those aged 20 to 49 years and particularly among those in their late 20s (Rice et al., 2019). A systematic review of lesbian and bisexual women's gynecologic conditions concluded that bisexual women may experience more pelvic pain and may be at greater risk for cervical cancer than heterosexual women (Robinson et al., 2016). Taken together, past research suggest that compared to heterosexual women, SMW report more risky sexual behaviors, sexually transmitted infections, unwanted pregnancies, pelvic pain, and cervical cancer, highlighting a key disparity between these groups in sexual and reproductive health.

Using Minority Stress Theory for Understanding Health Disparities in SMW

Meyer's minority stress model (2003) provides a framework for explaining why these disparities between SMW and heterosexual women may exist. The model posits that sexual minority individuals face unique challenges based on their identity (i.e., sexual minority stress), such as discrimination, prejudice, and stigma. The heightened stress and associated stress processes (e.g., expectations of rejection) caused by these challenges, in turn, lead to increased risk for psychological distress and mental health problems. Hatzenbuehler (2009) expanded upon Meyer's model with the psychological mediation framework, adding that the association between sexual minority stress and psychopathology (e.g., depression, anxiety, substance use) is mediated by psychological processes. These psychological processes include coping and emotional regulation (e.g., rumination), social and interpersonal processes (e.g., social isolation), and cognitive processes (e.g., negative self-schemas).

Drawing from these theories, research has demonstrated that sexual minority stress is associated with aspects of mental health, sexual and reproductive health, and binge eating, as will be discussed in greater detail in the following sections. For example, higher levels of sexual minority stress have been associated with greater psychological distress in a number of studies (Lea et al., 2014; Lehavot & Simoni, 2011; Lewis et al., 2003; Szymanski et al., 2014). Regarding sexual and reproductive health, lesbian and bisexual teens who reported pregnancy involvement were also more likely to report sexual orientation-related discrimination and harassment compared to lesbian and bisexual teens who did not report a pregnancy history (Saewyc et al., 2008). In addition, for SMW with lower levels of coping, high levels of perceived stigma were associated with reduced safe sex practices (Logie et al., 2016). Similarly, for SMW who reported lower levels of support, higher levels of enacted stigma were associated with fewer safe sex practices (Logie et al., 2016).

Last, this pattern of associations between sexual minority stress and negative health outcomes has also emerged in the area of binge eating. In a systemic review of disordered eating and body image concerns among SMW, Mason and colleagues (2018) concluded that sexual minority stress (e.g., discrimination) is related to disordered eating and body image concerns. Additionally, Panza, Fehling, Pantalone, Dodson, & Selby (2020) investigated whether stressors related to sexual orientation, gender, and weight led to increased risk disordered eating behaviors among SMW who are overweight. SMW with higher levels of internalized homophobia reported a greater number of binge eating episodes and those with higher levels of sexual orientation concealment reported more episodes of overeating (Panza, Fehling, Pantalone, Dodson, & Selby, 2020).

Summary of Key Health Disparities Among SMW

SMW experience more mental health concerns (e.g., depression, anxiety), body size binge eating concerns (e.g., obesity), and sexual and reproductive health concerns (e.g., unwanted pregnancies, sexually transmitted infections) when compared to heterosexual women. Minority stress theory helps to explain why these disparities exist, with research indicating that more sexual minority stress is associated with worse health outcomes. However, we know less about the role of sexual minority stress in seeking and accessing healthcare.

Healthcare Access Disparities Among SMW

In addition to more health problems, SMW experience more unmet healthcare needs and have more negative experiences when they do receive healthcare. Compared to the healthcare experiences of heterosexual women, gay/lesbian women are more than one and a half times and bisexual women are two times more likely to report delays in receiving or not receiving health care due to cost (Dahlhamer et al., 2016). Gay/lesbian women are also more than one and a half times and bisexual women are two times more likely than straight women to report no usual source of medical care (Dahlhamer et al., 2016). There are additional disparities between bisexual women

relative to gay/lesbian and straight women, such that bisexual women reported significantly higher likelihood of not receiving specific health services due to cost, delaying for noncost reasons, and difficulty finding a medical provider (Dahlhamer et al., 2016). Delaying healthcare has been linked to sexual identity. Lesbian women are more likely to report delaying healthcare due to sexuality reasons (e.g., fear of discrimination) when compared to heterosexual women (Van Dam et al., 2001). In addition to facing more difficulty accessing healthcare, SMW may also have different experiences when they do receive care. Sexual minority men and women are one and a half times more likely to report a negative healthcare experience than heterosexual individuals (Elliot et al., 2015). More specifically, lesbian and bisexual women reported less trust or confidence in their doctor and poorer doctor and nurse communication than heterosexual women (Elliot et al., 2015). Gaps in healthcare access for SMW are particularly pronounced in the areas of mental health, sexual and reproductive health, and binge eating/body size.

Mental Healthcare Disparities Among SMW

Mental healthcare is an area of healthcare that may be particularly challenging for SMW. LGBT individuals are more likely to report an unmet mental health need than heterosexual individuals (Burgess et al., 2007). More specifically, bisexual women are almost two times more likely to report an unmet need for mental healthcare compared to heterosexual women (Steele et al., 2017). Among a chronic mental illness population, lesbian and bisexual women were significantly more likely to report dissatisfaction with mental health services when compared to heterosexual women (Avery et al., 2001). Additionally, LGBT-specific mental health care programs may be limited. Results from the 2016 National Mental Health Service Survey indicated that only 12.6% of the facilities surveyed reported LGBT-specific programs (Williams & Fish, 2020). There are also important differences in care and nuances in the mental health treatment of bisexual women. Compared to gay and lesbian individuals, bisexual men and women are less likely to seek mental

health care for sexual orientation concerns and rate the care they do receive for sexual orientation concerns as less helpful (Page, 2004). Moreover, bisexual individuals with more serious mental health concerns were less likely to disclose their sexual orientation to providers, experienced less acceptance of their sexual orientation from providers if they did disclose, and received more biased clinical interventions than bisexual individuals with moderate mental health concerns (Page, 2004). SMW experience difficulty accessing mental healthcare, including reporting unmet needs and dissatisfaction with care. Among SMW, there may be heightened disparities for individuals who identify as bisexual.

Eating and Weight Healthcare Disparities Among SMW

Compared to mental healthcare, less is known about disparities in care for eating and weight concerns. However, several studies have suggested that SMW may face challenges specific to eating and weight related healthcare. Regarding weight bias, LGBTQ (lesbian, gay, bisexual, transgender, and queer or questioning) patients perceive that health providers attribute their health concerns to their weight and sexual and/or gender minority statuses, thereby creating a barrier to care (Paine, 2021). Additionally, SMW with larger body sizes report high rates of lifetime weight stigma and frequently perceive stigma due to weight and sexual orientation concurrently in daily life (Panza, Olson, Goldstein, Selby, & Lillis, 2020). Researchers have also identified weight stigma as a factor in their ecological model of factors associated with greater body mass among SMW (Eliason & Fogel, 2015). The double stigma may create barriers for seeking and accessing obesity-related care. One potential treatment option for obesity is bariatric surgery. There are known disparities for bariatric surgery among racial minorities and lower socioeconomic groups (Hecht et al., 2020). However, these disparities have not been studied among sexual orientations groups due to a lack of sexual orientation screening among bariatric programs (Soulliard et al., 2020). Similar to obesity-related treatment, there is a dearth of research investigating eating disorder treatment and

care among SMW. There are two known studies that focus on eating disorder treatment among sexual minority individuals and these studies are on sexual minority men (Calzo et al., 2017). One study suggested that interventions focusing on positive body image among SMW may be salient (Johns et al., 2017). It is known that SMW may face sexual identity stigma and weight stigma when accessing healthcare. However, more research is needed to better understand the healthcare experiences of SMW when seeking care for obesity and binge eating related concerns.

Sexual and Reproductive Healthcare Disparities Among SMW

SMW experience disparities in access and quality of sexual and reproductive healthcare, including lower frequency of preventative screening for cervical and breast cancer and negative experiences with gynecologists (e.g., inappropriate reactions or rejections; Albuquerque et al., 2016). Further, SMW are less likely to have reproductive health screenings than heterosexual women (Charlton et al., 2011). Pregnant SMW were more likely to report unmet medical care needs due to cost when compared to pregnant heterosexual women (Gonzales et al., 2019). Differences have also been found between bisexual and lesbian women. Among college SMW, bisexual women were more likely to have a gynecological examination, perform a breast self-examination, and have an HIV test compared to lesbian women (Kerr, Ding, & Thompson, 2013). SMW may experience difficulty accessing sexual and reproductive healthcare due to medical providers' misconceptions about sexual behavior and sexual partners. For example, among a sample of Black lesbian and bisexual women, about 90% of the lesbian women and 99% of bisexual women reported sexual intercourse with a man (Cochran & Mays, 1988). However, healthcare providers may assume SMW have only or mostly female partners and underestimate the need for sexual and reproductive healthcare among SMW. Particularly with sexual and reproductive healthcare for SMW (as compared to other health behaviors or conditions), there may be concerns related to provider misconceptions, stereotypes, and stigma around sexual identity. These factors may also decrease the

likelihood of SMW patient disclosure of sexual identity and behaviors, thereby decreasing the quality of care.

Barriers and Facilitators to Accessing Healthcare among SMW

Research that has been previously mentioned identified disparities in care received by SMW in comparison to heterosexual women. Many of these disparities can also be conceptualized as barriers to care. For example, Dahlhamer and colleagues (2016) found delaying care due to cost, lack of a usual source of medical care, and difficulty finding a provider to be barriers to care for SMW. Many other studies include negative experiences and fear of negative experiences related to sexuality as barriers for sexual minority individuals (Albuquerque et al., 2016; Elliot et al., 2015; Page, 2004; Paine, 2021; Van Dam et al., 2001).

A recent systematic review of the LGBT population's access to services identified many barriers to care, with homophobia at the root of many of the barriers (Albuquerque et al., 2016). For example, barriers identified related to the professional training for medical providers included a heteronormative academic culture, a lack of LGBT-specific training, and difficulties in approach to topics such as sexuality. For sexual minority individuals, internalized homophobia may lead to fear of disclosing sexual orientation or not seeking out services at all. Within health services, barriers include prejudice and discrimination, presumed heterosexuality, and humiliation and rejection (Albuquerque et al., 2016). Taken together, barriers are present within professional training and health services and within sexual minority individuals themselves with homophobia permeating all areas.

Less research has focused solely on facilitators care for SMW. A qualitative study that investigated the experiences of lesbian and bisexual women accessing sexual health services through semi-structured interviews identified five themes, including some barriers and some facilitators (Munson & Cook, 2016). The barriers included heteronormativity, the conundrum of

safer sex (i.e., inaccurate assumptions) and implied or overt homophobia. Health promotion engagement (e.g., commitment to preventative screenings) and resilience (e.g., willingness to reengage with services after homophobic experiences were facilitators). One study identified possible facilitators based on the experiences of gay, lesbian, bisexual, and two-spirit individuals in healthcare, such as creating a safe, affirmative space, developing trust in relationships, and privacy in service delivery (Brotman et al., 2008).

Using Models of Access to Healthcare to Understand Access Disparities for SMW

In addition to previous research identifying barriers and facilitators, models of healthcare access can help us better understand and explore access disparities for SMW. Andersen and Davidson (2014) created a behavioral model to better understand the multiple dimensions of access to healthcare more generally, but it can also be applied to specific populations, such as SMW. The model focuses on contextual factors (i.e., circumstances and environment of healthcare access) and individual factors (i.e., characteristics of the individual seeking healthcare access) that lead to health behaviors and outcomes. At both the contextual and individual levels, the factors that contribute to understanding access to healthcare are categorized as predisposing, enabling, and need factors. Predisposing factors are conceptualized as existing conditions that lead to a predisposition to use or not use services. Contextual predisposing characteristics include demographics (e.g., age, gender), social characteristics (e.g., educational, race, and ethnicity), and beliefs (e.g., cultural norms, prevailing political perspectives) of a community, while individual predisposing factors include the same characteristics but at the individual level. Enabling factors are conditions that facilitate or hinder use of services. Contextual enabling characteristics include health policy (e.g., public policy at all levels of government), financing (e.g., per capita community income), and organization (e.g., ratio of physicians to population). Individual enabling factors include financing (e.g., income) and organization (e.g., regular source of care). Need factors are conceptualized as conditions that require

medical treatment. Contextual need factors include environmental factors (e.g., air quality) and population health indices (e.g., mortality rates for heart disease). Individual need factors include perceived factors (e.g., emotional response to illness) and evaluated factors (e.g., professional judgment).

This model can serve as a guide to consider areas in which SMW may experience barriers or facilitators in their healthcare access. For instance, at the contextual predisposing level, the percentage of SMW in a community and the community (general or LGBTQ) beliefs about sexual minority health access may be important. Contextual enabling factors for SMW may be LGBTQ policies and outreach and education programs in one's community. In terms of individual predisposing factors, SMW's beliefs about health and health services could be considered. Individual enabling factors may include the income and health insurance status of the SMW, as well as whether she has a regular source of care and regular transportation to that source of care. Individual need factors for SMW may be their health status and perception of their health status. These theoretically identified factors can be used to inform the qualitative research process, and in the present study will be used in part to guide questions in the in-depth interview.

Assessing Barriers to Healthcare

Based on research described in the previous sections, it is evident that SMW face considerable disparities in health outcomes and access to healthcare. However, there is no current scale available that examines these healthcare access barriers paying careful attention to the specific needs of SMW. There are several existing scales that have been developed for assessing barriers to healthcare. Scales have been used to assess general barriers to healthcare (e.g., Earnshaw & Quinn, 2012), and other scales focus on specific areas of healthcare. For example, the Barriers to Access to Care Evaluation (BACE) focuses on barriers to access mental healthcare among general samples of

adults (Clement et al., 2012). Other scales concentrate on distinct populations, such as a scale that was created to assess barriers to care for people living with HIV/AIDS (Heckman et al., 1998).

Similar to the current study, Heckman et al. (1998) developed their barriers to care scale to focus on the needs of a specific population (people living with HIV/AIDS in urban and rural areas). The scale content was developed using a multi-step process that included a literature reviews of previously identified barriers and semi-structured interviews with personnel in AIDS service organizations. The scale was further refined based on review by AIDS service organizations personnel. The scale allows people living with HIV to indicate the extent to which geography/distance barriers, medical and psychological service barriers, community stigma barriers, and personal resource barriers impact their care. The authors suggested that the scale be used to identify programs to remove the barriers and improve the quality of life of those living with HIV. This scale is an example of a scale that is focused on the needs of a specific population. However, the process of scale creation did not directly include the input of the population of interest.

Although there have been past efforts to develop general healthcare access barriers scale (Earnshaw & Quinn, 2012), and for specific samples (Clement et al., 2012; Heckman et al., 1998), to date, there is no existing scale that takes into account the unique experiences and health concerns of SMW, despite notable health disparities and access disparities for this group. The present study will directly address this research gap by creating a measure that assesses barriers and facilitators to healthcare access for SMW based on the lived experiences of SMW.

Qualitative Studies Improve Our Understanding of SMW's Experiences

It is necessary to learn more about the lived experiences of SMW to inform scale development. One example of the potential value of qualitative research in informing our understanding of processes within marginalized communities is a qualitative study investigating cervical cancer screening experiences of Black LBQ (lesbian, bisexual, and queer women). In this

study 18 Black LBQ women participated in four focus groups. Coding of the focus group discussion revealed four themes that captured the barriers and facilitators to cervical cancer screening among Black LBQ women: health care provider communication style, heteronormative provider assumptions, heterosexism/racism/classism, and provider background. An example of a barrier included patient fear of discrimination. A potential facilitator identified was to receiving care from a provide who is knowledgeable about same-sex health. The authors provided recommendations based on the findings, including taking time to get to know the patient and their history and avoiding making heteronormative assumptions (e.g., assuming the patient is heterosexual), provider training on LGB concerns, and outreach tailored to LGB black women (Agénor et al., 2015). Lawson and Marsh (2017) emphasized the role that qualitative research can play for underserved women's health, including giving voice to the experiences of underserved women and laying the groundwork for patient-centered care. The improved understanding of SMW's experiences in the current study will be used to inform interventions for SMW's health and experiences in healthcare.

Potential Uses of a Scale Assessing Barriers and Facilitators to Accessing Healthcare among SMW

The development of a scale used to assess barriers and facilitators to accessing mental and physical healthcare could help to continue to expand our understanding of the experiences of SMW. Having a psychometrically valid scale that objectively measures these barriers and facilitators would allow researchers to test the impact of these factors on health behaviors, including mental health, eating and body size concerns, and sexual and reproductive health among others. The scale could be used to monitor barriers and facilitators in health care settings. Further, the scale could be utilized to assess the results of intervention efforts (e.g., health promotion programs).

Current Study

The use of an exploratory sequential mixed methods design in scale creation allows for the scale to be created based on the actual lived experiences of SMW. Given that SMW have been systematically excluded from research (Andersen & Zou, 2015) and that they face unique stressors (Meyer, 2003), it is important to hear directly from SMW about their healthcare experiences when informing the development of a scale assessing barriers and facilitators to healthcare access. There is currently no existing measure that assesses the barriers and facilitators that SMW face when seeking and accessing mental and physical healthcare. Although there are general measures of barriers, to date there are none that focus on SMW. A measure of this kind is particularly important given the disparities that young SMW face in the care they receive and their health outcomes. Last, much of research focuses on the negative aspects of health. Considering the positive aspects of healthcare experiences (i.e., facilitators) is especially important when thinking about potential protective factors and interventions for the future (e.g., healthcare promotion, provider trainings, etc.).

For Study 1, individual in-depth interviews were conducted with 20 SMW, and the results of the interviews were coded and analyzed for themes. Scale items were created out of the themes that were identified. A panel (including healthcare professionals, researchers, and SMW) reviewed the items for content validity during Study 2. Scales items were revised as necessary based on the feedback from the panel. The revised scale was administered to 190 SMW along with other measures in an online survey during Study 3. Reliability, validity, and factor structure of the scale in this sample of young SMW was assessed based on data gathered from the online survey.

Study Aims

Aim 1: To identify barriers and facilitators that SMW face when seeking and attempting to access mental and physical healthcare based on in-depth interviews with SMW.

Hypothesis 1: In Study 1, themes of barriers will include discrimination, non-disclosure of sexual identity, and perceptions of provider's knowledge and facilitators will include safe, affirmative environments and trusting relationships with providers.

Aim 2: To develop initial items that can assess barriers and facilitators to seeking and accessing healthcare based on the analysis of the qualitative data. An initial set of items will be developed based on the interviews and qualitative analysis in Study 1. This set of items will then be revised based on feedback from the panel in Study 2. There are no specific hypotheses for this aim.

Aim 3: To examine the factor structure, reliability, and validity of the scale in this sample of young SMW based on data collected during Study 3 of the study.

Hypothesis 3a: It is hypothesized that there will be two factors, one representing barriers and one representing facilitators.

Hypothesis 3b: It is hypothesized that each factor will have adequate internal consistency, with a Cronbach's alpha above 0.70.

Hypothesis 3c: It is expected that the barriers subscale will correlate with the Barriers to Access to Care Evaluation (BACE-3) and Barriers to Care Scale (BACS) and the facilitators subscale will correlate with the care access scale and the Help-Seeking Intentions Scale, demonstrating convergent validity for both hypothesized subscales in this sample of young SMW.

Aim 4: Given the well-documented health and access to care disparities, this study will examine the associations between the scale and mental health, binge eating/body size, and sexual and reproductive health in SMW. These associations will also be tested to demonstrate criterion validity in this sample of young SMW.

Hypothesis 4: SMW who report greater barriers and less facilitators will report more problems in mental health, body size/binge eating, and sexual and reproductive health.

Aim 5: To explore potential differences between subgroups of SMW in scale outcomes. Subgroups of SMW may be based on identity (lesbian vs. bisexual), relationship partner (in a relationship with a man vs. woman vs. nonbinary individual), and sexual history in the past year (sex with only women, sex with only men, sex with men and women, sex with nonbinary individuals). Due to the exploratory nature of this aim, there are no specific hypotheses and no power analysis was conducted, however, I will explore whether different subgroups differ on their mean levels of the scale (and any subscales).

CHAPTER II

STUDY 1: QUALITATIVE IN-DEPTH INTERVIEWS

Method

Participants and Recruitment

For Study 1 young adult SMW were recruited. Participants were included if they (1) identify as sexual minority (lesbian, bisexual, gay, queer, pansexual, etc.); (2) were between to ages of 18 and 40; and (3) were a cisgender woman. Participants were excluded if they identify as heterosexual or straight. There were not any inclusion criteria specific to health behaviors given the exploratory nature of the study and the need for a general barriers and facilitators to health scale. SMW were recruited through lists of past participants of previous research studies who agreed to be contacted for future research and Facebook and Instagram advertisements. Participants completed a brief online screening survey through Qualtrics (Appendix A). After interviewees completed the screening survey they were then contacted via email if eligible for the study. Twenty participants (*M*age = 28.50) meeting the inclusion criteria described participated. Participants were added in increments of 5 until saturation was reached. This number was based on recommendations that 20-30 interviews are typically adequate to meet saturation (Creswell, 1998). Half of the participants (*n* = 10) identified as White (non Latina). Participants also identified as Black (non Latina; *n* = 4), Black (Latina; *n* = 1), White (Latina; *n* = 1), White and Asian (*n* = 1), Latina (*n* = 1), Asian (*n* = 1), and Asian and Hawaiian/Pacific Islander (*n* = 1). Regarding sexual identity, participants identified as Lesbian (*n* =15), Queer (*n* = 11), Gay (*n* = 8), Pansexual (*n* = 5), and Bisexual (*n* = 4). Participants were able to select multiple identities.

Semi-Structured Interview Content

An outline of the interview topics is provided in Appendix B. The questions were developed based on Andersen and Davidson's (2014) behavioral model of healthcare and previous barriers and

facilitators to healthcare access for sexual minority individuals identified in past literature. An example question was “What are the challenges and difficulties that you face when trying to access physical or mental healthcare?”

Procedures

The researchers contacted participants via email to schedule interviews. Semi-structured interviews were conducted with the participants via a secure Zoom link. These interviews lasted approximately 45 minutes. Video and audio content of the interviews were recorded. At the end of the interview, participants completed a brief demographics survey (Appendix C). Participants were compensated $30 via Amazon gift card for their participation in the interview.

Data Analysis & Results

The goal of Aim 1 was to identify themes of barriers and facilitators; therefore, thematic analysis was used as a framework to analyze the interviews (Braun & Clarke, 2006). The researchers transcribed the interviews and read through the interviews, making note of initial themes. We used Nvivo 12 software to code with two independent coders who searched for themes and coded relevant quotes to the themes. We reviewed each theme and coded quote and came to a collaborative decision when there were differences. We also went back through the interviews if a new theme was added to check for quotes that may have been missed. The themes identified by the researchers are included in Appendix D and separated into barriers and facilitators. Addressing the first part of Aim 2, I then used the theme list to generate scale items. The initial scale was reviewed and edited by me and Dr. Kristin Heron. This draft of the scale can be found in Appendix E. The scale included 25 barrier items and 15 facilitator items using a scale from 0 (Not at all) to 6 (A lot).

Discussion

The aims of Study 1 were to identify barriers and facilitators SMW experienced when accessing mental and physical healthcare through in-depth interviews and to develop a set of initial

scale items. It was hypothesized that participants would introduce barriers such as discrimination, lack of safety in disclosing sexual identity, and perceptions of provider's lack of knowledge (Albuquerque et al., 2016; Munson & Cook, 2016). Hypothesized facilitators included affirmative environments and strong relationships with providers (Brotman et al., 2008; Munson & Cook, 2016). A list of 28 barrier themes were identified, including themes lining up with the hypotheses such as homophobia, avoiding treatment due to not wanting to disclose sexual identity, and inadequate provider knowledge regarding LGBTQ+ needs. These 28 themes were then converted into 25 scale items (e.g., homophobia was converted to "Healthcare providers have made homophobic comments to me"). Regarding facilitators, 15 facilitator themes were converted into 15 scale items. As hypothesized, clear identification of LGBTQ+ friendly care and provider relationship characteristics (e.g., providers who listen and are not dismissive) were distinguished. An initial set of scale items, including 25 barriers and 15 facilitators, was developed (Appendix E).

CHAPTER III

STUDY 2: SCALE REFINEMENT

Method

Participants and Recruitment

After a draft of the scale was formed, an expert panel reviewed the items for content and face validity. The expert panel included researchers who focus on SMW's health, mental health professionals, and physical health professionals, with many identifying as researchers and health professionals. Researchers were identified as experts within the field of sexual minority health and recruited via email. Health professionals were recruited using GLMA- Health Professionals Advancing LGBTQ+ Equality's healthcare directory and via email. The following researchers and/or health professionals provided feedback on the scale: Dr. Alyssa Norris (Assistant Professor of Psychiatry and Human Behavior at Brown University and a psychologist at the Women's Medicine Collaborative at Miriam Hospital), Dr. Emily Panza (Assistant Professor of Psychiatry and Human Behavior at Brown University and a research scientist at Miriam Hospital), Dr. Cindy Veldhuis (Associate Research Scientist at Columbia University School of Nursing at the time of data Study 2 data collection, Assistant Professor in the Department of Medical Social Sciences and in the Institute of Sexual and Gender Minority Health and Wellbeing at the Northwestern Feinberg School of Medicine currently), Dr. David Pantalone (Professor of Psychology at the University of Massachusetts Boston), Dr. Nicholas Perry (Research Assistant Professor in Psychology at the University of Denver), David Mischel (Psychiatric Nurse Practitioner at Ashland Memorial Medical Center), Kate Goemaat-Suarez (Licensed Clinical Social Worker at Christiana Care), Dr. Tiffany Brown (Assistant Professor of Psychological Sciences at Auburn University), Sarah Zollweg, MPhil, BSN, RN (PhD Candidate, Columbia University School of Nursing, NIH/NIAAA Ruth L. Kirschstein Predoctoral Research Fellow), Dr. Laurie Drabble (Professor of Social Work at San

Jose State University), Dr. Rixt Luikenaar (OB/GYN Physician at Rebirth Health Center), Dr. Michael Rigbsy (Medical Director of Internal Medicine at Yale University School of Medicine), Dr. Renee Morales (Assistant Professor OB/GYN at Eastern Virginia School of Medicine), and Dr. Claudia Allen (Director of the Family Stress Clinic and the Director of Behavioral Science in the Department of Family Medicine at the University of Virginia). In addition, 11 SMW provided feedback on the scale draft. All participants from Study 1 were contacted via email and given the opportunity to provide feedback on the scale draft. Out of the 20 participants in Study 1, 11 agreed to provide feedback and participate in Study 2.

Procedures

Through the use of a survey including a draft of the scale followed by open-ended questions, the panel was given the opportunity to provide feedback on each item, the response scale, the instructions, the item phrasing, the strengths and weaknesses, and their overall impressions (Appendix F). The SMW who reviewed the scale were paid $15 for their time via Amazon gift card. The health professionals and researchers volunteered their time as professional service.

Data Analysis & Results

Aim 2 was to gain feedback from a panel, including researchers, clinicians, and SMW and make revisions to the scale based on that feedback. Revisions were made to the scale based on feedback from the panel review (see Appendix G for the updated scale). Regarding the response scale, a 0 option was added if the question does not apply to someone. Additionally, the response options changed from Not a Lot- A lot to Strongly Disagree- Strongly Agree. There were recommendations to change the wording of the instructions to be simpler and plainer. Therefore, the barrier instructions changed from “Please indicate the extent to which the following items have acted as barriers in your experiences of seeking and accessing physical and mental healthcare.” to “Think about the times you have needed help with a physical or mental health problem. How much

do you agree or disagree that the following experiences or factors made it harder for you to get physical and/or mental health care or less likely to seek care throughout your life?" The facilitator instructions changed from "Please indicate the extent to which the following items have acted as facilitators in your experiences of seeking and accessing physical and mental healthcare." to "For the following questions, continue to think about the times you have needed help with a physical or mental health problem. How much do you agree or disagree that the following experiences or factors made it easier for you to get physical and/or mental health care or more likely to seek care throughout your life?"

Item level changes were also made based on suggestions from the panel. Some items were changed to be more inclusive (e.g., "A healthcare provider assumed I had a male partner." changed to "A healthcare professional assumed the gender of my partner(s) (that is, assumed my partner was a man)." Items were also edited to be clearer (e.g., changed "treated differently" to "treated poorly"). Edits were also made to more accurately represent the target sample (e.g., changing "LGBTQ+ community" to "queer community" given that all participants identified as cisgender). Two items were added to the facilitators scale to assess individual self-efficacy in healthcare, including, "I believe that it is important to engage in preventative health care" and "I am confident that I will be able to advocate for myself in a healthcare setting."

Discussion

The aim of Study 2 was the gather feedback from researchers, health professionals, and SMW and to refine the scale based on the feedback. Based on feedback, changes were made to the scale instructions and response options to create an easier participant experience. Item level changes were also made to make the items simpler and clearer, to be more inclusive, and to more accurate to the target population. Two facilitator items were also added to reflect individual self-efficacy in accessing healthcare. Therefore, the updated scale incorporated feedback from a variety of

perspectives and included 25 barrier and 17 facilitator items. The results suggest that the scale items are face valid and panel members endorsed scale utility.

CHAPTER IV

STUDY 3: INITIAL SCALE FACTOR STRUCTURE, VALIDITY, AND RELIABLITY

Method

Participants and Recruitment

In Study 3, SMW were recruited through lists of past participants of previous research studies who agreed to be contacted for future research, Facebook, Instagram, and Reddit posts, email listservs, flyers, and university announcements. Those in Study 3 completed the screening questions at the beginning of the larger Qualtrics survey. Eligibility for Study 3 was the same as the eligibility for Study 1, and therefore the same as the eligibility criteria for the SMW in Study 2. Participants were considered to be eligible if they (1) identify as sexual minority (lesbian, bisexual, gay, queer, pansexual, etc.); (2) were between to ages of 18 and 40; and (3) were a cisgender woman. If a potential participant was not eligible, then they were redirected to a page indicating that they were not eligible at that time. Participants were removed if they were not eligible or if they appeared to not be real participants responding (i.e., they were "bots"). Some indicators that responses were likely not real participants included a large number of responses being recorded across several minutes, qualitative responses that were irrelevant to the questions being asked, and fill in the blank responses that did not align (e.g., highest weight much lower than current weight). After verifying eligibility, 212 participants remained in the data set. However, due to the nature of the study as a scale development study, only participants who completed at least all of the barrier items or all of the facilitator items were included in the final datasets. Initially, it was hypothesized that the barriers and facilitators would be two factors of one scale. However, given the sample size collected and recommendations for sample sizes for scale development, the scales were separated. For the barriers scale (25 items), there were 188 participants who completed all scale items. For the facilitators scale (17 items), there were 183 participants who completed all scale items. The target

sample size was based on Tinsley and Tinsley's (1987) recommendation to include 5-10 subjects for every item up to 300 participants when conducting factor analysis in psychology research. Therefore, there were approximately 7-8 participants per barrier scale item and 10-11 participants per facilitator scale item. The 188 participants had a mean age of 28.50 (*SD* = 4.29), ranging from ages 18 to 40. Regarding sexual identity, 80 participants identified as Lesbian, 77 as Bisexual, 76 as Queer, 34 as Pansexual, 22 as Gay, 12 as Asexual, and 4 as Questioning (select all that apply). Participants identified as White (*n* = 151), Black (*n* = 21), Asian (*n* = 11), Other (*n* = 9; e.g., multiracial, Jewish), American Indian or Alaska Native (*n* = 4), Middle Eastern or Northern African (*n* = 4), Native Hawaiian or Other Pacific Islander (*n* = 2), and prefer not to answer (*n* = 1). Additionally, participants identified as Latinx (*n* = 23) and non-Latinx (*n* = 165).

Procedures

Participants completed a Qualtrics survey including the new scales and additional measures to establish validity in this sample of young SMW; all measures are described below. Participants were given the opportunity to voluntarily enter their email address for a raffle to win one $50, four $25, and five $10 Amazon gift cards.

Measures

Demographics (Appendix C). Age, education, income, race/ethnicity, sexual identity, relationship status, coming out, sexual behavior, etc. were assessed.

Barriers to Mental Healthcare (Appendix H). The Barriers to Access to Care Evaluation (BACE-3; Clement et al., 2012) consists of 30 items assessing barriers to mental healthcare (e.g., "feeling embarrassed or ashamed"). Response options range from 0 (*Not at all*) to 3 (*A lot*). A mean score was calculated, with higher scores reflecting greater barriers. The BACE-3 had good internal consistency (α = .89) and convergent validity, demonstrated by significant correlations with the Internalised Stigma of Mental Illness Scale, among adults receiving mental health care

(Clement et al., 2012). The Cronbach's alpha in this sample was .91. This scale was used to test convergent validity.

Barriers to Healthcare (Appendix I). The Barriers to Care Scale (BACS; Heckman et al., 1998) is a 12-item measure used to assess general barriers to care for people living with HIV/AIDS (e.g., "My personal financial resources"). Response options range from 1 (*No problem at all*) to 3 (*Major problem*). A mean score was calculated, with higher scores indicating greater barriers. The scale items were adapted for the present study (e.g., persons living with HIV was changed to LGBTQIA+ community). The BACS had been adapted in previous research, with one study adapting the measures for people with a hepatitis C viral diagnosis rather than an HIV diagnosis (Evon et al., 2010). The BACS had good internal consistency ($\alpha = .86$) among those living with HIV (Heckman et al., 1998). The BACS demonstrated convergent validity in sample of people with hepatitis C, based on a significant correlation between the BACS and the CES-D (Evon et al., 2020). The Cronbach's alpha in this sample was .90. This scale was used to test convergent validity.

Care Access (Appendix J). The Care Access scale (Earnshaw & Quinn, 2012) consists of six items assessing access to healthcare (e.g., "I see my doctor regularly"). Response options range from 1 (*Strongly agree*) to 5 (*Strongly disagree*). A mean score was calculated, with higher scores indicating greater challenges with care access. The Care Access scale had good internal consistency ($\alpha = .79$) and construct validity (significantly correlated with the brief version of the World Health Organization's Quality of Life Scale) among a chronic illness population (Earnshaw & Quinn, 2012). The Cronbach's alpha in this sample was .81. This scale was used to test convergent validity.

Help-Seeking (Appendix K). The Help-Seeking Intentions Scale (Deane et al., 2007) is a 6-item measure assessing likelihood of seeking help for physical health, personal problems, and

emotional problems (e.g., “If you have an emotional problem like being depressed or stressed out, how likely are you to talk to a health care professional other than a GP about it?”). Response options range from 1 (*Extremely unlikely*) to 7 (*Extremely likely*), with 4 (*Not sure*). All items are averaged, with higher scores indicating greater likelihood of seeking help. The scale had acceptable internal consistency, ranging from Cronbach’s alpha of .71 and 76, among various groups of adolescents (Deane et al., 2007). Convergent validity was established in a sample of adolescents, evidenced by significant correlations with the Barriers to Engaging in Treatment scale and the Hopkins Symptom Checklist-21 item version (Wilson et al., 2010). The Cronbach’s alpha in the current sample was .69. Scale if item deleted analyses were run in an attempt to improve the reliability of the HSI. These analyses showed that if any of the items were to be dropped then internal consistency would decrease.

Discrimination (Appendix L). The Experiences of Discrimination (EOD) Scale (Kreiger et al., 2005) assesses discrimination due to racial or ethnic identity “Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of your race, ethnicity, or color?” This scale was modified to assess discrimination due to LGB or sexual minority status in a variety of settings (e.g., work) as previously done by Lee and colleagues (2016). Participants respond to each item indicating “Yes” or “No.” A total count score was calculated. This scale was initially intended to test discriminant validity.

Suicidality (Appendix M). The present study included the Suicidality Subscale of the Inventory of Depression and Anxiety Symptoms (IDAS; Watson et al., 2007), which is a 6-item measure used to assess dimensions of suicidality (e.g., “I thought about my own death”). Participants respond to the items based on the past two weeks using a scale ranging from 1 (*Not at all*) to 5 (*Extremely*). This study adapted the time frame to include the past year. The mean of

the items was calculated, with higher scores indicating greater suicidality. The IDAS-Suicidality Subscale had good internal consistency (α = .82) in an adult sample and was significantly correlated with the Beck Depression Inventory-II (Watson et al., 2007). In a sample of young same-sex female couples, the IDAS-Suicidality Subscale had good internal consistency (α = .83; Lewis & Dawson, 2021). The Cronbach's alpha for the current sample was .84. This scale was used to test criterion validity.

Mental Health (Appendix N). The Anxiety and Depression subscales of the Mental Health Inventory (MHI-18; adapted from Veit & Ware, 1983) were used in the present study. The 5-item anxiety subscale (e.g., "Have you been a very nervous person?") and the 4-item depression subscale (e.g., "Have you felt downhearted and blue?") were utilized. Participants responded to the prompt "During the past 4 week, how much of the time…" with responses ranging from 1 (*All of the time*) to 6 (*None of the time*). The mean of each subscale was calculated, with higher scores reflecting more mental health problems. The MHI-18 had excellent internal consistency (α = .96) in a sample of adults (McHorney et al., 1992). In a sample of lesbian and bisexual women there was good internal consistency with the anxiety (α = .86) and depression (α = .90) subscales of the MHI, and the anxiety and depression subscales were significantly associated with social isolation (Mason & Lewis, 2015). The Cronbach's alphas for the depression subscale and anxiety subscale were .81 and .78, respectively, for the current sample. This scale was used to test criterion validity.

Body Mass Index (BMI). Self-report height and weight was be used to calculate BMI. A BMI categories are as follows: underweight (<18.5), normal weight (18.5-24.9), overweight (25-29.9) and obese (>30; NIH National Heart, Lung, and Blood Institute). This item was used to test criterion validity.

Binge Eating (Appendix O). The Binge Eating subscale of the Eating Pathology Symptom

Inventory (EPSI; Forbush et al., 2013) was used in the current study. The Binge Eating subscale consists of eight items (e.g., "I ate until I was uncomfortably full."). Participants responded with how frequently each statement applied to them over the past four weeks using a scale ranging from 0 (*Never*) to 4 (*Very often*). A total score was calculated for the binge eating subscale. The binge eating subscale demonstrated convergent validity through a significant correlation with the SCOFF, a screening tool for eating disorders, in a sample of young adult women (Forbush et al., 2014). The binge eating subscale had excellent internal consistency ($\alpha = .90$) in sample of sexual minority and heterosexual college women (Cusack et al., 2021). The Cronbach's alpha in the current sample was .90. This scale was used to test criterion validity.

Sexual Health (Appendix P). The Pelvic Problem Interference subscale of the Sexual Health Outcomes for Women Questionnaire (SHOW-Q; Learman et al., 2008) was used in the current study. The SHOW-Q is a measure assessing the sexual health of women from diverse backgrounds, including women in same-sex relationships or women without sexual partners. The Pelvic Problem Interference subscale consists of three items (e.g., "To what extent has your pelvic pain or discomfort interfered with your normal or regular sexual activity [with or without a partner]?"). Participants responded to a scale from 1 to 100, with higher scores indicating greater sexual health. The subscale score was calculated by combining the mean of the items for each subscale. The SHOW-Q had good internal consistency ($\alpha = .86$) and showed concurrent validity with health-related quality of life and pelvic symptomology among a demographically and clinically diverse sample of women (Learman et al., 2008). The Cronbach's alpha in the current sample was .80. This scale was used to test criterion validity.

Sexual Risk Behaviors (Appendix Q). The Sexual Risk Survey (SRS; Turchik & Garske, 2009) is a 23-item measure assessing broad sexual risk behaviors. The SRS contains five subscales: (1) sexual risk taking with uncommitted partners (e.g., "How many times have you had

sex with someone you don't know well or just met?"), (2) risky sex acts (e.g., "How many times have you had vaginal intercourse without a latex or polyurethane condom?"), (3) impulsive sexual behaviors (e.g., "How many times have you had an unexpected and unanticipated sexual experience?"), (4) intent to engage in risky sexual behaviors (e.g., "How many times have you gone out to bars/parties/social events with the intent of ''hooking up'' and engaging in sexual behavior but not having sex with someone?"), and (5) risky anal sex acts (e.g., "How many times have you had anal sex without a condom?). A mean score was calculated for each of the subscales, and a total score was also calculated by summing the scale items. Participants responded to each question by recording the number that is true for them over the past six months. Higher scores indicated greater sexual risk behaviors. The SRS demonstrated good internal consistency ($\alpha = .88$) and convergent validity (significant correlations with the Drinking and Drug Habits Questionnaire and the Sexual Desire Inventory) in sample of college women and men (Turchik & Garske, 2009). The SRS also showed good internal consistency ($\alpha = .77$) in a sample of urban lesbian, gay, bisexual, and transgender individuals (Shepler et al., 2017). The Cronbach's alpha in the current sample was .65. Scale if item deleted analyses were run to see if reliability could be improved. These analyses indicated that if item 12 was removed, Cronbach's alpha would be .69. Therefore, item 12 was removed and a total score was created with the remaining items.

Sexual and Reproductive Healthcare Behaviors (Appendix R). Five sexual and reproductive healthcare behavior questions were adapted from questions from the Growing Up Today Study (e.g., "Have you ever had a pap test?"; Charlton et al., 2011) and the National College Health Assessment (e.g., "Have you had a routine gynecological exam in the past 12 months?"; Kerr, Ding, & Thompson, 2013). For each question, participants indicated whether they had engaged in the described screening (yes/no). These items come from previous studies

and are not part of a validated scale; therefore, there is no existing reliability or validity data for these items. A total count score was created, with higher scores indicated a higher number of types of sexual health screenings received. This scale was used to test criterion validity.

Global Health. (Appendix S). Two questions were used to assess global physical and mental health. The item assessing physical health ("In general, would you say your physical health is: Excellent, Very good, Good, Fair, Poor, or Extremely Poor") is used in the MOS 20-item Short-Form Heath Survey (Ware et al., 1992). The mental health item was adapted from this item for the current study, replacing physical with mental using the same question format. There is no reliability or validity data for these single items. These items were used to test criterion validity.

Data Analysis & Results

Prior to data analysis, the data were examined for outliers and normality (skewness and kurtosis). Outliers were identified using boxplots. Normality was assessed using descriptive statistics. The Inventory of Depression and Anxiety Symptoms had 9 outliers and did not show non-normality. Two outliers were winsorized from 4.33 to 3.20, two were winsorized from 3.82 to 3.19, and five outliers were winsorized from 3.67 to 3.18. The Sexual Health Outcomes for Women Questionnaire had 9 outliers (100.00 → 78, 97.33 → 77.33, 96.67 → 76.67, 89.67 → 75.67, 88.33→ 74.33, 78.33→ 73.33, 77.67 →72.67 (2), 75→71) and did not show non-normality. The Sexual Risk Survey had skewness (2.35), kurtosis (6.03), and 14 outliers. The following outliers were winsorized: 127→ 124, 132→ 125, 138→ 126, 163→ 127, 167→ 128, 168→ 129, 182→ 130, 185→ 131, 192→ 132, 226→ 133, 231→ 134, 236→ 135, 253→ 136, 304→ 137. After the outliers were winsorized the skewness (1.32) and kurtosis (0.72) were reduced. The global mental health item had 8 outliers and the descriptive statistics indicated normality. The outliers could not be winsorized because they were already the next closest value. The Barriers to Access to Care Evaluation had one outlier that was winsorized (3.48 → 3.20) and appeared normal. The Care

Access scale had one outlier that was not winsorized due to proximity to the next value and skewness and kurtosis within normal limits. The Help-Seeking Intentions Scale had one outlier that was winsorized (6.67→ 6.10) and did not show non-normality. Regarding the barriers and facilitators scales, the descriptive statistics indicated normality. One outlier for the barriers scale was winsorized (188→ 186) and three outliers for the facilitators scale were winsorized (37→ 41, 31→ 40, 17→ 39). The following scales had no outliers, skewness, or kurtosis: Mental Health Inventory- Anxiety subscale, Mental Health Inventory- Depression subscale, the Eating Pathology Symptom Inventory- Binge Eating subscale, the global physical health item, the Barriers to Care Scale, and the Experiences of Discrimination Scale. As previously mentioned, only participants who completed at least all of the barriers items (five did not complete all of the facilitator items) were included. Therefore, missing data was limited. The pattern of missingness was such that participants did not complete measures closer to the end of the survey. The following scales had missing data: facilitators scale (2.7%), BACE-3 (4.3%), BACS (6.4%), Care Access (7.4%), and experiences of discrimination (8.5%). No missing data strategies were used given that responses for the full scales were missing.

Barriers Scale

Addressing Aim 3a, exploratory factor analysis (EFA) was used to analyze the underlying factor structure of the scales in this sample of young SMW using SPSS software. An EFA with principal axis factoring and no rotation was initially run to determine the number of factors that should be rotated for the barrier items. The eigenvalues are presented in Table 1. The scree plot (Figure 1) and parallel analysis suggested three factors should be rotated (Table 2). Initially a direct oblimin oblique rotation was used, on the assumption that the potential factors would be correlated. This correlated factors approach produced cross loading. Therefore, based on the recommendations of Tabachnick an Fidell (2007), an orthogonal approach was used (varimax rotation). The EFA with

three factors and a varimax rotation showed significant factor cross loading. As a result, items 4, 8, 10, 15, 16, 17, 25 were deleted, leaving 18 items (see Appendix G for the scale with corresponding item numbers). The 40-30-20 rule was used to determine which items would be deleted, where items remain if the primary factor loading is greater than 0.40, there is no other factor loading above 0.30, and the difference between the loading of the primary factor and another factor is at least 0.20 (Howard, 2016). With the remaining 18 items, another EFA with principal axis factoring and no rotation was run to see if the data indicated that a different number of factors should be rotated (Table 3). The analysis indicated that four factors should be rotated (Table 4, Figure 2); therefore, an EFA with four factors and a varimax rotation was run. Items 3, 4, and 11 were deleted due to cross loading or low factor loading (less than .32; Carpenter, 2018). Additionally, the fourth factor included only two items so those items (1, 2) were deleted as well. Another EFA with no rotation was run to determine the number of factors with the remaining 13 items (Table 5). The parallel analysis (Table 6) and scree plot (Figure 3) indicated that 3 factors should be rotated, so an additional EFA with 3 factors rotated using a varimax rotation was done (Table 7). The three factors produced three barriers scales that are conceptually consistent: Weight Stigma, General/Environmental, and Discrimination (see Appendix T for the scale items). The Kaiser–Meyer–Olkin (KMO) Measure of Sampling value, which examines presence of meaningful relationships among the items, was greater than the suggested .60 cutoff (KMO = .78; Carpenter, 2018). The Bartlett's Test of Sphericity suggested that the data is factorable, $\chi 2\ (78) = 1{,}243.63$, $p < .001$, indicated by significance. The item- total correlations for each of the three scales were well above .30, indicating that each item should remain included (Boateng et al., 2018). Prior to any additional analyses, the three scales were examined for outliers and normality. The Weight Stigma and General/Environmental scales showed normality with no outliers. The Discrimination scale was normal with one outlier that was winsorized from 38 to 30.

Barriers Weight Stigma Scale Validity and Reliability. Addressing Aim 3b, the Cronbach's alpha for this scale was .96, indicating excellent internal consistency (Nunnally, 1978).

Convergent validity was tested to assess Aim 3c. Convergent validity was indicated by significant positive correlations with barriers to mental healthcare (BACE-3; $r = .307$, $p < .001$), general barriers to healthcare (BACS; $r = .387$, $p < .001$), care access concerns ($r = .226$, $p = .003$), and experiences of discrimination ($r = .288$, $p = .003$) and a significant negative correlation with help seeking intentions (HSI; $r = -.179$, $p = .019$).

Criterion validity was tested to assess Aim 4. Criterion validity for the Barriers- Weight Stigma Scale was indicated by significant positive correlations with BMI ($r = .563$, $p < .001$), binge eating symptomology (EPSI; $r = .285$, $p < .001$), suicidality symptoms (IDAS; $r = .207$, $p = .004$), depressive ($r = .366$, $p < .001$) and anxiety symptoms ($r = .344$, $p < .001$; MHI), global physical health ($r = .375$, $p < .001$), and global mental health ($r = .385$, $p < .001$). The Barriers Weight Stigma scale was not significantly correlated with sexual health (SHOW-Q; $r = .077$, $p = .295$), sexual risk behaviors (SRS; $r = -.010$, $p = .891$), or sexual health screening ($r = .063$, $p = .394$).

Barriers General/Environmental Scale Validity and Reliability. The Cronbach's alpha for this scale was .74, indicating acceptable internal consistency (Aim 3b).

Convergent validity was indicated by significant positive associations with barriers to mental healthcare (BACE-3; $r = .450$, $p < .001$), barriers to healthcare (BACS; $r = .577$, $p < .001$), care access concerns ($r = .241$, $p = .001$), and experiences of discrimination ($r = .345$, $p < .001$; Aim 3c) and a significant negative correlation with help seeking intentions ($r = -.160$, $p = .036$).

Criterion validity for the Barriers General/Environmental Scale was indicated by significant positive correlations with binge eating symptomology (EPSI; $r = .260$, $p < .001$), suicidality symptoms (IDAS; $r = .260$, $p < .001$), depressive ($r = .270$, $p < .001$) and anxiety symptoms ($r = .262$, $p < .001$; MHI), global physical health ($r = .282$, $p < .001$), and global mental health ($r = .262$,

p <.001; Aim 4). There were no significant correlations with BMI (r = .113, p = .122), sexual health (SHOW-Q; r = .142, p = .053), sexual risk behaviors (SRS; r = .115, p = .118), or sexual health screening (r = -.066, p = .367).

Barriers Discrimination Scale Validity and Reliability. The Cronbach's alpha for this scale was .74, indicating acceptable internal consistency (Aim 3b).

Convergent validity was indicated by significant positive correlations with barriers to mental health care (BACE-3; r = .363, p <.001), barriers to healthcare (BACS; r = .302, p <.001), and experiences of discrimination (r = .442, p <.001; Aim 3c). There was not a significant correlation between the Barriers Discrimination scale and care access concerns (r = -.115, p = .131) or help seeking intentions (HSI; r = -.005, p =.951).

Criterion validity was indicated by a significant positive correlation with sexual health concerns (SHOW-Q; r = .210, p =.004; Aim 4). No other health outcomes were significantly associated with the Barriers- Discrimination Scale. There was not a significant correlation between the scale and binge eating (EPSI; r = .076, p =.302), BMI (r = -.030, p = .681), suicidality (IDAS; r = .135, p = .065), depressive (r = -.012, p = .866) or anxiety symptoms (r = .056, p = .446), global physical health (r = .023, p = .749), global mental health (r = -.051, p = .490), sexual risk behaviors (SRS; r = .143, p = .051), or sexual health screening (r = .056, p = .424).

Differences between Subgroups. To address Aim 5, mean differences for sexual identity, sexual behavior, and race/ethnicity for the Barriers scales were considered. Differences in sexual identity were examined for those groups with adequate sample sizes (lesbian, bisexual, queer, and pansexual). Given that participants were able to select all that apply, the comparison groups were those who did select a particular identity and those who did not (e.g., lesbian vs. not lesbian). Participants who selected a lesbian identity (M = 13.61, SD = 6.88) reported significantly higher Barriers- Discrimination scores than those who did not identify as lesbian (M = 10.86, SD = 6.11; t

(186) = 2.89, p = .004). Those who did not select a bisexual identity (M = 13.36, SD = 6.86) reported significantly higher Barriers- Discrimination scores than those did identify as bisexual (M = 10.12, SD = 5.65; t (186) = -3.42, p = <.001). There were no significant differences on the Barriers Weight Stigma or Barriers General/Environmental scales across sexual identities. Additionally, there were no significant difference for the queer or pansexual groups.

A second way in which sexual orientation can be operationalized is through sexual behavior. Differences in past year and lifetime sexual behavior were examined. Participants who reported past year sex with a woman/women (M = 12.95, SD = 6.68) reported significantly higher Barriers-Discrimination scores than who did not report past year sex with a woman/women (M = 10.89, SD = 6.29; t (186) = 1.16, p = .032). Participants who reported past year sex with a man/men (M = 10.69, SD = 5.52) reported significantly lower Barriers- Discrimination scores than those who did not report past year sex with a man/men (M = 12.90, SD = 7.06; t (186) = -2.28, p = .024). Similarly, those who reported lifetime sex with a woman/women (M = 12.89, SD = 6.54) reported significantly higher Barriers- Discrimination scores than those who did no select lifetime sex with a woman/women (M = 9.31, SD = 5.98; t (186) = 3.27, p = .001). There were no significant differences on the Barriers Weight Stigma or Barriers General/Environmental scales.

Differences in racial and ethnic identity were also considered. The only groups with adequate sample sizes were white vs. not white. There were no significant differences between those who selected white as an identity and those who did not on any of the barriers scales.

Facilitators Scale

To address Aim 3a, EFA was used to analyze the factor structure of the facilitator items. An EFA with principal axis factoring and no rotation was initially run to determine the number of factors that should be rotated (see Table 8 for eigenvalues). The scree plot (Figure 4) and parallel analysis (Table 9) support a three factor solution. An EFA with three factors rotated using a

quartimax rotation was run. Items 3, 9, 10, 12, 13, 14, 15, and 17 were deleted due to cross loading. Another EFA was run with the remaining nine items to determine how many factors should be rotated (see Table 10 for eigenvalues). The scree plot (Figure 5) and the parallel analysis (Table 11) supported 2 factors. However, the second factor had only two items so those items were deleted. An EFA was run with the remaining 7 items and a one factor solution was indicated (see Table 12 for factor loadings). The Kaiser–Meyer–Olkin (KMO) Measure of Sampling value was greater than the suggested .60 cutoff (KMO = .84). The Bartlett's Test of Sphericity suggested that the data is factorable, $\chi 2$ (21) = 412.11, $p < .001$, indicated by significance. The item- total correlations for the scale items were well above .30, indicating that each item should remain included. Prior to any additional analyses, the scale was examined for outliers and normality. The skewness and kurtosis were within normal limits and there were no outliers.

Facilitators Scale Validity and Reliability. The Cronbach's alpha for the facilitators scale was .82, indicating good internal consistency (Aim 3b). The scale was only significantly correlated with one scale, indicating poor validity (Aims 3c and 4). There was a significant positive correlation between the scale and help seeking intentions (HSI; $r = .171$, $p = .035$). The facilitators scale was not significantly correlated with suicidality (IDAS; $r = .065$, $p = .381$), BMI ($r = -.007$, $p = .928$), depression ($r = -.017$, $p = .822$) or anxiety symptoms (MHI; $r = -.094$, $p = .206$), binge eating (EPSI; $r = .070$, $p = .346$), pelvic problems (SHOW-Q; $r = .050$, $p = .505$), sexual risk behaviors ($r = .077$, $p = .299$), sexual health screenings ($r = .083$, $p = .262$), global physical health ($r = -.050$, $p = .499$), global mental health ($r = -.003$, $p = .968$), barriers to mental healthcare (BACE-3; $r = -.046$, $p = .537$), barriers to healthcare (BACS; $r = -.017$, $p = .825$), care access ($r = -.059$, $p = .442$), or experiences of discrimination ($r = .004$, $p = .954$).

Differences between Subgroups. These differences were not analyzed due to the poor validity of the scale (Aim 5).

CHAPTER IV

GENERAL DISCUSSION

The overall aim of the study was to create measurement tools that assesses barriers and facilitators to healthcare for young SMW using an exploratory sequential mixed methods design. First, 20 young SMW were interviewed about their experiences with healthcare. These interviews were then used to create scale items, which were reviewed by an expert panel. A larger sample of 188 SMW completed the newly developed items along with other assessments. These data were then utilized to assess factor structure, reliability, and validity of the scale.

Studies 1 and 2

In Study 1, 20 SMW were interviewed to better understand the lived experiences of young SMW and to identify barriers and facilitators that SMW encounter when accessing mental and physical healthcare. The in-depth interview method has been recommended and used as a way to learn more about the real experiences of individuals, particularly individuals from underserved populations (Agénor et al., 2015; Lawson & Marsh, 2017). It was hypothesized that themes of barriers would include discrimination, non-disclosure of sexual identity, and perceptions of provider's knowledge (Albuquerque et al., 2016; Munson & Cook, 2016), and that facilitators would include affirmative environments and strong relationships with providers (Brotman et al., 2008; Munson & Cook, 2016). Twenty-eight barrier themes (e.g., "disaffirming providers," "familial stigma around healthcare," and "fatphobia, weight stigma, weight-based discrimination") and 15 facilitator themes were identified (e.g., "finding providers online" and "identification of LGBTQ+ friendly care") and included aspects of the hypothesized themes.

Andersen and Davidson's (2014) behavioral model of health care access was used to inform the interview outline. The model considers contextual and individual levels and predisposing,

enabling, and need factors at each of the levels. At the contextual level, an example of a predisposing theme was “town is generally not accepting.” Similarly, individual predisposing factors included themes such as “presenting as less feminine, more masculine” and “health illiteracy.” A contextual enabling factor included “stigmatizing laws and policies,” while individual enabling factors were “low income” and “regular provider and ability to access provider.”

After a draft of the scale was created, an expert panel including researchers, physical and mental health professionals, and SMW reviewed the scale. They provided feedback to increase item clarity and inclusivity. This feedback allowed for better face validity and scale utility.

Study 3

The initial factor structure hypothesis was that there would be one scale with two factors (one barriers and one facilitators). Due to a smaller sample size than predicted, the barriers and facilitator items were analyzed as two separate scales. Using EFA, three factors for the barriers items were identified: Barriers- Weight Stigma, Barriers- General/ Environmental, and Barriers- Discrimination. A single factor scales was identified for the facilitators using EFA. Interestingly, weight stigma was not even hypothesized as a barrier theme and ended up as the primary factor.

Results suggest that the Barriers- Weight Stigma scale is reliable and valid. The scale had excellent internal consistency. Convergent validity was demonstrated by small to medium correlations with similar scales, including barriers to mental healthcare (BACE-3), general barriers to healthcare (BACS), care access concerns, experiences of discrimination, and help seeking intentions (HSI). Criterion validity was demonstrated by small to large correlations with a variety of physical and mental health outcomes, including measures of BMI, binge eating symptomology, suicidality symptoms, depressive and anxiety symptoms, and global physical and mental health. The only scales that the Barriers- Weight Stigma scale was not significantly correlated with were sexual health scales, which is conceptually congruent and is indicative of discriminant validity.

The Barriers- General/Environmental scale appears to have adequate reliability and validity. The scale had acceptable internal consistency. Convergent validity was demonstrated by small to large correlations with similar scales, including measures of barriers to mental healthcare, general barriers to healthcare, care access concerns, experiences of discrimination, and help seeking intentions. Criterion validity was less favorable, as only small correlations were found with health outcomes, including measures of binge eating, suicidality, depression and anxiety, and global physical and mental health. In addition, some correlations that would be expected were not significant, such as BMI and sexual health outcomes. As this scale assesses barriers to health more generally (e.g., "I did not have enough money to get the care I needed"), it would be predicted that all health outcomes would be significantly correlated with this scale. However, this scale was not correlated with BMI or sexual health outcomes as expected. For BMI, it is possible that Barriers- Weight Stigma better accounts for higher BMI as there was a large correlation between the scale and BMI. Similarly, for sexual health concerns, the Barriers- Discrimination scale may provide more information about how SMW are impacted by healthcare barriers.

Results suggest the Barriers- Discrimination scale has adequate reliability but poor validity. The scale had adequate internal consistency. Regarding convergent validity, the scale had medium correlations with three of the five similar scales. In terms of criterion validity, the scale was only significantly correlated with sexual health concerns, but not with any eating/body size, mental health, or global health measures suggesting inadequate criterion validity. It is possible that these associations between Barriers- Discrimination and health outcomes are not there due to protective psychological processes, such as positive coping and emotion regulation and social support (Hatzenbuehler, 2009). It is also possible that the Barriers- Discrimination scale was not associated with many of the health outcomes due to the sample characteristics. The sample was mostly white

(non Latinx) and, therefore, likely did not fully capture the discriminatory experiences of racially and ethnically diverse SMW.

Results suggest that the Facilitators scale is reliable but not valid. The scale had good internal consistency. However, the scale only correlated significantly with help seeking intentions. Creswell (2014) emphasized that when there are qualitative and quantitative phases of a study the results may not generalize from one phase to another. In addition, Creswell suggested that one of the benefits of the mixed-methods approach is that if the factor analytic, validity, and reliability results are poor in this sample, we can reexamine the qualitative data from Study 1 in order to identify future adjustments to this scale. For example, additional researchers could code the facilitator data to see if any new or different themes emerge. This process of coding, item creation, feedback from experts, and quantitative analysis could then be repeated to see if a stronger scale emerges. Andersen and Davidson's (2014) model of behavioral healthcare could also be more directly utilized to see if there are any possible gaps in factors that may serve as important facilitators. Additionally, there were two sets of two items (individual self-efficacy and support from family/friends) that may aid in the validity of the scale. Perhaps if these item sets, or constructs, had more items they may have emerged as reliable and valid facilitator factors. Another possibility to consider is that the facilitator items are basic standards of care rather than care that is above and beyond and, therefore, not associated with better or worse health outcomes.

Differences between groups varied across scales. There were no mean differences on the Barriers- Weight stigma scale between subgroups of SMW (i.e., based on identity or sexual behavior) indicating that the scale operates similarly across groups. As evidenced by a lack of mean differences between groups, it appears that the Barriers- General/Environmental scale also functions similarly across groups. The Barriers- Discrimination did not generalize across groups. There were differences in terms of both sexual identity and sexual behavior. In terms of sexual identity, those

who selected a lesbian identity reported significantly higher Barriers- Discrimination score than those who did not, and those who selected a bisexual identity reported significantly lower Barriers- Discrimination scores than those who did not select a bisexual identity. These results are consistent with previous research indicating that lesbian women are more likely to report past year discrimination than bisexual women (Bostwick et al., 2014). Additionally, SMW who reported sex with women reported higher Barriers- Discrimination scores than SMW who did not report sex with women. Although the differences in sexual identity and behavior were similar, it is important to separate identity and behavior given that sexual identity and sexual behavior do not always align (e.g., lesbian identity and sex with only women; Dawson et al., 2022).

Overall, the Barriers- Weight Stigma scale explained the most variance out of the factors, had the highest internal consistency, the strongest convergent and criterion validity, and did not have any differences between subgroups. Although not as strong as the Barriers- Weight Stigma scale, the Barriers- General/Environmental scale appeared to have adequate reliability and validity. The Barriers- Discrimination scale had adequate reliability, adequate convergent validity, poor criterion validity, and did not generalize across groups. Last, the facilitators scale had good reliability and poor validity.

Implications

Clinical

Health Outcomes. In addition to the importance of criterion validity, the associations between the barriers scales and health outcomes were also examined in an attempt to better understand health disparities among SMW. The sections below explore the implications of these findings on a variety of mental and physical health outcomes.

Mental Health. The Barriers- Weight Stigma scale and the Barriers- General/Environmental scale were significantly associated with depressive and anxiety symptoms, suicidality symptoms,

and global mental health concern. This link between weight stigma and poor mental health among SMW is consistent with previous literature (Johns et al., 2017). For example, in a study of SMW, the association between size discrimination was strong such that when size discrimination was added to a predictive model with BMI and depressive symptoms BMI was no longer predictive of depression (Johns et al., 2017). There are no known studies that focus on the association between general healthcare barriers and mental health concerns among SMW. This study provides preliminary evidence of a relationship, such that more general healthcare barriers are associated with greater mental health concerns among SMW.

Given that SMW are more likely to experience mental health concerns (Bostwick et al., 2010; Cochran et al., 2003; Cochran & Mays, 2015; Kerr, Santurri, & Peters, 2013; King et al., 2008; Rice et al., 2019) and experience heightened difficulties with healthcare access (Avery et al., 2001; Burgess et al., 2007; Page, 2004; Steele et al., 2017), it is important to consider what factors might be contributing to these disparities. These general and weight stigma barriers in healthcare appear to be areas for further exploration, particularly in relation to mental health concerns. It would be important to know whether these barriers are actually preventing SMW from getting the care they need or getting quality care. Longitudinal studies would help up better understand the connections between barriers, actual care experiences, and health outcomes.

Eating/Body Size. The Barriers- Weight Stigma scale and the Barriers- General/ Environmental scale were associated with binge eating. Additionally, the Barriers- Weight Stigma scale was associated with BMI. The association between general weight stigma and overeating and disordered eating symptoms has been previously seen in a sample of young lesbian women (Mason et al., 2017). Additionally, weight discrimination was also associated with BMI in this previous study (Mason et al., 2017). Again, there is no known research focused on general healthcare barriers

and health for SMW, so this association between general barriers and binge eating provides initial evidence.

Studying eating/body size and potential barriers among SMW is particularly important given the SMW are more likely to be overweight or obese (Boehmer et al., 2007; Conron et al., 2010; Laska et al., 2015; Struble et al., 2010; Wood et al., 2017) and more likely to engage in binge eating behaviors (Austin et al, 2009; Meneguzzo et al., (2017) when compared to their heterosexual counterparts. These results show that weight stigma and general healthcare barriers may be playing a role in these disparities. Perhaps SMW are less likely to get the care they need due to these barriers, exacerbating health concerns. Weight stigma in healthcare in particular may also lead to more directly to disordered eating through patterns of restriction (i.e., possible attempts to lose weight or listen to/please healthcare professionals) and bingeing.

Sexual and Reproductive Health. The Barriers- Discrimination scale, but none of the other scales, was significantly associated with sexual health concerns, specifically pelvic concerns. It is possible that this is the only scale that was associated with sexual health concerns because there is a certain amount of sexual orientation disclosure with sexual health that is more present than other areas of health. For example, healthcare professionals may ask about sexual partners, thereby leaving SMW more open to discrimination. The Barriers- Discrimination scale was significantly higher for women who reported sex with women than women who did not, suggesting that this could be the case.

Importance of Weight Stigma. The Barriers- Weight Stigma scale emerged as the primary factor when considering a wide range of barriers to healthcare and accounted for approximately half of the variance explained by all of the barriers scales. Among a sample of young SMW, it was expected that sexual orientation related discrimination would be more central to the barriers factor structure. Further, weight stigma was not initially predicted to be a barrier theme. However, based

on the qualitative and quantitative results of the study, weight stigma from healthcare professionals appears to be the most significant barrier for these samples of SMW. It is also noteworthy that the Barriers- Weight Stigma scale was associated with all health outcomes, not only the eating/body size outcomes, with the exception of the sexual health scales. This shows that the impact weight stigma in healthcare extended beyond weight-related health outcomes to broader mental health, including suicidality, anxiety, and depression. Considering that the Weight Stigma scale was not predicted to be a factor (or the primary factor) and that the items are general (not SMW specific), future research should explore if there is something unique about the way weight stigma functions among cisgender SMW vs. cisgender heterosexual women. In addition to experienced weight stigma, future research may explore whether weight bias internalization and coping with weight stigma differs between SMW and heterosexual cisgender women as differences among these constructs have been found across gender and racial groups (Himmelstein et al., 2017).

Weight stigma has been identified in the literature as a potential risk factor for health concerns (Hunger et al., 2020; Poon et al., 2020; Puhl & Suh, 2015). For example, among a sample of U.S. adults weight discrimination was associated with greater disordered eating symptoms through anticipated weight stigma when controlling for BMI and self- perceived weight status (Hunger et al., 2020). An ecological momentary assessment (EMA) study among SMW found that greater lifetime weight stigma experiences were associated with greater odds of size-based avoidance (e.g., avoidance of social activities or exercise due to appearance concerns) during the EMA time period (Poon et al., 2020). Similar findings have also been seen in SMW samples. A review of weight stigma and eating disorders emphasized that weight stigma can lead to eating concerns, increase barriers to healthy weight, and contribute to psychological concerns that may make treatment for eating and weight concerns more challenging (Puhl & Suh, 2015). Overall, it

appears that weight stigma can lead to disordered eating behaviors and create barriers for engaging in healthy behaviors.

Results from this present study and previous studies (Puhl & Suh, 2015) suggest that more intervention regarding weight stigma may be needed in healthcare settings, such as weight stigma sensitivity trainings for healthcare professionals. Additionally, given that we know SMW are having these experiences of weight stigma with healthcare providers and that they are associated with eating and body related concerns and mental health concerns, including suicidality, treatment interventions should target weight stigma. For example, psychoeducation about weight stigma and its impact and opportunities for individuals to process and better understand their experiences of weight stigma could be provided.

Research and Clinical Uses

Both the Barriers- Weight Stigma and the Barriers- General/Environmental scales appear to be psychometrically valid scales that measure weight stigma in healthcare and general/environmental barriers to healthcare among young SMW. These scales can be used in research to empirically test the impact of barriers on health outcomes and to better understand the health disparities of SMW. The weight stigma scale can be used to learn more about the role of weight stigma in healthcare plays in the lives of young SMW. It would also be important to know whether these healthcare barriers are leading to actual avoidance of healthcare visits and health promoting behaviors. Given that the scale does not indicate a time period and is therefore intended to be broad, it would not be possible to test pre and post intervention changes in barriers or monitor potential barriers in healthcare settings with the current instruction wording. However, the scale could potentially be modified to include a time period to be able to broaden the potential uses.

Strengths

To my knowledge, this is the first study that has aimed to build a scale that assesses barriers and facilitators to healthcare for SMW. The results of this study produced two barriers scales, weight stigma and general/environmental, that are brief, valid, reliable, and function similarly across subgroups of SMW. The results of this study also produced a reliable barriers discrimination scale and a reliable facilitators scale. The mixed-methods nature of the study is a strength, such that the lived experiences of an underrepresented population are directly incorporated into the scale creation. An additional benefit of the mixed- methods design is that the results of the qualitative part of the study can be reexamined if needed (e.g., the facilitators scale).

Limitations

There were several limitations to this study in terms of recruitment. First, as previously mentioned, the sample size collected was not large enough to analyze all of the scale items within one analysis leading to the separation of the scales into a barriers analyses and facilitator analyses. Participants were recruited online, which allows for more geographic diversity. Online recruitment has its limitations, such as "bots" completing studies. One of the limitations of the sample recruited is that the sample was mostly White (non Latinx). This study should be replicated in a sample that includes more racial and ethnic diversity. A more representative sample would be important for all of the scales but would be particularly important for the Barriers- Discrimination scale.

Another limitation of the study is that in order to be eligible participants needed to identify as cisgender women. The reason for the exclusion of non cisgender women is due to the additional and unique barriers to healthcare that transgender and gender diverse individuals face. However, I recognize that this is not inclusive of all women. BMI can give us helpful information in health-related research. Recently, however, the American Medical Association (2023) highlighted that BMI is an "imperfect way to measure body fat in multiple groups given that it does not account for

differences across race/ethnic groups, sexes, genders, and age-span." The internal consistency of the Sexual Risk Survey and the Help Seeking Intentions scales was also a limitation. The Cronbach's alpha for the scales was .69.

Future Directions

Future research should attempt to further explore items for the Barriers- Weight Stigma and Barriers- General/Environmental constructs and potential scales in particular. Given that the Barriers- Weight Stigma currently only has three items that are similar, more items should be created and tested to increase the utility of the scale. It is also possible that this construct could be best utilized as a single item. Future research may also consider the use of exploratory graph analysis (Golino & Epskamp, 2017) to identify whether there are redundant items. The reliability of the Barriers- General/Environmental scale could be improved upon; therefore, adding additional related items and testing them could increase the scale reliability. As previously mentioned, the facilitators scale could be reexamined at the qualitative level to see if there are better options that may generalize at the quantitative level. These improvements should be followed with continued replication, including verification of the psychometric results using confirmatory factor analysis in other samples.

Although the time period of the scale is not specified and therefore challenging for longitudinal analyses in itself, the proposed scales could be used to assess whether barriers predict future health outcomes. Additionally, this study focused on mental health, eating/body size, and sexual and reproductive health. Future research could focus on additional health outcomes, such as alcohol use as it is another area of SMW's health where disparities in health outcomes and care have been identified (Hughes, 2011).

As previously mentioned, a limitation of this study is that only cisgender SMW are included. Future research should aim to develop scales assessing barriers and facilitators to healthcare for

transgender and gender diverse individuals. Transgender and gender diverse individuals experience mental health concerns at higher rates than cisgender individuals and can have additional healthcare needs (i.e., gender affirming care; WPATH SOC-8).

References

Agénor, M., Bailey, Z., Krieger, N., Austin, S. B., & Gottlieb, B. R. (2015). Exploring the cervical cancer screening experiences of black lesbian, bisexual, and queer women: The role of patient-provider communication. *Women & Health*, *55*(6), 717-736. https://doi.org/10.1080/03630242.2015.1039182

Albuquerque, G. A., de Lima Garcia, C., da Silva Quirino, G., Alves, M. J. H., Belém, J. M., dos Santos Figueiredo, F. W., ... & de Abreu, L. C. (2016). Access to health services by lesbian, gay, bisexual, and transgender persons: systematic literature review. *BMC International Health and Human Rights*, *16*(2). https://doi.org/10.1186/s12914-015-0072-9

American Medical Association (2023). *AMA adopts new policy clarifying role of BMI as a measure in medicine. https://www.ama-assn.org/press-center/press-releases/ama-adopts-new-policy-clarifying-role-bmi-measure-medicine*

Andersen, R. M., Davidson, P. L., & Baumeister, S. E. (2007). Improving access to care in America. *Changing the US health care system: key issues in health services policy and management. 3a. edición. San Francisco: Jossey-Bass*, 3-31.

Andersen, J. P. & Zou, C. (2015). Exclusion of sexual minority couples from research. *Health Science Journal*, *9*(6)*,* 1-9.

Austin, S. B., Ziyadeh, N. J., Corliss, H. L., Rosario, M., Wypij, D., Haines, J., Field, A. E. (2009). Sexual orientation disparities in purging and binge eating from early to late adolescence. *Journal of Adolescent Health, 45*(3)*,* 238-245. https://doi.org/10.1016/j.jadohealth.2009.02.001

Avery, A. M., Hellman, R. E., & Sudderth, L. K. (2001). Satisfaction with mental health services among sexual minorities with major mental illness. *American Journal of Public Health*, *91*(6), 990-991. https://doi.org/10.2105/ajph.91.6.990

Boehmer, U., Bowen, D. J., & Bauer, G. R. (2007). Overweight and obesity in sexual-minority women: evidence from population-based data. *American Journal of Public Health*, *97*(6), 1134-1140. https://doi.org/10.2105/ajph.2006.088419

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, *6*, 149. https://doi.org/10.3389/fpubh.2018.00149

Bostwick, W. B., Boyd, C. J., Hughes, T. L., & McCabe, S. E. (2010). Dimensions of sexual orientation and the prevalence of mood and anxiety disorders in the United States. *American Journal of Public Health*, *100*(3), 468-475. https://doi.org/10.2105/ajph.2008.152942

Bostwick, W. B., Boyd, C. J., Hughes, T. L., West, B. T., & McCabe, S. E. (2014). Discrimination and mental health among lesbian, gay, and bisexual adults in the United States. *American Journal of Orthopsychiatry*, *84*(1), 35. https://doi.org/10.1037/h0098851

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Brotman, S., Ryan, B., Jalbert, Y., & Rowe, B (2008). The impact of coming out on health and health care access: the experiences of gay, lesbian, bisexual and two-spirit people. *Journal of Health & Social Policy*, *15*(1), 1-29. https://doi.org/10.1300/J045v15n01_01

Burgess, D., 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

Calzo, J. P., Blashill, A. J., Brown, T. A., & Argenal, R. L. (2017). Eating disorders and disordered weight and shape control behaviors in sexual minority populations. *Current Psychiatry Reports*, *19*(8), 1-10. https://doi.org/10.1007/s11920-017-0801-y

Carpenter, S. (2018). Ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures*, *12*(1), 25-44. https://doi.org/10.1080/19312458.2017.1396583

Charlton, B. M., Corliss, H. L., Missmer, S. A., Frazier, A. L., Rosario, M., Kahn, J. A., & Austin, S. B. (2011). Reproductive health screening disparities and sexual orientation in a cohort study of US adolescent and young adult females. *Journal of Adolescent Health*, *49*(5), 505-510. https://doi.org/10.1016/j.jadohealth.2011.03.013

Clement, S., Brohan, E., Jeffery, D., Henderson, C., Hatch, S. L., & Thornicroft, G. (2012). Development and psychometric properties the Barriers to Access to Care Evaluation scale (BACE) related to people with mental ill health. *BMC Psychiatry, 12*(1), 1-11. https://doi.org/10.1186/1471-244x-12-36

Cochran, S. D., Björkenstam, C., & Mays, V. M. (2016). Sexual orientation and all-cause mortality among US adults aged 18 to 59 years, 2001–2011. *American Journal of Public Health*, *106*(5), 918-920. https://doi.org/10.2105/ajph.2016.303052

Cochran, S. D., & Mays, V. M. (1988). Disclosure of sexual preference to physicians by black lesbian and bisexual women. *Western Journal of Medicine*, *149*(5), 616.

Cochran, S. D., & Mays, V. M. (2015). Mortality risks among persons reporting same-sex sexual partners: Evidence from the 2008 General Social Survey—National Death Index Data Set. *American Journal of Public Health*, *105*(2), 358-364. https://doi.org/10.2105/AJPH.2014.301974

Cochran, S. D., Sullivan, J. G., & Mays, V. M. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, *71*(1), 53-61. https://doi.org/10.1037/0022-006x.71.1.53

Conron, K.J., Mimiaga, M.J., & Langers, S.J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health, 100,* 1953-1960. https://doi.org/10.2105/ajph.2009.174169

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

Creswell, J.W. (1998), Qualitative Inquiry and Research Design: Choosing Among Five Traditions, Sage, Thousand Oaks, CA.

Cusack, C. E., Christian, C., Drake, J. E., & Levinson, C. A. (2021). A network analysis of eating disorder symptoms and co-occurring alcohol misuse among heterosexual and sexual minority college women. *Addictive Behaviors*, *118*, 106867. https://doi.org/10.1016/j.addbeh.2021.106867

Dahlhamer, J. M., Galinsky, A. M., Joestl, S. S., & Ward, B. W. (2016). Barriers to health care among adults identifying as sexual minorities: A US national study. *American Journal of Public Health, 106*(6), 1116-1122. https://doi.org/10.2105/ajph.2016.303049

Dawson, C. A., Ehlke, S. J., Lewis, R. J., Amerson, R., Braitman, A. L., Shappie, A. T., & Heron, K. E. (2022). A latent class analysis of sexual identity, attraction, and behavior among young sexual-minority women. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000594

Deane, F. P., Wilson, C. J., & Russell, N. (2007). Brief report: impact of classroom presentations about health and help-seeking on rural Australian adolescents' intentions to consult health care professionals. *Journal of Adolescence, 30*, 695-699.

https://doi.org.10.1016/j.adolescence.2007.03.001

Earnshaw, V. A., & Quinn, D. M. (2012). The impact of stigma in healthcare on people living with chronic illnesses. *Journal of Health Psychology*, *17*(2), 157-168. https://doi.org/10.1177/1359105311414952

Eliason, M. J., & Fogel, S. C. (2015). An ecological framework for sexual minority women's health: Factors associated with greater body mass. *Journal of Homosexuality*, *62*(7), 845-882. https://doi.org/10.1080/00918369.2014.1003007

Elliott, M. N., Kanouse, D. E., Burkhart, Q., Abel, G. A., Lyratzopoulos, G., Beckett, M. K., ... & Roland, M. (2015). Sexual minorities in England have poorer health and worse health care experiences: a national survey. *Journal of General Internal Medicine*, *30*(1), 9-16. https://doi.org/10.1007/s11606-014-2905-y

Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual orientation disparities in mistimed and unwanted pregnancy among adult women. *Perspectives on Sexual and Reproductive Health*, *49*(3), 157-165. https://doi.org/10.1363/psrh.12032

Evon, D. M., Simpson, K. M., Esserman, D., Verma, A., Smith, S., & Fried, M. W. (2010). Barriers to accessing care in patients with chronic hepatitis C: the impact of depression. *Alimentary Pharmacology & Therapeutics*, *32*(9), 1163-1173. https://doi.org/10.1111/j.1365-2036.2010.04460.x

Forbush, K. T., Wildes, J. E., Pollack, L. O., Dunbar, D., Luo, J., Patterson, K., ... & Watson, D. (2013). Development and validation of the Eating Pathology Symptoms Inventory (EPSI). *Psychological Assessment*, *25*(3), 859. https://doi.org/10.1037/a0032639

Forbush, K. T., Wildes, J. E., & Hunt, T. K. (2014). Gender norms, psychometric properties, and validity for the Eating Pathology Symptoms Inventory. *International Journal of Eating Disorders*, *47*(1), 85-91. https://doi.org/10.1002/eat.22180

Golino, H. F., & Epskamp, S. (2017). Exploratory graph analysis: A new approach for estimating the number of dimensions in psychological research. *PloS one*, *12*(6), e0174035. https://doi.org/10.1371/journal.pone.0174035

Gonzales, G., Quinones, N,, & Attanasio, L. (2019). Health and access to care among reproductive-age women by sexual orientation and pregnancy status. *Women's Health Issues, 29*(1), 8-16. https://doi.org/10.1016/j.whi.2018.10.006

Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin*, *135*(5), 707-730. http://dx.doi.org/10.1037/a0016441

Hecht, L. M., Pester, B., Braciszewski, J. M., Graham, A. E., Mayer, K., Martens, K., ... & Miller-Matero, L. R. (2020). Socioeconomic and racial disparities in bariatric surgery. *Obesity Surgery*, 1-5. https://doi/org/10.1007/s11695-020-04394-7

Heckman, T. G., Somlai, A. M., Peters, J., Walker, J., Otto-Salaj, L., Galdabini, C. A., & Kelly, J. A. (1998). Barriers to care among persons living with HIV/AIDS in urban and rural areas. *AIDS Care*, *10*(3), 365-375. https://doi.org/10.1080/713612410

Himmelstein, M. S., Puhl, R. M., & Quinn, D. M. (2017). Intersectionality: an understudied framework for addressing weight stigma. *American Journal of Preventive Medicine*, *53*(4), 421-431. https://doi.org/10.1016/j.amepre.2017.04.003

Howard, M. C. (2016). A Review of Exploratory Factor Analysis Decisions and Overview of Current Practices: What We Are Doing and How Can We Improve?. *International Journal of Human-Computer Interaction, 32*(1), 51-62. https://doi.org/10.1080/10447318.2015.1087664

Hughes, T. (2011). Alcohol use and alcohol-related problems among sexual minority women. *Alcoholism Treatment Quarterly*, *29*(4), 403-435. https://doi.org/10.1080/07347324.2011.608336

Hunger, J. M., Dodd, D. R., & Smith, A. R. (2020). Weight discrimination, anticipated weight stigma, and disordered eating. *Eating behaviors*, *37*, https://doi.org/10.1016/j.eatbeh.2020.101383

Hutchinson, M. K., Thompson, A. C., & Cederbaum, J. A. (2006). Multisystem factors contributing to disparities in preventive health care among lesbian women. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *35*(3), 393-402. https://doi.org/10.1111/j.1552-6909.2006.00054.x

Institute of Medicine (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. Washington, DC: The National Academies Press.

Ivezaj, V., White, M. A., & Grilo, C. M. (2016). Examining binge-eating disorder and food addiction in adults with overweight and obesity. *Obesity*, *24*(10), 2064-2069. https://doi.org/10.1002/oby.21607

Johns, M. M., Zimmerman, M., Harper, G. W., & Bauermeister, J. A. (2017). Resilient minds and bodies: Size discrimination, body image, and mental health among sexual minority women. *Psychology of Sexual Orientation and Gender Diversity*, *4*(1), 34–42. https://doi-org.proxy.lib.odu.edu/10.1037/sgd0000207

Kerr, D. L., Ding, K., & Thompson, A. J. (2013). A comparison of lesbian, bisexual, and heterosexual female college undergraduate students on selected reproductive health screenings and sexual behaviors. *Women's Health Issues*, *23*(6), e347-e355. http://dx.doi.org/10.1016/j.whi.2013.09.003

Kerr, D. L., Santurri, L., & Peters, P. (2013). A comparison of lesbian, bisexual, and heterosexual college undergraduate women on selected mental health issues. *Journal of American College Health*, *61*(4), 185-194. https://doi.org/10.1080/07448481.2013.787619

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593-602. https://doi.org/10.1001/archpsyc.62.6.593

King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry, 8*(1). http://dx.doi.org/10.1186/1471-244x-8-705

Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social Science & Medicine*, *61*(7), 1576-1596. https://doi.org/10.1016/j.socscimed.2005.03.006

Krueger, E. A., Meyer, I. H., & Upchurch, D. M. (2018). Sexual orientation group differences in perceived stress and depressive symptoms among young adults in the United States. *LGBT Health*, *5*(4), 242-249. doi: 10.1089/lgbt.2017.0228

Laska, M. N., Vankim, N. A., Erickson, D. J., Lust, K., Eisenberg, M. E., & Rosser, B. R. S. (2015). Disparities in weight and weight behaviors by sexual orientation in college students. *American Journal of Public Health, 105,* 111. https://doi.org/10.2105/AJPH.2014.302094

Lawson, A. K., & Marsh, E. E. (2017). Hearing the silenced voices of underserved women: The role of qualitative research in gynecologic and reproductive care. *Obstetrics and Gynecology Clinics, 44*(1), 109-120. https://doi.org/10.1016/j.ogc.2016.11.005

Lea, T., Wit, J., Reynolds, R. (2014). Minority stress in lesbian, gay, and bisexual adults in

Australia: Associations with psychological distress, suicidality, and substance use. *Archives of Sexual Behavior*, *43*(8), 1571-1578. http://dx.doi.org/10.1007/s10508-014-0266-6

Learman, L. A., Huang, A. J., Nakagawa, S., Gregorich, S. E., & Kuppermann, M. (2008). Development and validation of a sexual functioning measure for use in diverse women's health outcome studies. *American Journal of Obstetrics and Gynecology*, *198*(6), 710-713. https://doi.org/10.1016/j.ajog.2008.03.036

Lee, J. H., Gamarel, K. E., Bryant, K. J., Zaller, N. D., & Operario, D. (2016). Discrimination, Mental Health, and Substance Use Disorders Among Sexual Minority Populations. *LGBT Health*, *3*(4), 258–265. https://doi.org/10.1089/lgbt.2015.0135

Lehavot, K., Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of Consulting and Clinical Psychology, 79*(2), 159-170. http://dx.doi.org/10.1037/a0022839

Lewis, R.J., & Dawson, C.A. (2021). [Project Relate]. Unpublished raw data.

Lewis, R. J., Derlega, V. J., Griffin, J. L., & Krowinski, A. C. (2003). Stressors for gay men and lesbians: Life stress, gay-related stress, stigma consciousness, and depressive symptoms. *Journal of Social and Clinical Psychology*, *22*(6), 716-729. http://dx.doi.org/10.1521/jscp.22.6.716.22932

Logie, C. H., Lacombe-Duncan, A., MacKenzie, R. K., & Poteat, T. (2016). Minority stress and safer sex practices among sexual minority women in Toronto, Canada: Results from a cross sectional Internet-based survey. *LGBT Health 3*(6): 407-415. https://doi/org/10.1089/lgbt.2016.0005.

Mason, T.B., & Lewis, R.J. (2015). Minority Stress and Binge Eating Among Lesbian and

Bisexual Women. *Journal of Homosexuality*, *62*(7), 971-992. http://dx.doi.org/0.1080/00918369.2015.1008285

Mason, T. B., Lewis, R. J., & Heron, K. E. (2017). Indirect pathways connecting sexual orientation and weight discrimination to disordered eating among young adult lesbians. *Psychology of Sexual Orientation and Gender Diversity*, *4*(2), 193. https://doi.org/10.1037/sgd0000220

Mason, T. B., Lewis, R. J., & Heron, K. E. (2018). Disordered eating and body image concerns among sexual minority women: A systematic review and testable model. *Psychology of Sexual Orientation and Gender Diversity*, *5*(4), 397–422. https://doi-org.proxy.lib.odu.edu/10.1037/sgd0000293

Mathews, T. J. & Hamilton, B. E (2016). Mean age of mothers is on the rise: United States, 2000–2014. NCHS data brief, no 232. Hyattsville, MD: National Center for Health Statistics.

McHorney, C. A., Ware Jr, J. E., Rogers, W., Raczek, A. E., & Lu, J. R. (1992). The validity and relative precision of MOS short-and long-form health status scales and Dartmouth COOP charts: results from the Medical Outcomes Study. *Medical Care*, 253-265

McNair, R., & Bush, R. (2015). *Rainbow Women and Help Seeking*. University of Melbourne.

Meneguzzo, P., Collantoni, E., Gallicchio, D., Busetto, P., Solmi, M., Santonastaso, P., & Favaro, A. (2018). Eating disorders symptoms in sexual minority women: A systematic review. *European Eating Disorders Review*, *26*(4), 275-292. https://doi.org/10.1002/erv.2601

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. http://dx.doi.org/10.1037/0033-2909.129.5.674

Munson, S., & Cook, C. (2016). Lesbian and bisexual women's sexual healthcare experiences. *Journal of Clinical Nursing*, *25*(23-24), 3497-3510. https://doi.org/10.1111/jocn.13364

National Academies of Sciences, Engineering, and Medicine. (2020). *Understanding the Well-Being of LGBTQI+ Populations.* Washington, DC: The National Academies Press. https://doi.org/10.17226/25877.

Neumark-Sztainer, D., Wall, M., Guo, J., Story, M., Haines, J., & Eisenberg, M. (2006). Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: how do dieters fare 5 years later?. *Journal of the American Dietetic Association*, *106*(4), 559-568. https://doi.org/10.1016/j.jada.2006.01.003

Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Office of Disease Prevention and Health Promotion. (n.d.-a). Healthy People 2030. U.S. Department of Health and Human Services. https://health.gov/healthypeople

Operario, D., Gamarel, K. E., Grin, B. M., Lee, J. H., Kahler, C. W., Marshall, B. D., ... & Zaller, N. D. (2015). Sexual minority health disparities in adult men and women in the United States: National Health and Nutrition Examination Survey, 2001–2010. *American Journal of Public Health*, *105*(10), e27-e34. https://doi.org/10.2105/ajph.2015.302762

Page, E. H. (2004). Mental health services experiences of bisexual women and bisexual men: An empirical study. *Journal of Bisexuality*, *4*(1-2), 137-160. https://doi.org/10.1300/J159v04n01_11

Paine, E. A. (2021). “Fat broken arm syndrome”: Negotiating risk, stigma, and weight bias in LGBTQ healthcare. *Social Science & Medicine, 270*, 113609. https://doi.org/10.1016/j.socscimed.2020.113609

Panza, E., Fehling, K. B., Pantalone, D. W., Dodson, S., & Selby, E. A. (2020). Multiply marginalized: Linking minority stress due to sexual orientation, gender, and weight to dysregulated eating among sexual minority women of higher body weight. *Psychology of Sexual Orientation and Gender Diversity*. https://doi-org.proxy.lib.odu.edu/10.1037/sgd0000431

Panza, E., Olson, K., Goldstein, C. M., Selby, E. A., & Lillis, J. (2020). Characterizing lifetime and daily experiences of weight stigma among sexual minority women with overweight and obesity: A descriptive study. *International Journal of Environmental Research and Public Health*, *17*(13), 4892.

Poon, J. A., Panza, E. A., Selby, E., & Feinstein, B. A. (2022). Lifetime and daily weight stigma among higher weight sexual minority women: Links to daily weight-based concerns, avoidance, and negative affect. *Stigma and Health*. https://doi.org/10.1037/sah0000421

Puhl, R., & Suh, Y. (2015). Stigma and eating and weight disorders. *Current Psychiatry Reports*, *17*, 1-10. https://doi.org/10.1007/s11920-015-0552-6

Rice, C. E., Vasilenko, S. A., Fish, J. N., & Lanza, S. T. (2019). Sexual minority health disparities: An examination of age-related trends across adulthood in a national cross-sectional sample. *Annals of Epidemiology*, *31*, 20-25. https://doi.org/10.1016/j.annepidem.2019.01.001

Robinson, K., Galloway, K. Y., Bewley, S., & Meads, C. (2017). Lesbian and bisexual women's gynaecological conditions: a systematic review and exploratory meta-analysis. *BJOG: An International Journal of Obstetrics & Gynaecology*, *124*(3), 381-392. https://doi.org/10.1111/1471-0528.14414

Saewyc, E. M., Poon, C. S., Homma, Y., & Skay, C. L. (2008). Stigma management? The links between enacted stigma and teen pregnancy trends among gay, lesbian, and bisexual

students in British Columbia. *The Canadian Journal of Human Sexuality*, *17*(3), 123-139. https://doi.org/10.1037/e515582013-001

Shepler, D. K., Johnson, K. P., & Width, A. A. (2017). Risky sexual behavior and knowledge of HIV/AIDS transmission in a community sample: Sexual orientation, race, and gender. *Journal of Social, Behavioral, and Health Sciences*, *11*(1), 10. https://doi.org/10.5590/JSBHS.2017.11.1.10

Soulliard, Z. A., Cox, S., & Brode, C. (2020). Sexual minority bariatric patients: examination of eating behaviors, anxiety. *Surgery for Obesity and Related Diseases*, *1*, 9. https://doi.org/10.1016/j.soard.2020.07.007

Steele, L. S., Daley, A., Curling, D., Gibson, M. F., Green, D. C., Williams, C. C., & Ross, L. E. (2017). LGBT identity, untreated depression, and unmet need for mental health services by sexual minority women and trans-identified people. *Journal of Women's Health*, *26*(2), 116-127. https://doi.org/10.1089/jwh.2015.5677

Struble, C. B., Lindley, L. L., Montgomery, K., Hardin, J., & Burcin, M. (2010). Overweight and obesity in lesbian and bisexual college women. *Journal of American College Health, 59,* 51-56. https://doi.org/10.1080/07448481.2010.483703

Szymanski, D. M., Dunn, T. L., & Ikizler, A. S. (2014). Multiple minority stressors and psychological distress among sexual minority women: The roles of rumination and maladaptive coping. *Psychology of Sexual Orientation and Gender Diversity, 1*(4), 412-421. http://dx.doi.org/10.1037/sgd0000066

Tabachnick, B., & Fidell, L. (2007). *Using Multivariate Statistics (5th ed.)*. New York: Allyn and Bacon.

Tinsley, H. E. A., & Tinsley, D. J. (1987). Uses of factor analysis in counseling psychology research. *Journal of Counseling Psychology*, *34*(4), 414–424. https://doi-org.proxy.lib.odu.edu/10.1037/0022-0167.34.4.414

Tornello, S. L., Riskind, R. G., & Patterson, C. J. (2014). Sexual orientation and sexual and reproductive health among adolescent young women in the United States. *Journal of Adolescent Health*, *54*(2), 160-168. https://doi.org/10.1016/j.jadohealth.2013.08.018

Turchik, J. A., & Garske, J. P. (2009). Measurement of sexual risk taking among college students. *Archives of Sexual Behavior*, *38*(6), 936-948. https://doi.org/10.1007/s10508-008-9388-z

Van Dam, M. A. A., Koh, A. S., & Dibble, S. L. (2001). Lesbian disclosure to health care providers and delay of care. *Journal of the Gay and Lesbian Medical Association*, *5*(1), 11-19. https://doi.org/10.1023/a:1009534015823

Veit, C. T., & Ware, J. E. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology*, *51*(5), 730-742. http://dx.doi.org/10.1037//0022-006x.51.5.730

Ware, J. E., Sherbourne, C. D., & Davies, A. R. (1992). Developing and testing the MOS 20-item short-form health survey: A general population application. *Measuring functioning and well-being: The Medical Outcomes Study approach*, 277-290.

Watson, D., O'Hara, M. W., Simms, L. J., Kotov, R., Chmielewski, M., McDade-Montez, E. A., ... & Stuart, S. (2007). Development and validation of the Inventory of Depression and Anxiety Symptoms (IDAS). *Psychological Assessment*, *19*(3), 253. https://doi.org/10.1037/1040-3590.19.3.253

Wilson, C. J., Deane, F. P., Marshall, K. L., & Dalley, A. (2010). Adolescents' suicidal thinking and reluctance to consult general medical practitioners. *Journal of Youth and Adolescence*, *39*(4), 343-356. https://doi.org/10.1007/s10964-009-9436-6

Williams, N. D., & Fish, J. N. (2020). The availability of LGBT-specific mental health and substance abuse treatment in the United States. *Health Services Research*, *55*(6), 932-943. https://doi.org/10.1111/1475-6773.13559

Wood, S. M., Schott, W., Marshal, M. P., & Akers, A. Y. (2017). Disparities in body mass index trajectories from adolescence to early adulthood for sexual minority women. *Journal of Adolescent Health, 61,* 722-728. https://doi.org/10.1016/j.jadohealth.2017.06.008

Table 1

Eigenvalues for Barriers- 25 Items

Factor	Total	% of Variance	Cumulative %
1	7.305	29.219	29.219
2	2.751	11.005	40.225
3	2.298	9.191	49.416
4	1.477	5.908	55.325
5	1.240	4.962	60.286
6	1.188	4.751	65.038
7	1.065	4.259	69.297

Table 2

Barriers Parallel Analysis- 25 Items

Random Data Eigenvalues		
Root	Means	Percentile
1.000000	1.732428	1.827566
2.000000	1.614884	1.709473
3.000000	1.515849	1.590313
4.000000	1.436282	1.502226
5.000000	1.374330	1.432406
6.000000	1.315525	1.355528
7.000000	1.256766	1.313641
8.000000	1.201994	1.249533
9.000000	1.150202	1.192887
10.000000	1.099056	1.136440
11.000000	1.048752	1.088339
12.000000	1.007230	1.042812
13.000000	.960191	.997958
14.000000	.915379	.949856
15.000000	.872988	.912410
16.000000	.829344	.864285
17.000000	.791393	.826562
18.000000	.751860	.789743
19.000000	.714288	.747769
20.000000	.674663	.710475
21.000000	.636062	.670141
22.000000	.594581	.635618
23.000000	.548088	.585194
24.000000	.506551	.546064
25.000000	.451315	.492948

Table 3

Eigenvalues for Barriers- 18 Items

Factor	Total	% of Variance	Cumulative %
1	4.97	27.60	27.60
2	2.30	12.79	40.39
3	2.01	11.55	51.93
4	1.40	7.77	59.70
5	1.14	6.31	66.01

Table 4

Barriers Parallel Analysis- 18 Items

Random Data Eigenvalues		
Root	Means	Percentile
1.000000	1.572857	1.671427
2.000000	1.463785	1.534728
3.000000	1.376912	1.442522
4.000000	1.296718	1.362110
5.000000	1.230084	1.273772
6.000000	1.170824	1.223200
7.000000	1.111992	1.167212
8.000000	1.056967	1.103078
9.000000	.998067	1.038705
10.000000	.947683	.994105
11.000000	.902510	.947560
12.000000	.851656	.892167
13.000000	.800016	.845346
14.000000	.748814	.791894
15.000000	.698699	.743406
16.000000	.648271	.697388
17.000000	.593652	.633966
18.000000	.530495	.583535

Table 5

Eigenvalues for Barriers-13 Items

Factor	Total	% of Variance	% Cumulative
1	4.10	31.56	31.56
2	2.50	16.53	48.12
3	1.93	14.84	62.96
4	1.12	8.61	71.57

Table 6

Barriers Parallel Analysis- 13 Items

Random Data Eigenvalues		
Root	Means	Percentile
1.000000	1.452137	1.551814
2.000000	1.334345	1.416446
3.000000	1.246740	1.321950
4.000000	1.172844	1.220327
5.000000	1.108733	1.166601
6.000000	1.045891	1.099270
7.000000	.982218	1.027094
8.000000	.927793	.972007
9.000000	.867747	.916256
10.000000	.809340	.856259
11.000000	.754515	.812685
12.000000	.689037	.745593
13.000000	.608659	.677008

Table 7

Barriers Factor Loadings

Item	Weight Stigma	General/ Environmental	Discrimination
5. My healthcare professional did not acknowledge my same-sex partner as my spouse.	.049	.137	**.648**
7. A healthcare professional referred to my sexuality as a "lifestyle," "choice," or "preference."	.150	.259	**.600**
9. I have been refused treatment/healthcare due to my sexual orientation.	.119	.150	**.686**
12. A healthcare professional has blamed my health problems on my weight.	**.914**	.138	.101
13. A healthcare professional has focused more on my weight than the issue I was concerned about.	**.961**	.125	.050
14. I have been shamed by a healthcare professional due to my weight and/or body shape.	**.893**	.161	.165
18. I was treated poorly by a healthcare professional due to my racial or ethnic identity.	.053	.037	**.516**
19. I was treated poorly by a healthcare professional became I am masculine presenting.	-.010	-.022	**.658**
20. I did not have enough money to get the care I needed.	.154	**.516**	.182

21. My health insurance status prevented me from getting the care I needed.	.151	**.514**	.235
22. I live in an area with laws and policies that are stigmatizing towards the queer community.	.042	**.767**	.096
23. My city or town has low acceptance of the queer community.	.043	**.832**	.102
24. I have not wanted to or have not feel comfortable enough to disclose my sexual orientation.	.070	**.519**	-.031

Table 8

Eigenvalues for Facilitators- 17 Items

Factor	Total	% of Variance	% Cumulative
1	5.39	31.68	31.68
2	1.81	10.62	42.29
3	1.62	9.51	51.81
4	1.01	6.00	57.78

Table 9

Facilitators Parallel Analysis- 17 items

Random Data Eigenvalues		
Root	Means	Percentile
1.000000	1.559364	1.654559
2.000000	1.442651	1.522213
3.000000	1.351399	1.427221
4.000000	1.283357	1.347787
5.000000	1.211954	1.258791
6.000000	1.147060	1.202796
7.000000	1.086265	1.124902
8.000000	1.031452	1.074304
9.000000	.975328	1.020724
10.000000	.923164	.960606
11.000000	.870295	.907209
12.000000	.821615	.863823
13.000000	.767042	.811880
14.000000	.714993	.763203
15.000000	.664021	.711536
16.000000	.608213	.665105
17.000000	.541827	.603902

Table 10

Eigenvalues for Facilitators- 9 Items

Factor	Total	% of Variance	% Cumulative
1	3.58	39.75	39.75
2	1.36	15.14	55.00

Table 11

Facilitators Parallel Analysis- 9 Items

Random Data Eigenvalues		
Root	Means	Percentile
1.000000	1.362414	1.488195
2.000000	1.235161	1.309915
3.000000	1.140181	1.191926
4.000000	1.059772	1.117440
5.000000	.987877	1.031626
6.000000	.914066	.966461
7.000000	.841628	.898617
8.000000	.773026	.829693
9.000000	.685876	.751019

Table 12

Facilitator Factor Loadings

Item	Factor Loading
1. I have found information about healthcare professionals online that suggests they are accepting/affirming.	.577
2. My healthcare professional(s) show they are queer friendly care on their website or in their physical office.	.762
4. My healthcare professional(s) use inclusive language and ask culturally appropriate questions (for example, asking my partner(s) sex and/or gender identity).	.732
6.I have a healthcare professional who is part of the queer community.	.671
7. I have a healthcare professional who shares at least two of my identities (e.g., gender, sexual orientation, race/ethnicity, body size).	.430

Figure 1

Barriers Scree Plot- 25 Items

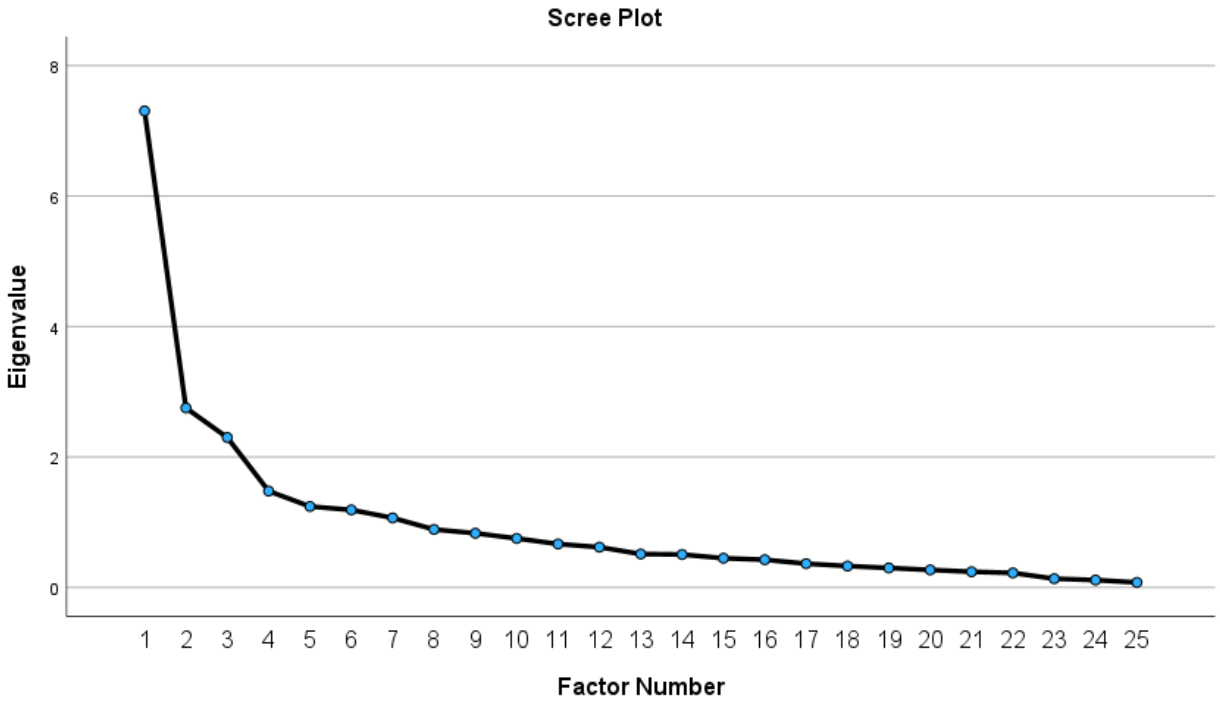


Figure 2

Barriers Scree Plot- 18 items

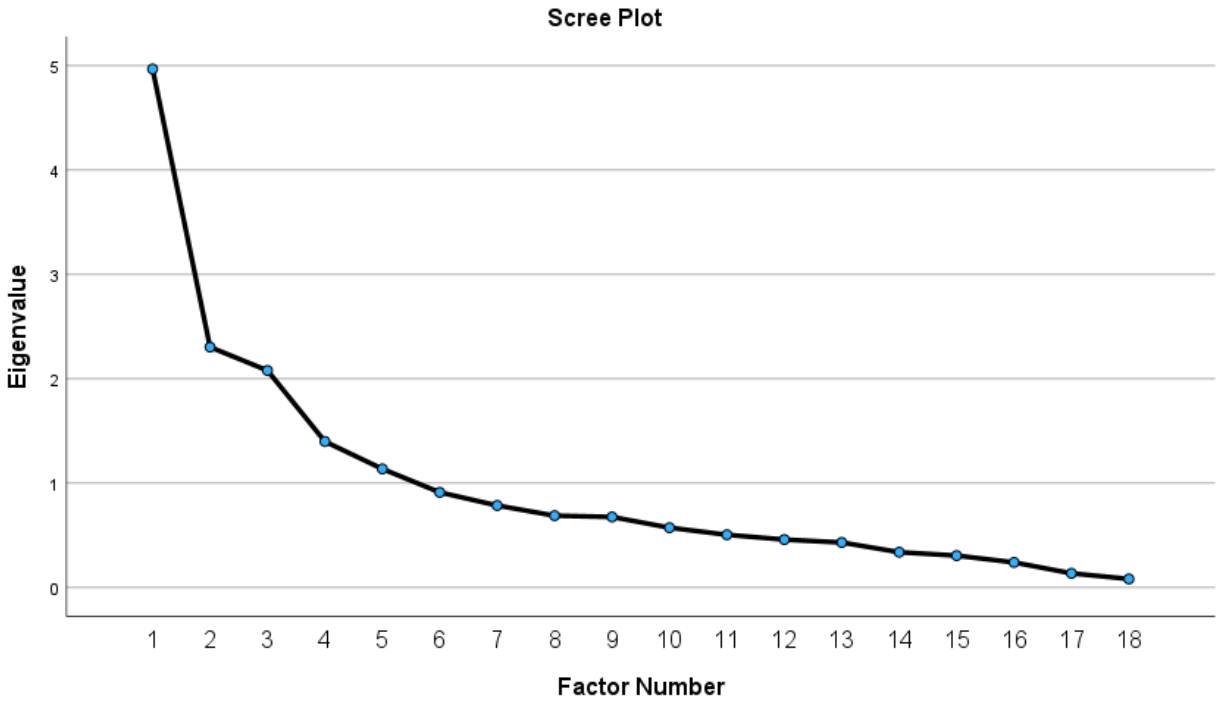


Figure 3

Barriers Scree Plot- 13 items

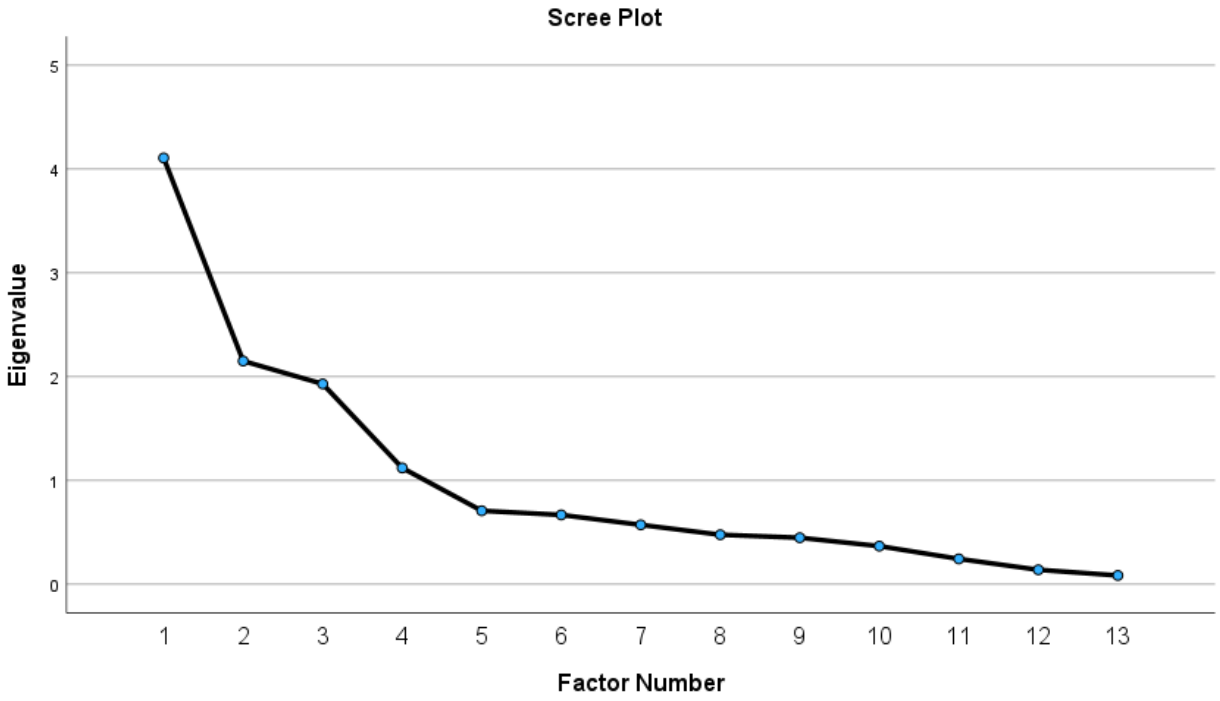


Figure 4

Facilitator Scree Plot- 17 Items

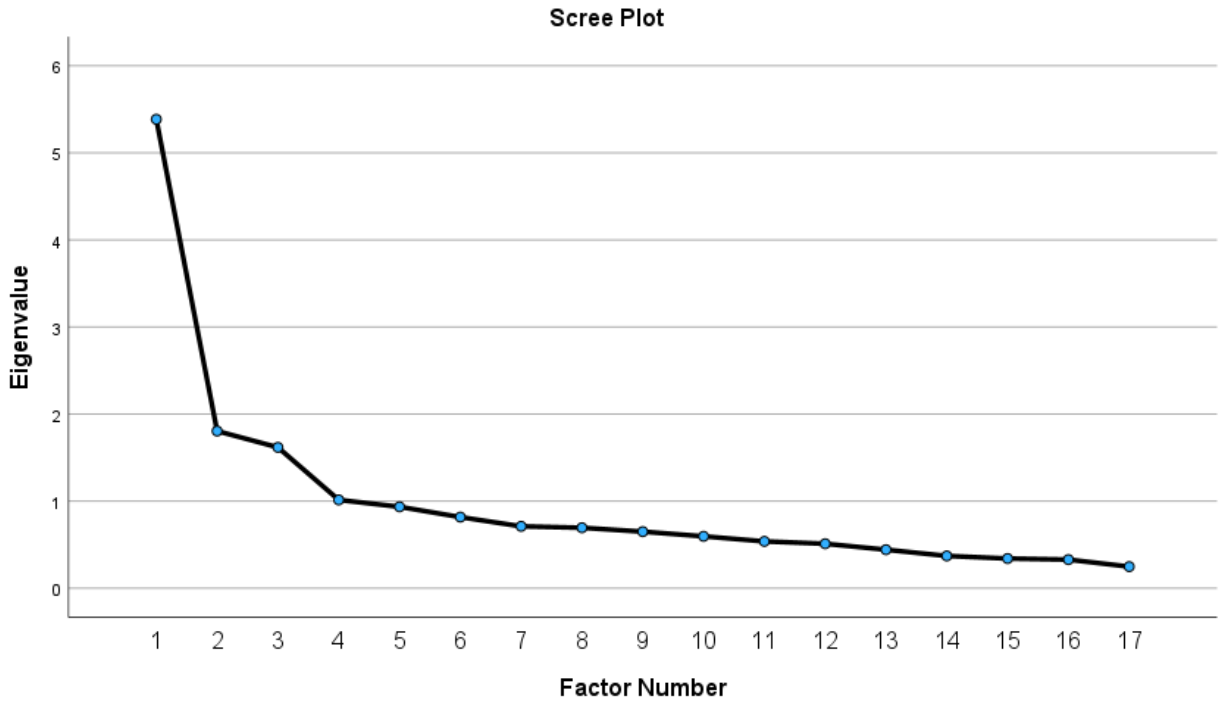
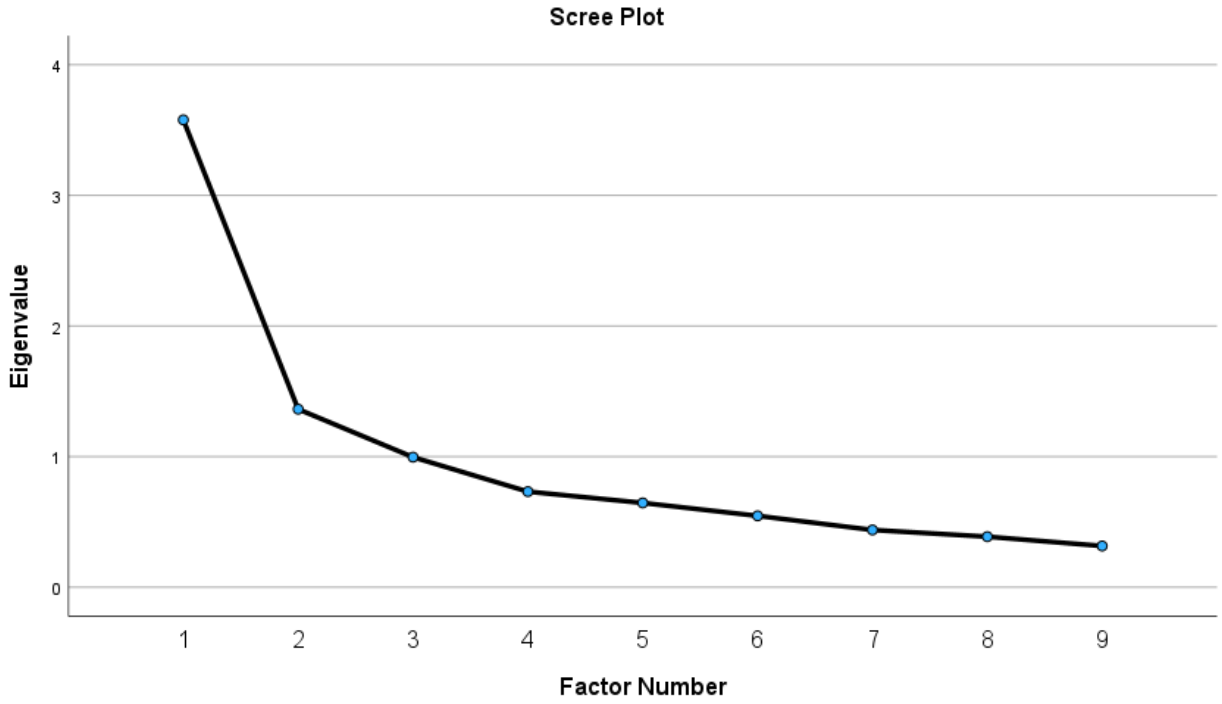


Figure 5

Facilitator Scree Plot- 9 Items



Appendix A

Screening Questionnaire

1. How old are you?

2. Which categories best describe you? If more than one category describes you, select all that apply.

- □ White or Caucasian
  For example: German, Irish, English, Italian, Polish, French, etc.
- □ Black or African American
  For example: African American, Jamaica, Haitian, Nigerian, Ethiopian, Somalian, etc.
- □ American Indian or Alaska Native
  For example: Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Nome Eskimo Community, etc.
- □ Asian or Asian American
  For example: Chinese or Chinese American, Filipino, Asian Indian, Vietnamese, Korean, Japanese, etc.
- □ Middle Eastern or Northern African
  For example: Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.
- □ Native Hawaiian or Other Pacific Islander
  For example: Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese, etc.
- □ Other (please specify) _____
- □ Prefer not to answer

3. Do you consider yourself Hispanic, Latinx, or of Spanish origin? (For example, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Columbian, Brazilian, etc.)

- □ Yes, I consider myself Hispanic, Latinx, or of Spanish origin
- □ No, I do not consider myself Hispanic, Latinx, or of Spanish origin

4. How would you describe yourself? (select all that apply)

- □ Woman
- □ Man
- □ Trans woman
- □ Trans man
- □ Gender queer/non-conforming
- □ Nonbinary
- □ Other (please specify) _____
- □ Prefer not to answer

5. Which sex were you assigned at birth? (that is, what appears on your birth certificate?)

- □ Female
- □ Male
- □ I don't know
- □ Other (please specify) _____
- □ Prefer not to answer

6. What best describes your educational level?

- □ Less than high school
- □ Some high school
- □ High school graduate
- □ Some college
- □ Associate's degree
- □ Bachelor's degree
- □ Master's degree
- □ Doctoral/Professional degree

7. There are many ways that individuals think of their sexual identity. Choose all that describe you:

☐ Heterosexual or straight
☐ Lesbian
☐ Bisexual
☐ Queer
☐ Asexual
☐ Pansexual
☐ Questioning
☐ Gay
☐ Other (specify): _____

Appendix B

Interview Outline

Participants:

- At least 20 sexual minority women ages 18-40
- Recruited by contacted past participants who agreed to be contacted for future research

Logistics:

- Interviews will occur via Zoom and last for approximately 45 minutes
- Interviews will be recorded
- The Principal Investigator and trained research assistants (graduate and undergraduate) will conduct the interviews

Format:

1. Welcome
    a. Introductions
    b. Guidelines
        i. Recording information
        ii. Approximate length of interview (45 mins)
    c. Purpose of the study
    d. Overview of topic areas to be covered
2. Healthcare access
    a. Contextual factors
        i. Can you tell me what the LGBTQ presence is like in your community?
        ii. What do you think your community believes about the importance of LGBTQ healthcare access?
        iii. What do those close to you (e.g., friends, family) believe about the importance of LGBTQ healthcare access?
        iv. What are the LGBTQ laws and policies where you live? How do these impact you?
        v. What are the LGBTQ specific health programs in your area? (e.g., outreach, education, community centers)
    b. Individual factors
        i. What are your beliefs about health and healthcare access?
        ii. How do you think your income level has affected your ability to access healthcare?
        iii. Can you tell me about your health insurance history and how that has impacted your healthcare experience?
        iv. Do you have a regular source of care and ability to access that care (e.g., transportation, finances, time off work)?

        v. How do you feel about your overall health?
3. Barriers to seeking and accessing healthcare
    a. Challenges and difficulties in access
        i. What are the challenges and difficulties that you face when trying to access physical or mental healthcare?
    b. Specific areas of health
        i. What areas of health have you had the most difficulty receiving quality treatment for?
    c. Negative experiences with healthcare providers
        i. Please tell me about any bad or negative experiences you have had with healthcare providers.
    d. Discrimination and prejudice in healthcare
        i. Please tell me about any times when you have faced discrimination from a healthcare system or individual healthcare provider.
    e. Disclosure of sexual identity to providers
        i. What have your experiences been like disclosing or not disclosing your sexual identity to healthcare providers?
    f. Perceptions of healthcare provider's knowledge of LGBTQ+ concerns
        i. How do you feel about the knowledge your healthcare providers do or do not have related to LGBTQ+ health concerns?
4. Facilitators to seeking and accessing healthcare
    a. Comfort in seeking out care
        i. What kinds of things have made you feel comfortable seeking out physical or mental healthcare?
    b. General facilitators
        i. What kinds of things have helped you access physical or mental healthcare?
    c. Provider(s) facilitators
        i. What are some things your provider(s) has done that have been helpful?
        ii. What health-related topics do you feel comfortable talking to your provider(s) about?
        iii. What are some things your provider(s) could do differently?
    d. Individual facilitators
        i. Why is it important to you to seek out physical and mental healthcare for yourself?
        ii. If you have had negative experiences in sought out care afterwards, what motived you to re-engage in services?
5. Conclusion
    a. Provide health-related resources
    b. Ask participant if she would like to be contacted with a summary of the results in the future
    c. Information about compensation

d. Thank you

Appendix C

Demographic Questionnaire

1. How old are you?

2. Which categories best describe you? If more than one category describes you, select all that apply.

- □ White or Caucasian
  For example: German, Irish, English, Italian, Polish, French, etc.
- □ Black or African American
  For example: African American, Jamaica, Haitian, Nigerian, Ethiopian, Somalian, etc.
- □ American Indian or Alaska Native
  For example: Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Nome Eskimo Community, etc.
- □ Asian or Asian American
  For example: Chinese or Chinese American, Filipino, Asian Indian, Vietnamese, Korean, Japanese, etc.
- □ Middle Eastern or Northern African
  For example: Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.
- □ Native Hawaiian or Other Pacific Islander
  For example: Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese, etc.
- □ Other (please specify) _____
- □ Prefer not to answer

3. Do you consider yourself Hispanic, Latinx, or of Spanish origin? (For example, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Columbian, Brazilian, etc.)

- □ Yes, I consider myself Hispanic, Latinx, or of Spanish origin
- □ No, I <u>do not</u> consider myself Hispanic, Latinx, or of Spanish origin

4. How would you describe yourself? (select all that apply)

- □ Woman
- □ Man
- □ Trans woman
- □ Trans man
- □ Gender queer/non-conforming
- □ Nonbinary
- □ Other (please specify) _____
- □ Prefer not to answer

5. Which sex were you assigned at birth? (that is, what appears on your birth certificate?)

- □ Female
- □ Male
- □ I don’t know
- □ Other (please specify) _____

- □ Prefer not to answer

6. What best describes your educational level?

- □ Less than high school
- □ Some high school
- □ High school graduate
- □ Some college
- □ Associate's degree
- □ Bachelor's degree
- □ Master's degree
- □ Doctoral/Professional degree

7. There are many ways that individuals think of their sexual identity. Choose all that describe you:

☐ Heterosexual or straight
☐ Lesbian
☐ Bisexual
☐ Queer
☐ Asexual
☐ Pansexual
☐ Questioning
☐ Gay
☐ Other (specify): _____

8. What is your employment status? (check all that apply)

- □ Employed part-time
- □ Employed full-time (or more)
- □ Retired
- □ Student
- □ Homemaker
- □ Unemployed

9. What is your average individual income?

- □ $0 - $9,999
- □ $10,000 - $19,999
- □ $20,000 - $29,999
- □ $30,000 - $39,999
- □ $40,000 - $49,999
- □ $50,000 - $59,999
- □ $60,000 - $69,999
- □ $70,000 - $79,999
- □ $80,000 - $89,999
- □ $90,000 - $99,999
- □ $100,000+

10. How much are finances an issue for you or your immediate family?

- □ Difficulty meeting my/my family's basic needs
- □ Barely able to meet my /my family's basic needs
- □ Once-in-a-while have difficulty covering my/my family's basic needs
- □ No difficulty covering basic needs
- □ Have extra money each month

11. How often do you think about your sexual orientation/identity?

- □ 1 - Never
- □ 2
- □ 3
- □ 4
- □ 5
- □ 6 - Often

12. At what age did you first wonder about your sexual identity? _____years

13. At what age did you self-identify as being lesbian/gay/bisexual/other? _____years

14. At what age did you first disclose your sexual identity to someone else? _____years

15. Have you disclosed your sexual identity to a parent or guardian? Yes/No

If yes: At what age did you first disclose your sexual identity to a parent or guardian? _____years

16. Have you disclosed your sexual identity to another family member other than a parent or guardian? Yes/No

If "yes": At what age did you first disclose your sexual identity to another family member other than a parent or guardian? _____years

17. Have you "come out" to any of your friends? Yes/No

If "yes": At what age did you first "come out" to friends? _____years

18. Have you "come out" to any of your coworkers? Yes/No

If "yes" to question 20, then: At what age did you first "come out" to coworkers? _____years

19. Relative to other lesbian/gay/bisexual individuals, I am:

- □ Definitely in the closet.
- □ In the closet most of the time.
- □ Half-in and half-out.
- □ Out of the closet most of the time.

- □ Completely out of the closet.
- □ Prefer not to answer

20. **During the past year**, with whom have you had sex?

☐ Woman/women
☐ Man/men
☐ Other
☐ No one
☐ Prefer not to answer

21. With whom have you had sex in your **lifetime**?

☐ Woman/women
☐ Man/men
☐ Other
☐ No one
☐ Prefer not to answer

22. How would you describe your relationship status?

- □ Single (not dating anyone)
- □ Dating one partner
- □ Dating several partners
- □ In a monogamous relationship
- □ In an open relationship
- □ Polyamorous
- □ Engaged, married, or in a civil union
- □ Other: _____

If not single: Is the other person (or people) you are dating or in a relationship with: (check all that apply)

(1) A woman (or women)
(2) A man (or men)
(3) A gender non-binary/genderqueer individual(s)
(4) Other: _____

If not single: How long have you been in your current relationship? _____Years _____Months

24. What is your height? _____ Feet _____Inches

25. What is your best guess of your current weight in pounds? _____

26. What is your best guess of your highest adult weight in pounds? _____

Appendix D

Theme List

Barriers

Avoid treatment because doesn't want to disclose

Avoiding treatment or putting off treatment due to previous negative experiences

Biased religious providers, conversion therapy

Change in quality of care upon disclosure

Community outreach is focused on sexual minority men

Difficulty connecting with LGBTQ+ community due to COVID-19

Difficulty obtaining a regular source of care

Disaffirming providers

Familial stigma around healthcare

Fatphobia, weight stigma, weight-based discrimination

Gender-related discrimination

Health illiteracy

Heteronormativity when accessing care

Homophobia, LGBTQ+ related discrimination

Inadequate provider knowledge regarding LGBTQ+ needs

Job not flexible with time off for healthcare

LGBTQ+ health is not something family thinks about

Low Income

No consistent health insurance coverage

Not feeling safe

Only disclosing identity when necessary

Presenting as less feminine, more masculine

Problems accessing mental health care

Problems accessing sexual and reproductive care

Providers not listening or poor bedside manner

Race-related microaggressions and discrimination

Stigmatizing laws and policies

Town is generally not accepting

Facilitators

Always insured

Feminine-presenting

Finding providers online

Identification of LGBTQ+ friendly care

Inclusive health center nearby (e.g., LGBTG+, planned parenthood, university counseling center)

Provider identity (including 3 subthemes below)

- LGBTQ+ providers
- POC providers
- Women, female providers

Provider use of inclusive language and questions

Providers who initiate conversations about LGBTQ+ topics

Providers who listen and are not dismissive

Re-engagement with care after bad experiences (e.g., seeking alternative provider)

Referrals from LGBTQ+ community

Regular provider and ability to access provider

Strong LGBTQ+ presence in physical community

Supportive family

Supportive friends

Appendix E

First Draft of Scale

Please indicate the extent to which the following items have acted as ***barriers*** in your experiences of seeking and accessing physical and mental healthcare.

0 (Not at all) 1 (A little) 2 (Somewhat) 3 (Neutral) 4 (Moderate) 5 (Very much so) 6 (A lot)

7 response options

1. A healthcare provider assumed I had a male partner.
2. A healthcare provider assumed I could be pregnant.
3. My family is not aware that I (and others in the LGBTQ+ community) have trouble accessing healthcare.
4. I was treated differently by a healthcare provider or provider's office after disclosing my sexual identity.
5. My provider did not acknowledge my same-sex partner as my romantic partner.
6. I have not been able to get an answer about whether a provider is affirming.
7. A healthcare provider referred to my sexuality as a "lifestyle" or "choice."
8. A healthcare provider suggested that my sexuality was the cause of my problems.
9. I have not been welcomed at a provider's office due to my sexual identity.
10. I have been refused treatment/healthcare due to my sexual identity.
11. Healthcare providers have made homophobic comments to me.
12. I have felt like my provider does not have adequate knowledge regarding LGBTQ+ health needs.
13. A healthcare provider has blamed my health problems on my weight.
14. A provider has focused more on my weight than my presenting concern.
15. I have been body shamed or fat shamed by providers.
16. I have been treated differently by providers due to being a woman.
17. My problems have not been taken seriously by providers because I am a woman.
18. I was treated differently by a healthcare provider due to the intersection of more than one identity (e.g., Black woman, overweight sexual minority, young woman of color).
19. I was treated differently by a healthcare provider due to my racial/ethnic identity.
20. I did not have enough money to get the care I needed.
21. My health insurance status prevented me from getting the care I needed.
22. I live in an area with laws and policies that are stigmatizing towards the LGBTQ+ community.
23. My city/town is not accepting of the LGBTQ+ community.
24. I have avoided or put off healthcare due to not wanting to disclose sexual identity.
25. I have avoided or put off healthcare due to previous negative experiences.

Please indicate the extent to which the following items have acted as ***facilitators*** in your experiences of seeking and accessing physical and mental healthcare.

0 (Not at all) 1 (A little) 2 (Somewhat) 3 (Neutral) 4 (Moderate) 5 (Very much so) 6 (A lot)

7 response options

1. I have found providers online.
2. My provider identifies LGBTQ+ friendly care on their website or in their physical office.
3. I live close to an inclusive health center (e.g., LGBTQ+ health center, Planned Parenthood).
4. My providers use inclusive language and ask inclusive questions (e.g., asking partner(s) gender identity).
5. I have a female provider.
6. I have a provider who is part of the LGBTQ+ community.
7. I have a provider who shares at least two of my identities (e.g., gender, sexual identity, race/ethnicity, body size).
8. My provider initiates conversations about LGBTQ+ topics.
9. My health insurance has covered the care I need it to.
10. My healthcare provider listens to me.
11. I have received referrals for providers from the LGBTQ+ community.
12. I have a regular provider and ability to access that provider.
13. There is a strong LGBTQ+ presence in my community.
14. I have supportive friends.
15. I have a supportive family.

Appendix F

Panel Survey

Thank you for participating in the initial development and validation of the Barriers and Facilitators to Care for Sexual Minority Women Scale! I value your expert opinion.

You will be asked to provide feedback on the below aspects of the scale:

1. Instructions that should accompany the scale
2. The Likert scale currently being used
3. The phrasing of the items
4. The two part structure of the scale
5. Individual item feedback
6. General utility of the scale

[Scale]

Free response: The survey currently has two parts. The first section assesses barriers that sexual minority women may encounter when seeking healthcare and the second part assesses facilitators that sexual minority women may encounter when seeking healthcare. What is your opinion of the two-part survey?

Free response: The scale uses a 7-point Likert scale ranging from *0 (not at all)* to *6 (a lot)*. What is your opinion of this scaling system? Would you suggest we consider an alternate scaling system? If so, what would you suggest and why?

Free response: The instructions for the first section of the scale currently read, "Please indicate the extent to which the following items have acted as ***barriers*** in your experiences of seeking and accessing physical and mental healthcare." What is your opinion of these instructions? Would you suggest alternate instructions? If so, what would you suggest and why?

Free response: The instructions for the second section of the scale currently read, "Please indicate the extent to which the following items have acted as ***facilitators*** in your experiences of seeking and

accessing physical and mental healthcare." What is your opinion of these instructions? Would you suggest alternate instructions? If so, what would you suggest and why?

Please provide your feedback on these items that assess ***barriers*** to healthcare access. A "good" item is an item that appropriately assesses the construct of barriers to healthcare access for sexual minority women. Provide feedback on items that you don't think assess the construct or that are poorly worded. There are 5 items per page so you can review the items in smaller chunks.

> Please select whether you think this item is a "good" item or if you have "suggestions to revise or drop" the item. If you select "suggestions to revise or drop" a text box will appear at the bottom of the page that will ask for your feedback on those specific items.
>
> > (Reviewers will have 2 response options: “good” or “suggestions to revise or drop” for the following barrier items.)
> >
> > [Barrier items]

Please provide your feedback on these items that assess ***facilitators*** to healthcare access. A "good" item is an item that appropriately assesses the construct of facilitators to healthcare access for sexual minority women. Provide feedback on items that you don't think assess the construct or that are poorly worded. There are 5 items per page so you can review the items in smaller chunks.

> Please select whether you think this item is a "good" item or if you have "suggestions to revise or drop" the item. If you select "suggestions to revise or drop" a text box will appear at the bottom of the page that will ask for your feedback on those specific items.
>
> > (Reviewers will have 2 response options: “good” or “suggestions to revise or drop” for the following facilitator items)

[Facilitator items]

Free response: What is your overall opinion of the scale? Would this scale be useful in research, clinical, or assessment settings? What the strengths and weaknesses of the scale?

Appendix G

Updated Scale Draft

Think about the times you have needed help with a physical or mental health problem.

How much do you agree or disagree that the following experiences or factors made it ***harder*** for you to get physical and/or mental health care or ***less likely*** to seek care throughout your life?

Some questions may not apply to you, so please select 0 if a question does not apply to you.

0 (N/A) 1 (Strongly Disagree) 2 (Disagree) 3 (Somewhat Disagree) 4 (Neither Agree nor Disagree) 5 (Somewhat Agree) 6 (Agree) 7 (Strongly Agree)

8 response options

1. A healthcare professional assumed the gender of my partner(s) (that is, assumed my partner was a man).
2. A healthcare professional assumed I could be pregnant (that is, that I am a woman who is having vaginal sex with a man).
3. My family has low awareness that I (and others in the queer community) have trouble accessing healthcare.
4. I was treated poorly by a healthcare professional or healthcare administrators after disclosing my sexual orientation.
5. My healthcare professional did not acknowledge my same-sex partner as my spouse.
6. I am unsure about whether my healthcare professional is affirming.
7. A healthcare professional referred to my sexuality as a “lifestyle,” “choice,” or “preference."
8. I have felt unwelcome at a healthcare professional’s office due to my sexual orientation.
9. I have been refused treatment/healthcare due to my sexual orientation.
10. Healthcare professionals have made homophobic, biphobic, or queerphobic comments to me.
11. I have felt like my healthcare professional does not have adequate knowledge regarding the health needs of queer women.
12. A healthcare professional has blamed my health problems on my weight.
13. A healthcare professional has focused more on my weight than the issue I was concerned about.
14. I have been shamed by a healthcare professional due to my weight and/or body shape.
15. I have been treated poorly by healthcare professionals due to being a woman.
16. My problems have not been taken seriously by healthcare professionals because I am a woman.
17. I was treated poorly by a healthcare professional due to the intersection of more than one identity (for example, a Black woman, overweight queer woman, young woman of color).
18. I was treated poorly by a healthcare professional due to my racial or ethnic identity.
19. I was treated poorly by a healthcare professional became I am masculine presenting.

20. I did not have enough money to get the care I needed.
21. My health insurance status prevented me from getting the care I needed.
22. I live in an area with laws and policies that are stigmatizing towards the queer community.
23. My city or town has low acceptance of the queer community.
24. I have not wanted to or have not feel comfortable enough to disclose my sexual orientation.
25. I have had previous negative experiences in healthcare.

For the following questions, continue to think about the times you have needed help with a physical or mental health problem.

How much do you agree or disagree that the following experiences or factors made it ***easier*** for you to get physical and/or mental health care or ***more likely*** to seek care throughout your life?

Some questions may not apply to you, so please select 0 if a question does not apply to you.

0 (N/A) 1 (Strongly Disagree) 2 (Disagree) 3 (Somewhat Disagree) 4 (Neither Agree nor Disagree) 5 (Somewhat Agree) 6 (Agree) 7 (Strongly Agree)

8 response options

1. I have found information about healthcare professionals online that suggests they are accepting/affirming.
2. My healthcare professional(s) show they are queer friendly care on their website or in their physical office.
3. I live close to an inclusive health center (e.g., LGBTQ+ health center, Planned Parenthood).
4. My healthcare professional(s) use inclusive language and ask culturally appropriate questions (for example, asking my partner(s) sex and/or gender identity).
5. I have access to a healthcare professional who is a woman if I so choose.
6. I have a healthcare professional who is part of the queer community.
7. I have a healthcare professional who shares at least two of my identities (e.g., gender, sexual orientation, race/ethnicity, body size).
8. My healthcare professional(s) initiates conversations about topics that are important to queer people.
9. I have health insurance that covers the care I need it to.
10. My healthcare professional(s) listen to me.
11. I have received referrals for healthcare professionals from other members of the queer community.
12. I have a regular healthcare professional and ability to access that healthcare professional.
13. There is a strong queer presence in my community.
14. I have supportive friends.
15. I have a supportive family.
16. I believe that it is important to engage in preventative health care.

17. I am confident that I will be able to advocate for myself in a healthcare setting.

(Opportunity for free response)

Appendix H

Barriers to Access to Care Evaluation (BACE-3)

Instructions: Below you can see a list of things which can stop, delay or discourage people from getting professional care for a mental health problem, or continuing to get help. By professional care, we mean care from staff such as a GP (family doctor), member of a community mental health team (e.g. care coordinator, mental health nurse or mental health social worker), psychiatrist, counsellor, psychologist or psychotherapist. Have any of these issues ever stopped, delayed or discouraged you from getting, or continuing with, professional care for a mental health problem?

Response options: Not at all, A little, Quite a lot, A lot

1. Being unsure where to go to get professional care.
2. Wanting to solve the problem on my own.
3. Concern that I might be seen as weak for having a mental health problem.
4. Fear of being put in hospital against my will.
5. Concern that it might harm my chances when applying for jobs.
6. Problems with transport or travelling to appointments.
7. Thinking the problem would get better by itself.
8. Concern about what my family might think, say, do or feel.
9. Feeling embarrassed or ashamed.
10. Preferring to get alternative forms of care (e.g. traditional/religious healing or alternative/complementary therapies).
11. Not being able to afford the financial costs involved.
12. Concern that I might be seen as ‘crazy’.
13. Thinking that professional care probably would not help.
14. Concern that I might be seen as a bad parent.
15. Professionals from my own ethnic or cultural group not being available.
16. Being too unwell to ask for help.
17. Concern that people I know might find out.
18. Dislike of talking about my feelings, emotions or thoughts.
19. Concern that people might not take me seriously if they found out I was having professional care.
20. Concerns about the treatments available (e.g. medication side effects).
21. Not wanting a mental health problem to be on my medical records.
22. Having had previous bad experiences with professional care for mental health.
23. Preferring to get help from family or friends.
24. Concern that my children may be taken into care or that I may lose access or custody without my agreement.
25. Thinking I did not have a problem.
26. Concern about what my friends might think, say or do.
27. Difficulty taking time off work.
28. Concern about what people at work might think, say or do.
29. Having problems with childcare while I receive professional care.
30. Having no one who could help me get professional care.

Appendix I

Barriers to Care Scale (BACS)

Please indicate the extent to which each listed barrier has made it difficult for you to receive the care you need.

Response options: (1) No problem at all, (2) Very slight problem, (3) Somewhat of a problem, (4) Major problem

1. Long distances to medical facilities and personnel.
2. Medical personnel (e.g. physicians, nurses), who [provide biased or inadequate care to those who identify as LGBTQIA+].
3. The lack of health care professionals who are adequately trained and competent in [LGBTQIA+] care.
4. The lack of transportation to access the services I need.
5. The shortage of psychologists, social workers and mental health counsellors who can help address mental health issues.
6. The lack of psychological support groups for the [LGBTQIA+ community].
7. The level of knowledge about [LGBTQIA+ community] among residents in the community.
8. Community residents' stigma against [LGBTQIA+ community].
9. The lack of employment opportunities for [LGBTQIA+ community].
10. The lack of supportive and understanding work environments for [LGBTQIA+ community].
11. My personal financial resources.
12. Lack of adequate and affordable housing.

Appendix J

Care Access

Response Options: (1)Strongly Agree to (5) Strongly Disagree

1. I don’t always go to the doctor’s when I should.
2. I should have started seeing a doctor for my illness earlier.
3. Sometimes I feel sick for awhile before I go to the doctor’s.
4. I see my doctor regularly.
5. I should see my doctor more frequently.
6. I always go to the doctor’s when I feel sick.

Appendix K

Help-Seeking Intentions Scale

1 = Extremely Unlikely, 4 = Not sure, 7 = Extremely Likely

If you have a physical health concern, how likely are you to talk to a General Practitioner about it?

If you have a personal problem like relationship difficulties with friends, family, or at school, how likely are you to talk to a General Practitioner about it?

If you have an emotional problem like being depressed or stressed out, how likely are you to talk to a General Practitioner about it?

If you have a physical health concern, how likely are you to talk to a health care professional other than a GP about it?

If you have a personal problem like relationship difficulties with friends, family, or at school, how likely are you to talk to a health care professional other than a GP about it?

If you have an emotional problem like being depressed or stressed out, how likely are you to talk to a health care professional other than a GP about it?

Appendix L

Experiences of Discrimination (EOD) Scale

Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of sexual minority status?

(1)At school?

(2)Getting hired or getting a job?

(3)At work?

(4)Getting housing?

(5)Getting medical care?

(6)Getting service in a store or restaurant?

(7)Getting credit, bank loans, or a mortgage?

(8)On the street or in a public setting?

(9)From the police or in the courts?

Appendix M

Inventory of Depression and Anxiety Symptoms Suicidality Subscale (IDAS)

Below is a list of feelings, sensations, problems, and experiences that people sometimes have. Read each item to determine how well it describes your recent feelings and experiences. Then select the option that best describes **how much** you have felt or experienced things this way **during the past two weeks, including today**. Use this scale when answering:

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. I had thoughts of suicide.	1	2	3	4	5
2. I hurt myself purposely.	1	2	3	4	5
3. I thought about my own death.	1	2	3	4	5
4. I thought about hurting myself.	1	2	3	4	5
5. I cut or burned myself on purpose.	1	2	3	4	5
6. I thought that the world would be better off without me.	1	2	3	4	5

Appendix N

Mental Health Inventory

The next set of questions are about how you feel, and how things have been for you during the PAST 4 WEEKS. Please answer every question. If you are not sure which answer to select, please choose the one that comes closest to describing you.

During the PAST 4 WEEKS, how much of the time...

1	2	3	4	5	6
All of the Time	Most of the Time	A Good bit of the Time	Some of the Time	A Little Bit of the Time	None of the Time

1. Did you feel depressed?
2. Have you been a very nervous person?
3. Have you felt tense or high-strung?
4. Have you felt downhearted and blue?
5. Were you able to relax without difficulty?
6. Have you felt restless, fidgety, or impatient?
7. Have you been moody, or brooded about things?
8. Have you been in low or very low spirits?
9. Have you been anxious or worried?

Appendix O

The Eating Pathology Symptoms Inventory (EPSI)- Binge Eating Subscale

0	1	2	3	4
Never	**Rarely**	**Sometimes**	**Often**	**Very Often**

1. I ate when I was not hungry.
2. I snacked throughout the evening without realizing it.
3. I ate until I was uncomfortably full.
4. I did not notice how much I ate until after I had finished eating.
5. If someone offered me food, I felt that I could not resist eating it.
6. I stuffed myself with food to the point of feeling sick.
7. I ate as if I was on auto-pilot.
8. I ate a very large amount of food in a short period of time (e.g., within 2 hours).

Appendix P

Sexual Health Outcomes for Women Questionnaire (SHOW-Q)- Pelvic Pain Subscale

During the past 4 weeks…

(Scale from 1 to 100)

1. To what extent has your bleeding interfered with your normal or regular sexual activity (with or without a partner)?
2. To what extent has your pelvic pain or discomfort interfered with your normal or regular sexual activity (with or without a partner)?
3. To what extent have your pelvic problems overall interfered with your normal or regular sexual activity (with or without a partner)?

Appendix Q

Sexual Risk Survey (SRS)

Instructions: Please read the following statements and record the number that is true for you over the past 6 months for each question on the blank. If you do not know for sure how many times a behavior took place, try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number, especially if the behavior happened fairly regularly. If you've had multiple partners, try to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior. If the question does not apply to you or you have never engaged in the behavior in the question, put a "0" on the blank. Please do not leave items blank. Remember that in the following questions "sex" includes oral, anal, and vaginal sex and that "sexual behavior" includes passionate kissing, making out, fondling, petting, oral-to-anal stimulation, and hand-to-genital stimulation. Refer to the Glossary for any words you are not sure about. Please consider only the last 6 months when answering and please be honest.

In the *past six months*:

1. How many partners have you engaged in sexual behavior with but not had sex with?
2. How many times have you left a social event with someone you just met?
3. How many times have you "hooked up" but not had sex with someone you didn't know or didn't know well?
4. How many times have you gone out to bars/parties/social events with the intent of "hooking up" and engaging in sexual behavior but not having sex with someone?
5. How many times have you gone out to bars/parties/social events with the intent of "hooking up" and having sex with someone?
6. How many times have you had an unexpected and unanticipated sexual experience?
7. How many times have you had a sexual encounter you engaged in willingly but later regretted?

For the next set of questions, follow the same direction as before. However, for questions 8–23, if you have never had sex (oral, anal or vaginal), please put a "0" on each blank.

8.How many partners have you had sex with?

9.How many times have you had vaginal intercourse without a latex or polyurethane condom? Note: Include times when you have used a lambskin or membrane condom.

10.How many times have you had vaginal intercourse without protection against pregnancy?

11.How many times have you given or received fellatio (oral sex on a man) without a condom?

12.How many times have you given or received cunnilingus (oral sex on a woman) without a dental dam or "adequate protection" (please see definition of dental dam for what is considered adequate protection)?

13.How many times have you had anal sex without a condom?

14.How many times have you or your partner engaged in anal penetration by a hand ("fisting") or other object without a latex glove or condom followed by unprotected anal sex?

15.How many times have you given or received analingus (oral stimulation of the anal region, "rimming") without a dental dam or "adequate protection"(please see definition of dental dam for what is considered adequate protection)?

16.How many people have you had sex with that you know but are not involved in any sort of

relationship with (i.e., “friends with benefits”, “fuck buddies”)?
17.How many times have you had sex with someone you don’t know well or just met?
18.How many times have you or your partner used alcohol or drugs before or during sex?
19.How many times have you had sex with a new partner before discussing sexual history, IV drug use, disease status and other current sexual partners?
20.How many times (that you know of) have you had sex with someone who has had many sexual partners?
21.How many partners (that you know of) have you had sex with who had been sexually active before you were with them but had not been tested for STIs/HIV?
22.How many partners have you had sex with that you didn’t trust?
23.How many times (that you know of) have you had sex with someone who was also engaging in sex with others during the same time period?

Appendix R

Sexual and Reproductive Healthcare Behaviors

1. Have you ever had a routine (preventative) physical exam or check-up?

    If yes: When was your last routine (preventative) physical exam or check-up?

2. Have you ever had a gynecological exam?

    If yes: When was your last gynecological exam?

3. Have you ever had a pap test?

    If yes: When was your last pap test?

4. Have you ever been tested for human immunodeficiency virus (HIV) infection?

5. Have you ever been tested for sexually transmitted diseases (STDs)?

Appendix S

Global Health

1. In general, would you say your physical health is:

- □ 1 - Excellent
- □ 2 - Very good
- □ 3 - Good
- □ 4 - Fair
- □ 5 – Poor
- □ 6 – Extremely Poor

2. In general, would you say your mental health is:

- □ 1 - Excellent
- □ 2 - Very good
- □ 3 - Good
- □ 4 - Fair
- □ 5 – Poor
- □ 6 – Extremely Poor

Appendix T

Final Scale Draft

Think about the times you have needed help with a physical or mental health problem.

How much do you agree or disagree that the following experiences or factors made it ***harder*** for you to get physical and/or mental health care or ***less likely*** to seek care throughout your life?

Some questions may not apply to you, so please select 0 if a question does not apply to you.

0 (N/A) 1 (Strongly Disagree) 2 (Disagree) 3 (Somewhat Disagree) 4 (Neither Agree nor Disagree) 5 (Somewhat Agree) 6 (Agree) 7 (Strongly Agree)

Barriers- Weight Stigma

1. A healthcare professional has blamed my health problems on my weight.

2. A healthcare professional has focused more on my weight than the issues I was concerned about.

3. I have been shamed by a healthcare profession due to my weight and/or body shape.

Barriers- General/Environmental

1. I did not have enough money to get the care I needed.

2. My health insurance status prevented me from getting the care I needed.

3. I live in an area with laws and policies that are stigmatizing towards the queer community.

4. My city or town has low acceptance of the queer community.

5. I have not wanted to or have not felt comfortable enough disclose my sexual orientation.

Barriers- Discrimination

1. My healthcare professional did not acknowledge my same-sex partner as my spouse.

2. A healthcare professional referred to my sexuality as a “lifestyle,” “choice,” or “preference.”

3. I have been refused treatment/ healthcare due to my sexual orientation.

4. I was treated poorly by a healthcare professional due to my racial or ethnic identity.

5. I was treated poorly by a healthcare professional because I am masculine presenting.

For the following questions, continue to think about the times you have needed help with a physical or mental health problem.

How much do you agree or disagree that the following experiences or factors made it ***easier*** for you to get physical and/or mental health care or ***more likely*** to seek care throughout your life?

Some questions may not apply to you, so please select 0 if a question does not apply to you.

0 (N/A) 1 (Strongly Disagree) 2 (Disagree) 3 (Somewhat Disagree) 4 (Neither Agree nor Disagree) 5 (Somewhat Agree) 6 (Agree) 7 (Strongly Agree)

Facilitators

1. I have found information online about health professionals that suggests they are accepting/affirming.

2. My healthcare professional(s) show they are queer friendly care on their website or in their physical office.

3. My healthcare professional(s) use inclusive language and ask culturally appropriate questions (for example, asking my partner(s) sex and/or gender identity).

4. I have a healthcare professional who is part of the queer community.

5. I have a healthcare professional who shares at least two of my identities (e.g., gender, sexual orientation, race/ethnicity, body size).

6. My healthcare professional(s) initiates conversations about topics that are important to queer people.

7. I have received referrals for healthcare professionals from other members of the queer community.

VITA

Charlotte A. Dawson
Virginia Consortium Program in Clinical Psychology
Old Dominion University
234 Mills Godwin Life Sciences Building
Norfolk, VA 23529

Education

Ph.D.	Clinical Psychology (*Expected August 2023*) Virginia Consortium Program in Clinical Psychology
M.S.	Experimental Psychology, 2020 Old Dominion University
B.A.	Psychology, Minor: Spanish, 2016 University of Virginia

Selected Publications

Dawson, C. A., Ehlke, S. J., Lewis, R. J., Amerson, R., Braitman, A. L., Shappie, A. T., & Heron, K. E. (2022). A latent class analysis of sexual identity, attraction, and behavior among young sexual-minority women. *Psychology of Sexual Orientation and Gender Diversity.* Advance online publication.

Sandoval, C.M., Romano, K.A., Heron, K.H., **Dawson, C.A.**, Sutton, T.G., Winstead, B.A., & Lewis, R.J. (2021). Associations between body dissatisfaction and relationship functioning among same-sex female couples: An actor-partner interdependence model. *Journal of Family Psychology.*

Macintyre, R. I., Heron, K. E., **Dawson, C. A.**, Filipkowski, K. B., & Arigo, D. (2021). Does Assessment Alter Responses? An Examination of Measurement Reactivity in an Ecological Momentary Assessment of Body Comparisons. *Journal of Social and Clinical Psychology*, *40*(4), 304-332. https://doi.org/10.1521/jscp.2021.40.4.304

Lewis, R. J., Braitman, A.L., Shappie, A. T., **Dawson, C. A.**, & Heron, K. E. (2021). Recruiting same-sex female couples for health disparity-focused daily diary research: challenges, successes, and lessons learned. *Psychology & Sexuality*. https://doi.org/10.1080/19419899.2021.1942177

Ehlke, S. J., Braitman, A. L., **Dawson, C. A.**, Heron, K. E., & Lewis, R. J. (2020). Sexual minority stress and social support explain the association between sexual identity with physical and mental health problems among young lesbian and bisexual women. *Sex Roles, 83*. https://doi.org/10.1007/s11199-019-01117-w