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Development and Validation of the Bisexual Microaggressions Scale

A dissertation
presented to
the faculty of the Department of Psychology
East Tennessee State University

In partial fulfillment
of the requirements for the degree
Doctor of Philosophy in Psychology

by
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August 2017

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ABSTRACT

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by

Emma G. Fredrick

Sexual minorities face stigmatizing experiences which can lead to disparities in physical and mental health, as well as social and economic resources. Additionally, research suggests that microaggressions, or small actions and comments that speak to a person's prejudices, act as stigmatizing experiences and contribute to negative outcomes for the stigmatized. However, most studies of sexual minority health do not explore bisexual experiences uniquely, despite evidence that bisexuals have unique experiences of stigma and microaggressions. Those studies that do explore bisexual experiences find worse outcomes for bisexuals than their lesbian or gay counterparts. Thus, the current study developed a quantitative scale for assessing experiences of microaggressions specific to bisexuals. A 35-item scale formulated around previously identified microaggression types was validated using data from a sample of 232 bisexuals. Results indicated that bisexual microaggressions were distinct from homonegative microaggressions and that bisexual microaggressions were related to worse physical, psychological, and environmental quality of life. This scale is an additional tool that researchers may use in understanding how stigma experiences lead to negative outcomes, as well as to identify opportunities for alleviating disparities.

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CHAPTER 1

INTRODUCTION

Sexual minorities, or those who do not identify as straight, face health disparities (Koh, Piotrowski, Jumanyika, & Fielding, 2011), which occur largely due to stigma (Hatzenbuehler, Phelan, & Link, 2013; Meyer, 2003). The impact of stigma on mental and physical health is often conceptualized as minority stress (Meyer, 2013). Despite the fact that bisexuals make up approximately 5.5% of women and 2.0% of men within the United States (Copen, Chandra, & Febo-Vazeuqz, 2016), little research has focused on this group. The limited research on bisexuals does find significantly worse health outcomes for bisexuals than lesbians or gay men (Herek, 2002; Kertzner, Meyer, Frost, & Stirratt, 2009; Mulick & Wright, 2002). However, in contrast to minority stress theory, research also suggests that both bisexual men and women are less likely to report past-year discrimination than their lesbian or gay counterparts (Bostwick, Boyd, Hughes, & West, 2014), despite both straight and lesbian/gay individuals reporting bias against bisexuals (Mulick & Wright, 2002). One potential reason for this discrepancy is the lack of assessment of microaggressions, or small prejudiced actions and comments, as opposed to large or macro discriminatory events (Balsam, Molina, Beadnell, Simoni, & Walters, 2011). The impact of daily or chronic stress can accumulate over time and be at least as powerful as the stress of major life events (Charles, Piazza, Mogle, Sliwinski, & Almedia, 2013; Lepore, Palsane, & Evans, 1991; Lu, 1994; Serido, Almeida, & Wethington, 2004). While previous research suggests that bisexuals experience unique microaggressions (Bostwick & Hequembourg, 2014; Sarno & Wright, 2013), the relationship between microaggressions and health disparities among bisexuals remains mostly unexplored.

Thus, in the current dissertation, I seek to build on existing measures of bisexual experience (Brewster & Moradi, 2010; Paul, Smith, Mohr, & Ross, 2014) by exploring the unique experience of microaggressions faced by bisexuals. Creating a scale to assess these unique microaggressions will provide a tool for researchers to understand the experiences of bisexuals – a diverse group with deep and nuanced experiences that merit careful exploration through research. By understanding these experiences more deeply, we can more accurately identify points of intervention to decrease bisexual health disparities. Below I outline in more depth the literature grounding this dissertation, focusing first on stigma and its consequences in stigmatized populations, stigma’s unique impact on bisexuals and their health outcomes, microaggressions and their impact on minorities overall, and finally, the limited work that exists on bisexual-specific microaggressions, before discussing the current study.

Stigma and Its Consequences

Historically, stigma has referred to an attribute of a person that is deeply discrediting, without much regard to the social context in which people have stigmatized attributes (Goffman, 1963). However, more recently, stigma has been re-conceptualized to encompass the power structures (both structural and interpersonal) that allow stigma to continue, and within that context has been defined as the co-occurrence of labeling, stereotyping, separation, status loss, and discrimination (Link & Phelan, 2001). By placing stigma in this context, more recent descriptions account for the sociopolitical context of having a stigmatized identity and allow for a more complex understanding of the stigma experience.

In particular, stigma against sexual minorities has been referred to as “sexual stigma” or “the negative regard, inferior status, and relative powerlessness that society collectively accords to any nonheterosexual behavior, identity, relationship, or community” (Herek, 2007, pp. 906-

907). The public form of sexual stigma can manifest in multiple ways. For example, despite the June 26, 2015 ruling by the Supreme Court that same-gender couples can marry, there are twenty-eight states where a person can still lose their job for pursuing such a marriage (American Civil Liberties Union [ACLU], 2016). Additionally, this stigma can occur on an interpersonal level. For example, several studies have found heterosexuals hold negative attitudes toward lesbians, gay men, and bisexuals, as well as finding that some non-heterosexual individuals' hold internalized negative attitudes towards their sexual orientation and negative attitudes toward other sexual minority groups (Breen & Karpinski, 2013; Chonody, Siebert, & Rutledge, 2009; Herek, 2002; Herek & Capitanio, 1996; Mulick & Wright, 2002; Rutledge, Siebert, Siebert, & Chonody, 2011).

The effect that this stigma has on sexual minorities has been described in terms of minority stress, or the psychological stress that comes from having a minority identity (Meyer, 2003). Using minority status and circumstances in the environment (e.g., sociocultural position, public policy) as catalysts, Meyer outlines two main types of stigma processes. First, minority status can lead to *distal minority stress processes*, described as *enacted stigma*, a public stigma based on the perception that one is a minority. Second, minority status can lead to what Meyer refers to as *proximal minority stress processes*, which include expectations of rejection (*anticipated stigma*), concealment of minority identity, and internalized stigma related to one's minority identity. Importantly, Meyer theorizes that one's minority identity can impact one's psychosocial resources, including coping abilities and social support. Meyer describes both community level support (e.g., structured support related to one's minority identity) and individual level support (e.g., interpersonal relationships). In return, these psychosocial resources

can impact the relationship between the distal and proximal stressors and mental and physical health outcomes.

These various forms of stigma can be life stressors that lead to negative physical and mental health outcomes for the stigmatized (Chaudoir, Earnshaw, & Andel, 2013; Fredriksen-Goldsen et al., 2014; Frost, 2011; Hatzenbuehler, 2009; Meyer, 2003). The research on the mental health of sexual minorities suggests that both public and internalized stigma predict psychological distress in this population. For example, in a sample 741 gay men living in New York City, minority stress components were significantly related to psychological distress (Meyer, 1995). Furthermore, a meta-analysis of existing literature found that lesbian, gay, and bisexual (LGB) individuals are 2.5 times more likely to have had a mental disorder in their lifetime and are at a higher risk for suicidal ideation and attempts than heterosexual individuals, starting as early as high school (Meyer, 2003). Similarly, a study of 200 sexual minority men found that experiences of stigma and concealment of identity were related to major depressive symptomology (Bruce, Harper, & Bauermeister, 2015). Additionally, a study of 474 LGB adults found that perceived discrimination was associated with worse mental and physical health and that the impact of perceived discrimination on mental health was indirect through internalization of sexual stigma (Walch, Ngamake, Bovornusvakool, & Walker, 2016). In line with this, a study of 218 lesbians and 249 gay men found that discrimination experiences were related to symptoms of depression and social anxiety and this relationship was partially mediated through internalized sexual stigma (Feinstein, Goldfried, & Davila, 2012).

In addition to mental health, physical health can also be greatly impacted by experiences of stigma. Across stigmatized identities, Frost (2011) and Major and O'Brien (2005) have outlined several negative health outcomes of stigma-related stressors, including poorer physical

health, such as decreased access to and quality of medical care, increased infant mortality, and increased risk behaviors - such as risky sexual behavior and smoking - than those who are not stigmatized. For these reasons, Hatzenbuehler et al. (2013) consider stigma as a fundamental cause of health disparities. In one striking example, Hatzenbuehler and colleagues (2014) used data from the General Social Survey to construct community-wide levels of anti-gay prejudice and explored how this prejudice impacts health across communities. Using a Cox proportional hazard model, they found that sexual minorities who live in areas with high stigma die, on average, twelve years earlier than sexual minorities living in low stigma areas. Death due to suicide, homicide, and cardiovascular disease were significantly higher among sexual minorities living in the high stigma areas.

Beyond health, stigma can also impact social and economic resources. Above and beyond health care resources, stigma can impact one's social status and income and can reduce access to quality housing, jobs, and education (Frost, 2011; Major & O'Brien, 2005). Additionally, stigma can lead to worse performance and satisfaction in the classroom and the workplace (Frost, 2011; Major & O'Brien, 2005). Further, experiences of stigma can decrease reported relationship quality and feelings of safety and acceptance (Frost, 2011; Major & O'Brien, 2005; Meyer, Ouellette, Haile, & McFarlane, 2011). This lack of social resource can then increase the health consequences of stigma (Chaudoir et al., 2013; Fredriksen-Goldsen et al., 2014; Hatzenbuehler, 2009; Meyer, 2003).

Bisexual Specific Experiences of Stigma and Health

However, few studies have explored the stigma experiences and health of bisexuals. While often bisexuals are removed from samples or are collapsed with lesbian and gay samples (to see some of the most recent examples see Brewster, Velez, Foster, Esposito, & Robinson,

2016 and Ngamake, Walch, & Raveepatarakul, 2016), there is evidence that their stigma experiences vary from those of other sexual minorities. In part, the attitudes that are held about bisexual individuals are often more negative than attitudes about other sexual minorities. Studies have found that both straight and gay/lesbian individuals' attitudes are more negative toward bisexuals than towards lesbians or gay men (Herek, 2002; Mulick & Wright, 2002). Indeed, preliminary data confirm that attitudes toward bisexuals ($M=2.41$) are more negative than attitudes toward gay men ($M=2.26$) and lesbians ($M=1.98$) across all sexualities (all multiple comparisons significant $p<.001$; Fredrick & Williams, 2013). Additionally, bisexuals experience unique microaggressions, which uniquely add to their experiences of stigma (Bostwick & Hequembourg, 2014; Sarno & Wright, 2013).

For bisexuals, this double discrimination and these unique microaggressions can lead to more severe negative outcomes in several aspects of life – including mental and physical health and social and economic resources. With regards to mental health, analysis of data from the 2004-2005 National Epidemiologic Survey of Alcohol and Related Conditions (NESARC) found that bisexuals report higher rates of past-year mental health issues than lesbians or gay men (Bostwick et al., 2014). Further, a national phone survey of 9,872 French adults found that bisexual men and women have higher rates of both chronic and recent depression than lesbians and gay men (Lhomond, Saural-Cubizolles, & Michaels, 2014). Public and internalized negativity towards bisexuals has been found to be associated with both higher depressive symptomology and alcohol misuse in a sample of 470 bisexual women (Molina et al., 2015) and higher depressive symptomology and lower self-esteem in a sample of 203 bisexual women (Lambe, Cerezo, & O'Shaughnessy, 2017). Additionally, bisexuals in a racially diverse sample of 396 LGB adults in the U.S. reported being less out about their sexual orientation to their

family, friends, and co-workers than their lesbian or gay counterparts, which was related to poorer psychological well-being at a follow up one year later (Durso & Meyer, 2013).

Additionally, Lea, de Wit, and Reynolds (2014) found that suicidality was predicted by internalized and public stigma in an online study of 572 Australian young adults who reported some level of same-sex attraction. Within this study, they found that bisexual men reported higher internalized stigma than other sexual minority groups. Similarly, a study of 139 bisexual women and 227 lesbian women found that bisexual women scored significantly higher on the Center for Epidemiologic Studies Depression Scale (Bostwick, Hughes, & Everett, 2015), and analysis of data from the National Longitudinal Study of Adolescent Health found that bisexual young adults reported significantly higher depression than heterosexuals, but lesbians and gay men did not (Li, Pollitt, & Russell, 2016). Likewise, Shearer and colleagues (2016) found that bisexual girls and women (ages 14-24) reported the highest levels of current suicidal intention of all participant groups.

With regards to physical health, in a study of 1,531 LGB adults over the age of 50 using data from the 2003-2010 Washington State Behavioral Risk Factor Surveillance System, bisexuals reported higher rates of diabetes than other sexual minorities (Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013). Bisexual men also reported lower levels of HIV testing than gay men in the same study (Fredriksen-Goldsen et al., 2013). Additionally, bisexual women who completed the American College Health Association's National College Health Assessment-II (ACHA-NCHA-II) reported being less likely to use condoms for vaginal intercourse than heterosexuals and were more likely to have anal intercourse – which carries a greater risk for transmission of sexually transmitted infections than vaginal intercourse given that anal tissue is more prone to tearing and abrasions – than heterosexuals or lesbians (Kerr, Ding, &

Thompson, 2013). Durso and Meyer (2013) found that bisexuals are less out about their sexual orientation than other sexual minorities to their health care providers in a sample of 396 racially diverse self-identified LGB adults, which likely has implications for the quality of care they receive (Johnson & Nemeth, 2014). Further, bisexual college students report higher use of alcohol, tobacco, and other drugs than other sexual minorities, particularly bisexual women, based on data from the ACHA-NCHA-II (Kerr, Ding, & Chaya, 2014). Similarly, bisexual youth reported higher use of several illicit drugs, including cocaine and inhalants, than lesbian, gay, or heterosexual youth based on data from the 2005 and 2007 Youth Risk Behavior Survey (Newcomb, Birkett, Corliss, & Mutanski, 2014).

Bisexuals also report lower levels of both social and economic resources. For instance, bisexuals reported lower levels of general social well-being than lesbians or gay men in a community sample of 396 LGB adults (Kertzner et al., 2009). Additionally, bisexuals reported lower income than lesbians, gay men, and heterosexuals, particularly bisexual women, in a sample of 577 LGB adults from a national survey (Bostwick et al., 2014). Further, bisexuals were more likely to have been a victim of a crime, particularly sexual assault and assaults within the home, in a sample of 4,449 sexual minorities who completed the British Crime Survey any time between 2007 and 2010 (Mahoney, Davies, & Scurlock-Evans, 2014). Bisexuals were also more likely to face housing adversity and intimate partner violence than lesbians or gay men, as reported by 522 LGB young adults in the National Longitudinal Study of Adolescent Health, Wave 3 (McLaughlin, Hatzenbuehler, Xuan, & Conron, 2012). Bisexual college students also reported more threats to academic performance than lesbian or gay students based on data from the ACHA-NCHA II (Klein & Dudley, 2014).

Microaggressions

One specific incarnation of stigma that may impact sexual minority health is microaggressions, which are brief, everyday slights or indignities that can take verbal, behavioral, or environmental forms (Sue et al., 2007). While microaggressions can be unconscious acts by a perpetrator where they are unaware of the potential harm of their actions or statements (Platt & Lenzen, 2013; Sue et al., 2007), they can have a psychological impact on those on the receiving end (Platt & Lenzen, 2013). Microaggressions can take three distinct forms: (1) microassault, or explicit belittlement through name-calling, avoidant behavior, or purposeful discriminatory actions – such as displaying derogatory signs; (2) microinsult, or rude or insensitive communication that demeans the recipient; and (3) microinvalidation, or exclusion or negation of a person’s psychological or physical reality (Sue et al., 2007).

The exploration of microaggressions is an important gap in the minority stress literature. These everyday aggressions build up over time much in the same way as more overt stigma, and thus they should affect outcomes for those experiencing these microaggressions much in the same way that overt stigma does, thus acting as a type of distal stressor. As you will see below, there is evidence in the literature that microaggressions do impact the social and emotional resources and mental and physical health of the target.

While there is perceived minimal harm from microaggressions, all three types of microaggressions can have negative impacts on multiple areas of life, similar to more macro-level forms of stigma (Sue et al., 2007). For example, Black university students reported that racial microaggressions were related to anxiety symptoms (Liao, Weng, & West, 2016). A study of young adults of color found that racial microaggressions were related to suicidal ideation, with the relationship mediated by depressive symptomology (O’Keefe, Wingate, Cole, Hollingsworth,

& Tucker, 2015), and a study of Asian-Americans found that racial microaggressions predicted general mental health problems (Nadal, Wong, Sriken, Griffin, & Fujii-Doe, 2015). Further, racial microaggressions negatively predicted mental health and were correlated with depressive symptoms and negative affect in a sample of 506 people of color (Nadal, Griffin, Wong, Hamit, & Rasmus, 2014). Similarly, racial microaggressions were related to more somatic symptoms and negative affect in Asian-Americans (Ong, Burrow, Fuller-Rowell, Ja, & Sue, 2013), and a study of Latino and Asian American adolescents found that microaggressions were related to increased anxiety, anger, and stress (Huynh, 2012). In a study of students of color at a largely White university, microaggressions were related to high anxiety and binge drinking (Blume, Lovato, Thyken, & Denny, 2012).

Outside of mental health, racial microaggressions have been associated with poorer academic and social outcomes. Racial microaggressions were associated with lower academic self-efficacy in 409 undergraduate students of color (Forrest-Bank & Jenson, 2015) and lower self-esteem in another sample of 225 undergraduate students (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014). Additionally, a study in India of Northeasterners (who have different customs and appearances) residing in Delhi (located in central India) found that microaggressions impacted the social well-being of the Northeasterners (Sohi & Singh, 2015).

Outside of race/ethnicity, there is some evidence for similar impacts of microaggressions. For example, a qualitative study of participants diagnosed with a mental illness showed that microaggressions were related to isolation, negative emotions, and treatment nonadherence (Gonzales, Davidoff, Nadal, & Yanos, 2015). In a review of peer-reviewed academic articles and popular media news reports, Kaskan and Ho (2016) describe microaggressions against female athletes (including sexual objectification and perceived inferiority) and the potential

consequences of these experiences (including decreased athletic ability and eating disorders); however, these are proposed consequences based on existing literature. In a study of gender microaggressions, undergraduate students reading vignettes of workplace microaggressions by male supervisors (such as a male supervisor asking a female employee who helped them with their presentation or commenting on their clothing) reported an expectation of decreased work productivity when these microaggressions were more explicit (Basford, Offermann, & Behrend, 2014). Additionally, perceived microaggressions against women in psychotherapy (such as inappropriate gazing or assumptions about diagnosis) were negatively related to positive therapy outcomes and having a working alliance with the therapist (Owen, Tao, & Rodolfa, 2010).

Limited work has been conducted specifically with sexual orientation-based microaggressions (for a thorough review see Nadal, Whitman, Davis, Erazo, & Davidoff, 2016). But this limited work has evidenced negative impacts of microaggressions for LGB individuals. For example, a qualitative study of 26 undergraduate sexual minorities showed that microaggressions (such as being called derogatory names or hearing “jokes” about how all gay people have AIDS) resulted in verbal confrontations, feelings of being physically unsafe, feeling the need to conform to other’s expectations, negative emotions (e.g., frustration, anger, sadness, and shame), and specific mental health problems such as depression and anxiety (Nadal, Wong, et al., 2011). Additionally, an online study aimed at creating a homonegative microaggression scale found that homonegative microaggressions (such as people changing the topic when you bring up your sexual orientation or people of the same sex assuming you are attracted to them because of your identity) were related to lower self-esteem in 120 LGB adults (Wright & Wegner, 2012). While this study includes some compelling empirical evidence, the sample was largely homogenous and had very few bisexuals. Using the scale created by Wright and Wegner

(2012), an online study found that the experience of homonegative microaggressions was related to more reported posttraumatic stress symptomology in 90 sexual minorities (Robinson & Rubin, 2016). While this sample was more diverse and had a larger percentage of bisexual participants, the smaller sample size of only 90 sexual minorities did not allow for an exploration of differentiation in experience by sexual orientation.

Bisexual Microaggressions

Prior work suggests that bisexuals encounter specific types of microaggressions not faced by other sexual minorities. Sarno and Wright (2013) found that bisexuals more often reported more identity confusion and feeling like an “alien in own land” (i.e., feeling that they are assumed to be straight by lesbian or gay individuals). In a qualitative focus group of microaggressions experienced by lesbian, gay, and bisexual individuals, bisexual participants reported assumptions that they were gay or lesbian and invalidation of identity in line with the “alien in own land” framework, as well as exoticization related to their attractions (Nadal, Issa, et al., 2011). Similarly, McClelland, Rubin, and Bauermeister (2016) conducted interviews with 13 young bisexual women and found four categories of microaggression reactions from friends and families upon coming out as bisexual: disgust, discomfort, titillation, and ambivalent tolerance. Bostwick and Hequembourg (2014) completed a thorough qualitative analysis of focus group data and found seven types of microaggressions that are unique to bisexuals: hostility; denial/dismissal; unintelligibility; pressure to change; lesbian, gay, bisexual, and transgender (LGBT) legitimacy; dating exclusion; and hypersexuality.

Hostility. Participants in the study reported experiencing slights or insults that disparaged bisexuality specifically. These participants made sure to note that these experiences were not targeted at non-heterosexuality or broader sexual minority categories, but specifically targeted

bisexuality. Bostwick and Hequembourg (2014) described experiences of bisexual participants being told by their friends that something was wrong with them because of their orientation and receiving boos and hisses from lesbian and gay individuals at a gay pride parade. One participant described the larger LGBT community as a “minefield” for bisexuals. These hostile experiences are the most similar to macro-aggressions, can occur in LGBT spaces as well as in the general public, and can take the form of negative comments, physical intimidation, or aggressive sounds or gestures.

Denial/dismissal. Another microaggression specific to bisexuality is the constant denial of bisexuality or questioning of the validity of bisexuality as a sexual orientation. Participants described friends not believing them about their identity and reading same-sex relationships as an indication that the participant was now gay or lesbian (thus invalidating their bisexual identity). These experiences were described as being perpetrated by both straight people and lesbian/gay people. Bisexuals may be told their identity is not a real identity, that they are confused about their sexuality, or that bisexuality is “just a phase”.

Unintelligibility. Somewhat similarly, participants reported that there was a general unintelligibility that seemed to exist around their identity. Participants described how others could not seem to comprehend their identity, particularly in the context of relationships where the belief seems to be that if you are in a same-sex relationship you are gay/lesbian and if you are in a different-sex relationship you are straight. The need to consistently explain or “prove” one’s identity was identified as a stressor to the self and in relationships by the participants. Individuals facing unintelligibility microaggressions may feel that they are misunderstood and must present a tally of their past relationships in order to prove to others that they are actually bisexual.

Pressure to change. Participants also reported that their romantic partners would sometimes pressure them to change the way they identify to “align” with the current relationship. For example, one participant indicated that initially their same-sex partner seemed fine with their bisexual identity; however, after the relationship had become established, there was pressure to identify as lesbian/gay. Another participant discussed how she had potential partners tell her they would not date her unless she identified herself as a lesbian, rather than as bisexual.

LGBT legitimacy. Additionally, participants often felt that they were set apart from others in the LGBT community, feeling excluded or unwanted. They described feeling “not gay enough” in their interactions and identity to be included and that they had to prove their commitment to the community and their identity. One participant described the need to come across as a “good bisexual” (i.e., one that does not live up to stereotypes) in order to be accepted into the community. The feeling that one does not belong to the LGBT community can provide a source of stress and can contribute to a lack of adequate social resources.

Dating exclusion. With regards to the potential to form romantic relationships, participants described feeling there were people who would not date them because of their sexuality. Female participants mentioned lesbian women and straight men who had expressed a disinterest in them because of their bisexuality. Additionally, some participants noted that they had seen dating website profiles where people specifically said they were uninterested in dating bisexual people. Potential romantic partners may hold stereotypes about bisexuality, and thus not wish to “compete with both men and women” for their partners’ attention.

Hypersexuality. Bostwick and Hequembourg (2014) believe the hypersexuality microaggression may be a potential reason for the dating exclusion microaggression. Participants described how they have had people assume that since they are bisexual they cannot be

monogamous and therefore cannot form meaningful relationships. Additionally, participants noted that they have been called promiscuous because of their sexuality, despite their sexual histories. One participant noted that even people who are generally supportive of bisexuality tend to believe that bisexuals are indiscriminate in their sexual choices and will have sex with anyone.

Existing measures. The existing literature on bisexual microaggressions is limited, particularly with regards to quantitative measurement. For example, a study of biphobia and anxiety in Canada found that biphobia had little impact on anxiety; however, the authors indicated that the scale they used may not accurately capture all aspects of biphobia and that additional measures are needed specific to bisexual experience, including LGBT legitimacy and inclusion in LGBT spaces (MacLeod, Bauer, Robinson, MacKay, & Ross, 2015). In particular, this study used the *Anti-Bisexual Experiences Scale* (Brewster & Moradi, 2010), which assesses: (1) sexual orientation instability, (2) sexual irresponsibility, and (3) interpersonal hostility. As such, this scale touches on some microaggression experiences (particularly hostility, denial/dismissal, and hypersexuality), but does not account for all microaggressions (such as LGBT legitimacy, pressure to change, or dating exclusion). Finally, the *Bisexual Identity Inventory* (Paul et al., 2014) examines bisexual experience; however, this scale addresses more macro-level experiences and identity, rather than microaggressions, and thus was not included in this dissertation.

In summary, the existing literature, when exploring bisexual experience, largely focuses on macroaggressions. While there has been theorizing regarding bisexual microaggressions, the empirical exploration of these microaggressions and how they impact health disparities is limited. In part, this may be due to the lack of empirical tools with which to study these experiences. Thus, it is crucial to help develop such tools. The previously described

microaggressions are components of stigma and thus impact social, economic, and health disparities of bisexual individuals. As we see above, bisexuals report worse mental and physical health outcomes than lesbian or gay individuals, as well as lower social and economic resources. However, *why* this is occurring has not been explored. In particular, it is crucial to look to microaggressions as they occur on a more regular basis and can create a cumulative experience of minority stress (Balsam et al., 2011; Platt & Lenzen, 2013; Sue et al., 2007).

Current Study

The lack of explicit assessment of microaggressions may explain why bisexuals report experiencing fewer discrimination events (Bostwick et al., 2014) but still report worse health outcomes, as described above. Indeed, McClelland and colleagues (2016) found that young bisexual women reported not having experienced discrimination in an interview, while simultaneously describing microaggression experiences related to their sexuality. Therefore, it is important that microaggressions be explored as uniquely impacting the bisexual experience of minority stress and that there are adequate measures to study these experiences. This dissertation developed and validated a microaggressions scale for bisexuals that maps onto the types of microaggressions outlined by Bostwick and Hequembourg (2014). Scale development was completed using focus groups of bisexual individuals to examine clarity and reliability of scale items, as well as examination of the scale by an expert in the field. Scale validation was completed using a multipronged online data collection approach. It was hypothesized that: (1) bisexuals would score significantly higher on the scale than lesbian/gay or straight individuals, (2) the scale would not be significantly related to measures of neuroticism, (3) the scale would be significantly related to homonegative microaggressions, but not at a level indicative of convergence, (4) the scale would be significantly related to previous measures of bisexual stigma

experiences at a level indicative of convergence, and (5) the scale would predict quality of life above and beyond the existing measure of bisexual stigma experiences. Such a scale could be used to better understand the role of microaggressions in bisexuals' experience of minority stress and the avenues from stigma to health disparities.

CHAPTER 2

STUDY 1: SCALE DEVELOPMENT

The goal of Study 1 was to develop the Bisexual Microaggressions Scale to be validated in Study 2. Following initial development of the items based on previous literature, scale items were presented to bisexual participants in focus groups to assess items for clarity and reliability. Additionally, an expert in the field reviewed the scale for content validity. Final changes were made to the scale based on the feedback from the bisexual focus group participants, as well as the expert's review, prior to Study 2.

Method

Participants

Following the initial development of scale items based on previous literature, four focus groups, each with three bisexual individuals, met to discuss the scale items. Two focus groups were conducted in person with individuals in the local area. In order to gather diversity in location, lived experiences, and available support and resources, two focus groups were conducted online with individuals from outside of the local area. Local focus groups were advertised using physical flyers on the campus of a southeastern university and in the local businesses, as well as in Facebook groups for local LGBT support groups. Online focus groups were advertised on Facebook in various LGBT support groups, as well as through emails sent to LGBT organizers. Participants in the in-person focus groups were given \$20 in cash in exchange for their participation, and participants in the online focus groups were given a \$20 Amazon e-gift card in exchange for their participation.

The mean age of the 12 participants in the focus groups was 27.92 ($SD=7.55$, range=18-42). Eight of the participants were White (66.67%), three were bi-racial (25%), and one was

Black (8.33%). Four participants identified as men (33.33%; one of those four identified as transgender), seven participants identified as women (58.33%), and one participant identified their gender as non-binary (8.33%). While all participants identified as bisexual, only six of the participants identified their sexual orientation as only bisexual (50%; three participants stated they also identified as queer, one also identified as pansexual, one also identified as pansexual and queer, one also identified as straight, and one also identified as gay/lesbian). Most of the participants ($n=10$; 83.33%) had at least some college education; however, the largest subgroup ($n=5$; 41.67%) had some college education, but no degree. There was variation in terms of self-identified rurality (3 urban, 5 suburban, and 5 rural) with less variation in self-identified socioeconomic status (7 low income, 2 low-middle income, 2 middle income, and 1 upper-middle income).

Procedure

Original scale items were developed by the primary researcher based on the seven types of microaggressions identified by Bostwick and Hequembourg (2014). Five items were developed for each of the seven microaggression types in an attempt to capture each unique experience discussed in their qualitative analysis, resulting in creating a 35-item scale with seven sections. These items were reviewed by a research assistant for grammar and clarity. See Appendix A for the initial version of the scale.

Following this, the focus groups were held in order to have bisexual individuals evaluate the scale for clarity and relatability. The size and number of focus groups was based on recommendations regarding focus group methodology (Bender & Ewbank, 1994; Millward, 2012). All focus group audio was recorded using a handheld recorder for later verbatim

transcription. Additionally, the primary researcher and a research assistant took notes throughout the focus groups to assist in identifying comments during review of transcripts.

Participants were first given the informed consent document (either in person or electronically) and then were given a brief demographic survey. In-person participants completed their surveys on paper and online participants completed their surveys electronically using SurveyMonkey. In-person participants were then given the original scale and asked to rate each item for clarity (1=*not at all clear*, 2=*somewhat clear*, 3=*neutral*, 4=*mostly clear*, 5=*totally clear*). Participants were then asked to discuss clarity issues section by section. Once all clarity issues had been discussed, participants were given the scale again and asked to rate each item for relatability (1=*has not happened to me or anyone that I know*, 2=*has happened to someone that I know*, 3=*has happened to me, but only once*, 4=*has happened to me on a few occasions*, and 5=*has happened to me a lot*). Participants were then asked to discuss relatability issues section by section. Once all relatability issues had been discussed, participants were asked if there were experiences they have had because they are bisexual that they felt were not captured in the existing scale items.

Online participants were presented with the scale twice electronically prior to the focus group. They were emailed a link to the scale items an hour before the focus group time and asked to complete the online survey prior to joining the online focus group. Once participants completed the online survey where they were asked to rate each item on clarity and relatability, they joined the focus group. The online focus groups were held using Zoom online conference software. Participants were able to call in or join using a smart phone or web browser, and they were able to choose to join with or without video. Half of participants joined with audio only and half with audio and video. Participants were asked to first discuss clarity issues, section by

section with each item read to them aloud, and then were asked to discuss relatability issues. Once all relatability issues had been discussed, participants were asked if there were experiences they have had because they are bisexual that were not captured in the scale items. Following the focus groups, the primary investigator and one undergraduate research assistant transcribed the focus groups and data from the demographics and ratings were entered into SPSS.

Analysis Plan

For both clarity and relatability, mean scores were calculated and examined to identify issues within the scale. Then, transcripts of the focus groups were reviewed for repeated issues in clarity or relatability that occurred across focus groups, such as suggestions regarding wording changes that would make items more clear for participations. Additionally, the transcripts were reviewed for experiences related to bisexuality that were not captured within the original scale. After making changes to the scale based on feedback from the focus groups, the scale was examined by an expert in bisexual microaggressions and final changes to the scale were made.

Results

Clarity

Mean clarity scores were calculated in order to identify any problematic survey items. All items scored at least an average of 4.5, indicating the item scored between “mostly clear” and “totally clear”, with the majority of items receiving an average of 5.0. Despite the relatively high clarity ratings, participants suggested changes to both the instructions for the scale and some of the scale items based on discussions in the focus groups. With regard to instructions, they were changed to explicitly state that participants should consider both in person and online experiences when responding to scale items and a note was added to explain what is meant by “LGBT community”. Throughout the survey, some item wording was identified as potentially

confusing by the participants, and changes were suggested. The following changes were made based on feedback from the focus group participants: (1) questions that ask about hostility and threat were changed to specify both verbal and physical hostility, (2) “intimate relationships” was changed to “romantic relationships”, (3) “People have attempted to get me to change the way I talk about my sexual orientation” was changed to “People have attempted to influence the way I talk about my sexual orientation”, (4) “potential romantic partners” was changed to “someone that I was interested in romantically”, (5) “I have been told I probably have STDs” was changed to “I have been told I am more likely to have STDs”, and (6) “People have told me I cannot have monogamous relationships” was changed to “People have told me that I am incapable of having monogamous relationships”.

Relatability

In terms of relatability, there was more variance in participant responses and mean scores than with clarity. Mean scores ranged from 1.42 to 4.17 for relatability. All but seven items received ratings that spanned the full range (with all other items spanning 4 of the 5 available responses), indicating a wide range in personal experience. Additionally, multiple participants indicated in the focus group discussion that even if the experiences had not happened to them or someone that they personally knew, they knew of similar experiences happening to people who are bisexual. Additionally, they indicated that all items seemed important to bisexual experiences and should not be excluded. Further, no additional items were added based on responses to the question “Are there additional experiences you have had as a bisexual that you feel were not captured in the scale?”, as any identified experiences were not specific to bisexuals (e.g., religious hostility, being called an abomination) or were not specific to microaggressions (e.g., changes in how someone identifies over time).

Face and Content Validity

Following the updates to the scale based on the focus group, the scale was sent to Dr. Amy Hequembourg, one of the researchers who originally identified the seven unique types of bisexual microaggressions. Dr. Hequembourg reviewed the scale and consulted via phone with the primary investigator. No gaps in the experiences covered by the items were identified, and no significant changes were suggested. However, it was suggested that items be reworded to specifically mention “because I’m bisexual” and “because of my bisexuality”, rather than “because of my sexual orientation”. These changes to the wording were made prior to the implementation of Study 2. To see the fully updated version of the scale items and instructions based on feedback from the focus groups and the expert, please see Table 1. Additionally, it was suggested that the items be randomly sorted so that questions about one type of microaggression were not necessarily in order. The order of the items was randomized using Excel. See Appendix B for final scale as presented to participants in Study 2.

Table 1.

Initial Scale Items and Updated Scale Items

Original Item	Updated Item
Instructions: Please rate the following in terms of relatability – is this something you have experienced or that someone you know has experienced?	Instructions: Please read the following statements thinking about your personal experiences and the experiences of those that you know who have the same sexual orientation as you. Respond to each statement using the following scale. Please consider both in person and online experiences. <i>Note: Some of the following questions ask about your experiences with lesbian, gay, bisexual, and transgender (LGBT) spaces and communities. These are defined broadly to include any LGBT-orientated space or community, including but not limited to bars, gay-straight alliances, support groups, community centers, pride events, and online forums.</i>

Original Item	Updated Item
I have experienced hostility from others because of my sexual orientation.	I have experienced verbal or physical hostility from others because I'm bisexual
I have been told something is wrong with me because of my sexual orientation.	I have been told something is wrong with me because I'm bisexual.
People have yelled negative things at me because of my sexual orientation.	People have yelled negative things at me because I'm bisexual.
I have felt threatened by gay or lesbian people because of my sexual orientation.	I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.
I have felt threatened by straight people because of my sexual orientation.	I have felt physically or verbally threatened by straight people because I'm bisexual.
I have been told my sexual orientation is not real.	I have been told my bisexuality is not real.
I have been told my sexual orientation is just a phase.	I have been told my bisexuality is just a phase.
People have questioned if my sexual orientation is legitimate.	People have questioned if my bisexuality is legitimate.
I have been told to make up my mind with regards to my sexual orientation.	I have been told to make up my mind with regards to being bisexual.
I have been told I am wrong about my sexual orientation or that I am just confused.	I have been told I am wrong about being bisexual or that I am just confused.
I have found that people don't really understand my sexual orientation.	I have found that people don't really understand my bisexuality.
I have found myself having to explain or defend my sexual orientation.	I have found myself having to explain or defend my bisexuality.
People have made incorrect assumptions about my sexual orientation based on my relationship(s).	People have made incorrect assumptions about my sexual orientation based on my relationship(s).
I have been told that my sexuality isn't legitimate because of my relationship history.	I have been told that my bisexuality isn't legitimate because of my relationship history.
I have had to actively work to make sure my sexual orientation is recognized within my intimate relationships.	I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.

Original Item	Updated Item
In relationships, my partners have told me they wished I would use different labels for my sexual orientation.	In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
I have been told to use labels for my sexual orientation that align with my current relationship(s).	I have been told to use labels for my sexual orientation that align with my current relationship(s).
A current or past partner has become uncomfortable when I tell other people about my sexual orientation.	A current or past partner has become uncomfortable when I tell other people about my bisexuality.
People have attempted to get me to change the way that I talk about my sexual orientation.	People have attempted to influence the way that I talk about my sexual orientation.
I have been pressured to use labels for my sexual orientation that are not in line with how I identify.	I have been pressured to use labels for my sexual orientation that are not in line with how I identify.
LGBT spaces or events have not been welcoming for me because of my sexual orientation.	LGBT spaces or events have not been welcoming for me because of my bisexuality.
The LGBT community has ignored issues related to my sexual orientation.	The LGBT community has ignored issues related to bisexuality.
The LGBT community has viewed me as not “gay enough” because of my sexual orientation.	The LGBT community has viewed me as not “gay enough” because of I’m bisexual.
I have had to prove that I don’t live up to stereotypes about my sexual orientation in order to be accepted into the LGBT community.	I have had to prove that I don’t live up to stereotypes about bisexuality in order to be accepted into the LGBT community.
I have had to prove my relationship history in order to be accepted in LGBT spaces.	I have had to prove my relationship history in order to be accepted in LGBT spaces.
I have had friends tell me they could never date someone of my sexual orientation.	I have had friends tell me they could never date someone who is bisexual.
I have seen online dating profiles that mention they would not date someone of my sexual orientation.	I have seen online dating profiles that mention they would not date someone who is bisexual.
I have had potential romantic partners tell me they won’t date me because of my sexual orientation.	I have had someone that I was interested in romantically tell me they won’t date me because I’m bisexual.

Original Item	Updated Item
I have avoided telling someone about my sexual orientation because I was afraid they would no longer want to date me.	I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.
I have been told by people that they couldn't date someone of my sexual orientation because they would get too jealous.	I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.
People have thought that I am promiscuous or will sleep with anybody because of my sexual orientation.	People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.
I have been told I probably have STDs because of my sexual orientation.	I have been told I am more likely to have STDs because I'm bisexual.
People have believed that I cannot have monogamous relationships because of my sexual orientation.	People have told me that I am incapable of having monogamous relationships because I'm bisexual.
Potential partners have assumed that I am sexually adventurous because of my sexual orientation.	Potential partners have assumed that I am sexually adventurous because I'm bisexual.
I have been referred to as greedy because of my sexual orientation.	I have been referred to as greedy because of I'm bisexual.

CHAPTER 3

STUDY 2: SCALE VALIDATION

Study 2 aimed to validate the Bisexual Microaggressions Scale developed in Study 1. Participants were recruited online using multiple advertising strategies. The online data were gathered in order to assess the scale's relationship to preexisting measures and specifically to examine discriminant, convergent, and predictive validity. Additionally, bisexual participants' responses to the scale were compared to lesbian/gay and straight participants' responses in order to show that the scale captured experiences unique to bisexual individuals.

Method

Participants

Following scale development, scale scores were validated using data from an online sample of bisexuals and non-bisexuals. Previous work has suggested four sampling strategies, that when combined with a clear conceptual definition of each study-specific population, could aid in improving the quality of the sample: (1) sampling in population-specific venues, (2) time-space sampling, (3) respondent-driven sampling, and (4) web based sampling (Meyer & Wilson, 2009). I chose online sampling in order to access a more diverse population and to reach the bisexual community, which is often underrepresented in research (Hartman, 2011). Participants were recruited through Amazon Mechanical Turk and targeted social media (i.e., Facebook, Twitter, Tumblr) recruitment, as well as emailing over 500 LGBTQ+ organizations.

Adults aged 18 or older were recruited to participate in the study, regardless of self-identified sexual orientation. Recruitment was not limited to bisexuals because the non-bisexual subsamples were used to test for content validity. While 1,435 individuals started the survey, only those who completed the necessary items and who correctly responded to attention check

questions placed throughout the survey were included in analysis. Of the 836 participants who were included, 27.8% were bisexual, 12.9% were lesbian/gay, 35.5% were straight, 6.8% were pansexual, 4.5% were asexual, 10.5% were queer, and 1.9% identified as another identity not listed. For the purpose of this study, only bisexual ($n=232$), lesbian/gay ($n=108$), and straight ($n=295$) participants were included in analyses. Of these 635 final participants, 53.2% identified as women, 40.9% identified as men, 3.3% identified as genderqueer, and 1.6% identified as another gender not listed. Additionally, 10.1% of participants said they identified as transgender or gender non-conforming (TGNC) in some way. Participant age ranged from 18 to 73, with a mean age of 30.57 ($SD=10.42$). The majority of participants had at least some college education (90.8%), with the largest group having a bachelor's degree (32.3%). With regard to race, 75.1% of participants identified as White, with an additional 7.6% identifying as partially White, 7.7% identified as at least partially Latino or Hispanic, 5.8% identified as at least partially Black, 4.6% identified as at least partially East Asian or Asian American, 3.8% identified as at least partially South Asian or Indian American, 2.7% identified as at least partially Native American or Alaskan Native, 1.3% identified as at least partially Middle Eastern or Arab American, and 0.2% identified as at least partially Native Hawaiian or Pacific Islander. See Table 2 for demographics and descriptive statistics by sexual orientation.

Table 2.

Demographics and Descriptive Statistics by Sexual Orientation

	Bisexual ($n=232$)	Lesbian/Gay ($n=108$)	Straight ($n=295$)
Age	$M=27.37$ ($SD=9.09$)	$M=31.19$ ($SD=11.95$)	$M=32.86$ ($SD=10.18$)
Gender Identity			
Man	16.4% ($n=38$)	60.2% ($n=65$)	53.2% ($n=157$)
Woman	70.3% ($n=163$)	37.0% ($n=40$)	45.8% ($n=135$)
Genderqueer	8.6% ($n=20$)	0.9% ($n=1$)	0.3% ($n=1$)

	Bisexual (<i>n</i> =232)	Lesbian/Gay (<i>n</i> =108)	Straight (<i>n</i> =295)
Another identity not listed	3.4% (<i>n</i> =8)	0.9% (<i>n</i> =1)	0.3% (<i>n</i> =1)
TGNC			
Yes	20.3% (<i>n</i> =47)	10.2% (<i>n</i> =11)	2.0% (<i>n</i> =6)
No	72.4% (<i>n</i> =168)	82.4% (<i>n</i> =89)	93.9% (<i>n</i> =277)
Race/Ethnicity			
Black, Afro-Caribbean, or African American	5.2% (<i>n</i> =12)	5.6% (<i>n</i> =6)	6.4% (<i>n</i> =19)
East Asian or Asian American	1.7% (<i>n</i> =4)	3.7% (<i>n</i> =4)	7.1% (<i>n</i> =21)
Latino or Hispanic American	9.9% (<i>n</i> =23)	4.6% (<i>n</i> =5)	7.1% (<i>n</i> =21)
Middle Eastern or Arab American	2.6% (<i>n</i> =6)	0.0% (<i>n</i> =0)	0.7% (<i>n</i> =2)
Native American or Alaskan Native	3.4% (<i>n</i> =8)	0.9% (<i>n</i> =1)	2.7% (<i>n</i> =8)
Native Hawaiian or Pacific Islander	0.0% (<i>n</i> =0)	0.0% (<i>n</i> =0)	0.3% (<i>n</i> =1)
South Asian or Indian American	1.3% (<i>n</i> =3)	1.9% (<i>n</i> =2)	6.4% (<i>n</i> =19)
White or Euro-American	90.1% (<i>n</i> =209)	84.3% (<i>n</i> =91)	76.3% (<i>n</i> =225)
Another identity not listed	1.7% (<i>n</i> =4)	2.8% (<i>n</i> =3)	0.3% (<i>n</i> =1)
Education			
Some high school, no diploma	0.9% (<i>n</i> =2)	1.9% (<i>n</i> =2)	0.3% (<i>n</i> =1)
High school graduate or GED	6.5% (<i>n</i> =15)	1.9% (<i>n</i> =2)	11.2% (<i>n</i> =33)
Some college, no diploma	33.2% (<i>n</i> =77)	18.5% (<i>n</i> =20)	22.0% (<i>n</i> =65)
Associate's Degree	6.9% (<i>n</i> =16)	3.7% (<i>n</i> =4)	10.8% (<i>n</i> =32)
Bachelor's Degree	27.2% (<i>n</i> =63)	29.6% (<i>n</i> =32)	37.3% (<i>n</i> =110)
Advanced Degree	24.1% (<i>n</i> =56)	44.4% (<i>n</i> =48)	18.3% (<i>n</i> =54)

	Bisexual (<i>n</i> =232)	Lesbian/Gay (<i>n</i> =108)	Straight (<i>n</i> =295)
Bisexual Microaggressions Scale	<i>M</i> =2.71 (<i>SD</i> =0.91)	<i>M</i> =2.36 (<i>SD</i> =0.63)	<i>M</i> =1.40 (<i>SD</i> =0.65)
Homonegative Microaggressions Scale	<i>M</i> =2.78 (<i>SD</i> =1.21)	<i>M</i> =2.60 (<i>SD</i> =0.88)	N/A
Anti-Bisexual Experiences (Lesbian/Gay) Scale	<i>M</i> =2.53 (<i>SD</i> =1.20)	N/A	N/A
Anti-Bisexual Experiences (Heterosexual) Scale	<i>M</i> =2.71 (<i>SD</i> =1.28)	N/A	N/A
Neuroticism Subscale	<i>M</i> =27.23 (<i>SD</i> =6.62)	<i>M</i> =23.67 (<i>SD</i> =6.61)	<i>M</i> =21.61 (<i>SD</i> =8.31)
Outness Inventory	<i>M</i> =2.68 (<i>SD</i> =1.17)	<i>M</i> =4.16 (<i>SD</i> =1.23)	N/A
Centrality Scale	<i>M</i> =27.63 (<i>SD</i> =8.87)	<i>M</i> =31.08 (<i>SD</i> =6.32)	<i>M</i> =23.46 (<i>SD</i> =9.74)
Quality of Life			
Physical	<i>M</i> =14.45 (<i>SD</i> =3.32)	<i>M</i> =15.62 (<i>SD</i> =2.80)	<i>M</i> =15.62 (<i>SD</i> =2.97)
Psychological	<i>M</i> =12.27 (<i>SD</i> =3.30)	<i>M</i> =13.30 (<i>SD</i> =2.97)	<i>M</i> =13.75 (<i>SD</i> =3.30)
Social	<i>M</i> =13.22 (<i>SD</i> =3.47)	<i>M</i> =13.49 (<i>SD</i> =3.45)	<i>M</i> =14.14 (<i>SD</i> =3.80)
Environmental	<i>M</i> =14.22 (<i>SD</i> =3.10)	<i>M</i> =14.81 (<i>SD</i> =2.77)	<i>M</i> =14.81 (<i>SD</i> =2.77)

Procedure

Participants who clicked the survey link were taken to the online survey hosted on REDCap, a secure survey site. Participants were asked where they saw the study and were presented with one of two informed consent pages which had been tailored with information about Amazon Mechanical Turk participation versus social media participation. Participants that agreed to participate (by clicking “next”) were taken to the body of the survey where they completed demographic information and the Bisexual Microaggressions Scale. For non-bisexual participants, the Bisexual Microaggressions Scale was altered so that it stated the sexuality identified in the demographic questionnaire (see Appendix C). All participants also were given a measure of quality of life, neuroticism, and sexual orientation identity centrality (a potential confounder). Participants who did not identify as straight were also given a measure that

assessed the extent to which they are out to others about their sexual orientation (given outness may be a confounder). Participants who identified as bisexual or as lesbian/gay were also given a measure of homonegative microaggressions. Participants who identified as bisexual additionally were given measures of anti-bisexual experiences. In addition, there were three “attention check” questions throughout the survey that asked participants to respond in specific way (i.e., “Please select strongly agree”). These items are used to easily exclude individuals who are simply clicking the same response without reading the question items (Oppenheimer, Meyvis, & Davidenko, 2009). Following completion of the survey items, participants were presented with information about payment (as discussed below), as well as list of mental health and social resources, should they need them. Participation took between 15 and 40 minutes, depending on which scales were presented. See Table 3 for demographics and descriptive statistics by recruitment strategy.

Table 3.

Demographics and Descriptive Statistics by Recruitment Strategy

	MTurk (<i>n</i> =269)	Social Media (<i>n</i> =285)	Email (<i>n</i> =70)
Age	<i>M</i> =35.54 (<i>SD</i> =9.50)	<i>M</i> =28.93 (<i>SD</i> =10.69)	<i>M</i> =29.69 (<i>SD</i> =11.24)
Sexual Orientation			
Bisexual	12.3% (<i>n</i> =33)	60.4% (<i>n</i> =172)	30.0% (<i>n</i> =21)
Lesbian/Gay	3.7% (<i>n</i> =10)	18.2% (<i>n</i> =52)	62.9% (<i>n</i> =44)
Straight	84.0% (<i>n</i> =226)	21.4% (<i>n</i> =61)	7.1% (<i>n</i> =5)
Gender Identity			
Man	61.3% (<i>n</i> =165)	22.1% (<i>n</i> =63)	41.4% (<i>n</i> =29)
Woman	37.5% (<i>n</i> =101)	68.1% (<i>n</i> =194)	51.4% (<i>n</i> =36)
Genderqueer	0.0% (<i>n</i> =0)	5.6% (<i>n</i> =16)	5.7% (<i>n</i> =4)

	MTurk (<i>n</i> =269)	Social Media (<i>n</i> =285)	Email (<i>n</i> =70)
Another identity not listed	0.0% (<i>n</i> =0)	3.2% (<i>n</i> =9)	1.4% (<i>n</i> =1)
TGNC			
Yes	3.3% (<i>n</i> =9)	16.1% (<i>n</i> =46)	11.4% (<i>n</i> =8)
No	91.8% (<i>n</i> =247)	77.5% (<i>n</i> =221)	80.0% (<i>n</i> =56)
Race/Ethnicity			
Black, Afro-Caribbean, or African American	8.2% (<i>n</i> =22)	3.2% (<i>n</i> =9)	8.6% (<i>n</i> =6)
East Asian or Asian American	8.2% (<i>n</i> =22)	1.1% (<i>n</i> =3)	4.3% (<i>n</i> =3)
Latino or Hispanic American	7.8% (<i>n</i> =21)	6.7% (<i>n</i> =19)	10.0% (<i>n</i> =7)
Middle Eastern or Arab American	1.1% (<i>n</i> =3)	1.4% (<i>n</i> =4)	1.4% (<i>n</i> =1)
Native American or Alaskan Native	3.0% (<i>n</i> =8)	2.5% (<i>n</i> =7)	2.9% (<i>n</i> =2)
Native Hawaiian or Pacific Islander	0.4% (<i>n</i> =1)	0.0% (<i>n</i> =0)	0.0% (<i>n</i> =0)
South Asian or Indian American	7.8% (<i>n</i> =21)	1.1% (<i>n</i> =3)	0.0% (<i>n</i> =0)
White or Euro-American	71.0% (<i>n</i> =191)	93.3% (<i>n</i> =266)	84.3% (<i>n</i> =15.7)
Another identity not listed	0.4% (<i>n</i> =1)	1.8% (<i>n</i> =5)	2.9% (<i>n</i> =2)
Education			
Some high school, no diploma	0.4% (<i>n</i> =1)	1.1% (<i>n</i> =3)	1.4% (<i>n</i> =1)
High school graduate or GED	11.9% (<i>n</i> =32)	6.0% (<i>n</i> =17)	1.4% (<i>n</i> =1)

	MTurk (<i>n</i> =269)	Social Media (<i>n</i> =285)	Email (<i>n</i> =70)
Some college, no diploma	23.8% (<i>n</i> =64)	26.3% (<i>n</i> =75)	25.7% (<i>n</i> =18)
Associate's Degree	13.8% (<i>n</i> =37)	4.6% (<i>n</i> =13)	1.4% (<i>n</i> =1)
Bachelor's Degree	40.9% (<i>n</i> =110)	28.8% (<i>n</i> =82)	14.3% (<i>n</i> =10)
Advanced Degree	8.9% (<i>n</i> =24)	32.6% (<i>n</i> =93)	55.7% (<i>n</i> =39)
Bisexual Microaggressions Scale	<i>M</i> =1.55 (<i>SD</i> =0.81)	<i>M</i> =2.46 (<i>SD</i> =0.94)	<i>M</i> =2.22 (<i>SD</i> =0.74)
Homonegative Microaggressions Scale	<i>M</i> =2.34 (<i>SD</i> =0.95)	<i>M</i> =2.81 (<i>SD</i> =1.07)	<i>M</i> =2.27 (<i>SD</i> =1.20)
Anti-Bisexual Experiences (Lesbian/Gay) Scale	<i>M</i> =2.49 (<i>SD</i> =1.09)	<i>M</i> =2.55 (<i>SD</i> =1.20)	<i>M</i> =2.57 (<i>SD</i> =1.36)
Anti-Bisexual Experiences (Heterosexual) Scale	<i>M</i> =2.46 (<i>SD</i> =1.13)	<i>M</i> =2.74 (<i>SD</i> =1.28)	<i>M</i> =2.83 (<i>SD</i> =1.51)
Neuroticism Subscale	<i>M</i> =21.08 (<i>SD</i> =8.51)	<i>M</i> =26.61 (<i>SD</i> =6.29)	<i>M</i> =24.66 (<i>SD</i> =7.91)
Outness Inventory	<i>M</i> =3.09 (<i>SD</i> =1.59)	<i>M</i> =2.96 (<i>SD</i> =1.27)	<i>M</i> =3.87 (<i>SD</i> =1.38)
Centrality Scale	<i>M</i> =24.36 (<i>SD</i> =9.80)	<i>M</i> =27.56 (<i>SD</i> =8.87)	<i>M</i> =28.93 (<i>SD</i> =7.91)
Quality of Life			
Physical	<i>M</i> =15.68 (<i>SD</i> =2.80)	<i>M</i> =14.65 (<i>SD</i> =3.18)	<i>M</i> =15.92 (<i>SD</i> =2.68)
Psychological	<i>M</i> =13.68 (<i>SD</i> =3.49)	<i>M</i> =12.55 (<i>SD</i> =3.06)	<i>M</i> =13.65 (<i>SD</i> =3.05)
Social	<i>M</i> =13.97 (<i>SD</i> =3.85)	<i>M</i> =13.39 (<i>SD</i> =3.53)	<i>M</i> =13.83 (<i>SD</i> =3.38)
Environmental	<i>M</i> =14.43 (<i>SD</i> =3.04)	<i>M</i> =14.65 (<i>SD</i> =2.80)	<i>M</i> =15.16 (<i>SD</i> =2.32)

Amazon Mechanical Turk. Overall, 34.1% of the participants were recruited through Amazon Mechanical Turk (MTurk; www.mturk.com), an online work marketplace. Previous

work suggests that data collected using MTurk is reliable and provides more diversity than typical sampling procedures (i.e., college convenience samples), as well as collecting quickly (Buhrmester, Kwang, & Gosling, 2011; Shapiro, Chandler, & Mueller, 2013). MTurk allows researchers to set qualifiers for study participation. For the purpose of this study qualifiers were set that participants live within the United States, be 18 or older, and have a 90% task approval rate, an indicator of prior completion rate (Shapiro et al., 2013). MTurk workers were able to access the survey through the posting of a Human Intelligence Task (HIT) and then were able to view information about the survey. Following participation in the study, as described above, MTurk participants were asked to create a custom validation code using the first two letters of their mother's maiden name, the first two letters of the street they live on, and the last two numbers of their phone number. They entered this code into the survey, as well as into MTurk. The validation code was checked against survey responses to see if participants passed attention check item, adhering to recommendations made about using MTurk (Buhrmester, 2016; Buhrmester et al., 2013). If participants responded correctly to attention check items, they were paid \$1 for participation through the MTurk system, which is consistent with previous guidelines for social scientists using MTurk (Buhrmester, 2016; Buhrmester et al., 2013).

Social media. Additionally, 51.3% of participants were recruited through the use of targeted advertising through social media sites (i.e. Twitter, Tumblr, and Facebook), and 12.4% of participants were gathered through email contact with over 500 LGBTQ+ organizations across the United States. A paid advertisement was bought on Facebook, which appeared on the Facebook walls (or homepages) of individuals who expressed interest in a number of LGBT topics or events. Additionally, the post was shared on multiple Facebook profiles and in several Facebook groups specific to LGBT issues. Further, the study was posted on Tumblr, an online

blogging platform. Multiple Tumblrs that focus on bisexual issues were messaged about sharing the study on their own blogs, in addition to using the tagging features on posts that allows Tumblr users to see posts made about specific topics. Additionally, the study was posted on Twitter, using similar procedures to Tumblr (messaging specific users and using tagging features). Following participation in the study, participants gathered through social media and email were able to click on a link to enter a drawing for a \$25 Amazon gift card, which occurred every 50 participants. Winners were chosen using a random number generator on Google. Information gathered for the drawing was kept separately from the survey responses and was only used to contact winners.

Measures

Demographics. Participants were asked to provide information regarding their age, sexual orientation, gender identity, race, education, socioeconomic status, area where they live, and relationships. Additionally, they were asked one question about general physical health and general mental health on a scale from poor to excellent, as well as two questions about health insurance. See Appendix D for demographic questions.

Potential confounders. Along with the demographic information above, two scales measured potential confounding variables. First, the Outness Inventory (Mohr & Fassinger, 2000) was used to measure how out participants' were about their sexual orientation. The 11-item scale asked participants to rate their outness to a number of different people in their life (e.g., mother, father, work peers, members of religious community) on a scale from 1 (*person definitely does not know about your sexual orientation status*) to 7 (*person definitely knows about your sexual orientation status and it is openly talked about*), with a 0 option indicating there is no such person or group in their life. See Appendix E. Mean scores were calculated prior to analysis ($\alpha=.83$). Second, a six-item measure of centrality (Quinn et al., 2014) examined how important

one's sexual orientation identity is to their sense of self. Participants were asked to respond on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). See Appendix F. A sum score was calculated prior to analyses ($\alpha=.92$).

Bisexual microaggressions. The Bisexual Microaggressions Scale consists of 35 items that address seven types of microaggressions - hostility; denial/dismissal; unintelligibility; pressure to change; lesbian, gay, bisexual and transgender legitimacy; dating exclusion; and hypersexuality. Participants were asked to respond to each item on a scale from 1 to 5 (1=*has not happened to me or anyone that I know*; 2=*has happened to someone that I know*; 3=*has happened to me, but only once*; 4=*has happened to me on a few occasions*; 5=*has happened to me a lot*). The wording of the scale items changed based on participant sexual orientation, given that non-bisexual individuals completed the scale to serve as comparison groups. For the bisexual version of the scale, see Appendix B. For the non-bisexual versions of the scale, see Appendix C. Composite scores and squared correlations were calculated prior to analyses (see below).

Measure of discriminant validity. In order to assess discriminant validity, the neuroticism subscale of the Big Five Inventory (John & Srivastava, 1999) was given. This eight item measure asks if the participant sees themselves as someone who has certain characteristics, such as getting nervous easily or being emotionally stable. Participants respond on a 5-point Likert scale (1=*disagree strongly*, 5=*agree strongly*). This scale was chosen given that if neuroticism is strongly correlated with responses to the Bisexual Microaggressions Scale, it may indicate that the scale is picking up on participants' neurosis rather than true experiences. See Appendix G. Prior to analyses, appropriate items were reverse coded on the Big Five Inventory neuroticism subscale and then a sum score was calculated (John & Srivastava, 1999). These

analyses were conducted only with the bisexual subsample, given the scale being validated is theorized to capture experiences unique to bisexuals; thus reliability alphas were calculated only using the bisexual subsample ($\alpha=.85$).

Measures of convergent validity. Convergent validity was examined using two scales. See Appendices H-J. These analyses were conducted only with the bisexual subsample, given the scale being validated is theorized to capture experiences unique to bisexuals; thus, reliability alphas were calculated only using the bisexual subsample. First, the Homonegative Microaggressions Scale (Wright & Wegner, 2012) was used, given that this scale also addresses experiences of microaggressions. However, this 45-item scale assesses experiences of microaggressions related to lesbian or gay identity. Participants are asked to respond to questions such as “How often have people assumed you were skilled in stereotypically gay tasks (like interior design for men or carpentry for women)?” and “How often have people assumed you were a pedophile?” on a 5-point scale (1=*hardly ever/never/not at all*, 5=*constantly/a great deal*). While some questions are worded to include bisexuality, these items largely address microaggressions related to lesbian or gay identity. Mean scores were calculated prior to analysis ($\alpha=.96$). This scale was hypothesized to be significantly and positively related to the Bisexual Microaggressions Scale, but with a bivariate correlation coefficient of .69 or lower, which does not indicate true convergent validity (Carlson & Herdman, 2012), indicating that while these measures are related they are measuring distinctly different concepts.

However, the Anti-Bisexual Experiences Scale (Brewster & Moradi, 2010) was hypothesized to be significantly and positively related to the Bisexual Microaggressions Scale with a bivariate correlation of .70 or higher, indicating true convergent validity (Carlson & Herdman, 2012). This 17-item scale is made up of three subscales: interpersonal hostility (e.g. “I

have been excluded from social networks because I am bisexual”; 5 items), sexual orientation instability (e.g. “People have acted as if my bisexuality is only a sexual curiosity”; 8 items), and sexual irresponsibility (e.g. “People have assumed that I will cheat in a relationship because I am bisexual”; 4 items). Participants were asked to respond on a six-point Likert scale (1=*never*, 6=*almost all of the time*) and are asked to complete the scale twice – once thinking about their experiences with straight people and once thinking about their experiences with gay and lesbian people. Mean scores were calculated for the Anti-Bisexual Experiences Scale – Lesbian/Gay ($\alpha=.96$) and for the Anti-Bisexual Experiences Scale – Heterosexual ($\alpha=.97$) prior to analyses. While these subscales touch on hostility, denial/dismissal, and hypersexuality microaggressions, they do not assess unintelligibility, pressure to change, LGBT legitimacy, or dating exclusion microaggressions.

Predictive validity. Finally, predictive validity was examined by using the World Health Organization (WHO) Brief Quality of Life Scale (WHOQOL-BREF; Bonomi, Patrick, Bushnell, & Martin, 2000). See Appendix K. The WHOQOL-BREF is a 26 item scale that consists of four unique aspects of quality of life: physical health (7 items; e.g. “To what extent do you feel that physical pain prevents you from doing what you need to do?”), psychological health (6 items; e.g., “How satisfied are you with yourself?”), social relationships (3 items; e.g., “How satisfied are you with the support you get from your friends?”), and environment/resources (8 items; e.g., “How healthy is your physical environment?”). Participants were given a 5-point scale to respond, with wording of responses varying based on how the question is worded. Mean scores were created for all four aspects and then multiplied by four so that scores are directly comparable to the longer version of the WHO quality of life scale. It was hypothesized that the Bisexual Microaggressions Scale would predict all four components of quality of life above and

beyond the Anti-Bisexual Experiences Scales, indicating that the Bisexual Microaggressions Scale uniquely accounts for variance in quality of life. Prior to analyses, appropriate items were reverse coded, and then domain scores were calculated for the four domains of quality of life: physical ($\alpha=.87$), psychological ($\alpha=.87$), social ($\alpha=.65$), and environmental ($\alpha=.86$). Domain scores are calculated by taking the mean of the items within the domain and then multiplying the score by four so that is directly comparable to the long form WHO Quality of Life scale.

Analysis Plan

Construct Validity

There are three types of measurement models, as outlined by Bollen and Bauldry (2011). The first is what is known as effect or reflective measurement. This is a traditional form of measurement, where each item is the effect of a latent variable. For example, if one was measuring intelligence, the latent factor of intelligence would impact how a participant responded to the items on the measure. This approach is not appropriate for the current analysis, as the seven types of microaggressions identified are not pre-existing constructs in the world that then impact how the participant responds to scale items, but are rather conceptual frameworks for discussing similar experiences.

Secondly, there is causal measurement. Under this model, items directly cause a latent variable and all items are conceptually united and experiences of items is often strongly related. For example, socioeconomic status (SES) is defined as the standing a person has in society. Income, education, and occupational prestige thus cause SES, and income, education, and occupational prestige are often extremely related to each other. However, this measurement model does not fit the current study because rather than the latent variable of one of the seven microaggressions types being caused by the experiences captured in the scale, it is a conceptual

framework that is made up of the items in the subscale. For example, “denial” is not caused by being told your sexual orientation isn’t real or is just a phase, but is a factor made up of those experiences. Additionally, there is no existing outline that specifies which items would make up the latent variable of these specific microaggression types and a participant reporting experiencing one of the experiences within a microaggression type, does not necessarily mean they are more likely to have had other experiences within that microaggression type.

Finally, there are composite, or formative, measurement models. Within a composite model, there is no explicit standard of what items should be included, and the experience of one item does not necessitate the experience of another item. This model is in line with the current study, given the latent factors are composites of different unique experiences and experiencing one does not necessarily mean you will experience another. There is an exact linear combination of indicators based on theory, rather than statistical measurement, because I am theoretically including items that measure specific experiences of interest and thus are fully accounting for the experiences with the creation of the scale. Items are weighted elements that form a composite variable. Thus, within each of the seven microaggression types – the five items for each subscale would be weighted to create a composite for that microaggression. Composite models may have fewer problems with regards to error and the consistency of latent variable meaning across applications than causal models (Howell, 2014). Composite analysis lets the researcher make an informed decision about the number of variables, rather than statistics (Walkey, 1997).

Under the composite approach, weights were calculated for each item within a subscale. These weights can be set as equal, if it is hypothesized that each item has the same weight on the creation of the subscale, or weights can be fixed based on theory. For this scale, item weights were set as equal. Once weights were created, a composite score was calculated for each

subscale. Additionally, squared correlations indicated how good a single composite item is as a stand-in for the full composite variable by determining the correlation between the composite item and composite variable score and squaring. The squared correlation analysis was conducted rather than reliability alphas, as internal consistency is not relevant to formative scales (Jarvis, Mackenzie, & Podsakoff, 2003). Given this approach, factor analyses were inappropriate. However, principal component analysis (PCA) was conducted to statistically examine if proposed subscale items clustered together, which would suggest they do in fact share the underlying construct (microaggression type).

Results

Construct Validity

PCA. A principal component analysis was conducted to assess, statistically, the clustering of sample items. This analysis was completed first, given that the specific clustering of the scale items would have an impact on all subsequent analyses. It was initially proposed that there are seven unique microaggressions types, and that the five items previously labeled under these subsections would statistically cluster within a PCA (see Appendix A for initial clustering of scale items based on microaggression type). The PCA was conducted in SPSS using only bisexual participants, given that these are theoretically bisexual-unique experiences. Given that the PCA was being used as a statistical examination of seven theoretical microaggression factors, extraction of factors was initially set to a fixed number of seven factors. An oblique rotation, direct oblimin, was selected over an orthogonal rotation, given that oblique rotations allow for correlation between components, which is highly likely within a scale measuring similar theoretical concepts, such as the microaggressions measured within this scale (Costello & Osborne, 2005; Netemeyer, Bearden, & Sharma, 2003); rotation converged in 52 iterations. The

Kaiser-Meyer-Olkin measure of sampling adequacy was .949 and the Bartlett's Test of Sphericity was significant ($\chi^2(595)=5197.63, p<.001$), indicating the data set was suitable for factor analysis (Tabacknick & Fidell, 2007). In an initial examination of the pattern matrix of the seven forced components, items failed to appropriately cluster into the proposed seven unique microaggression types. See Table 4.

Table 4.

Item Loading with Seven Components

Item	Component						
	1	2	3	4	5	6	7
I have been told my bisexuality is just a phase.	.778						
People have questioned if my bisexuality is legitimate.	.742						
I have been told my bisexuality is not real.	.715						
I have been told to make up my mind with regards to being bisexual.	.714						
I have been told I am wrong about being bisexual or that I am just confused.	.688						
I have been referred to as greedy because I'm bisexual.	.513		.322				
I have found myself having to explain or defend my bisexuality.	.487		-.336				
People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.	.443						
I have been told that my bisexuality isn't legitimate because of my relationship history.	.442						-.321

Item	Component						
	1	2	3	4	5	6	7
LGBT spaces or events have not been welcoming for me because of my bisexuality.		.759					
I have had to prove my relationship history in order to be accepted in LGBT spaces.		.566					
Potential partners have assumed that I am sexually adventurous because I'm bisexual.		.334					
I have found that people don't really understand my bisexuality.	.350		-.453				
I have been told I am more likely to have STDs because I'm bisexual.	.316		.405				
I have felt physically or verbally threatened by straight people because I'm bisexual.						-.903	
I have experienced verbal or physical hostility from others because I'm bisexual.						-.689	
People have yelled negative things at me because I'm bisexual.						-.637	
I have been told something is wrong with me because I'm bisexual.	.339					-.614	
I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.		.305			-.503	.309	
People have attempted to influence the way that I talk about my sexual orientation.					-.370		
I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.							.766

Item	Component							
	1	2	3	4	5	6	7	
A current or past partner has become uncomfortable when I tell other people about my bisexuality.						.411	.334	-.364
I have had friends tell me they could never date someone who is bisexual.							.777	
I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.							.589	
I have had someone that I was interested in romantically tell me they won't date me because I'm bisexual.							.528	
People have told me that I am incapable of having monogamous relationships because I'm bisexual.							.352	
I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.								-.746
People have made incorrect assumptions about my sexual orientation based on my relationship(s).								-.639
I have been told to use labels for my sexual orientation that align with my current relationship(s).								-.557
I have been pressured to use labels for my sexual orientation that are not in line with how I identify.								-.422

Only the first six components had eigenvalues above 1.0, indicating perhaps that there are six components within the scale, rather than seven; however, the eigenvalues-greater-than-one approach may overestimate components that should be retained (O'Connor, 2000). Visual

examination of the scree plot suggests that the first component is the most significant, with a dip occurring at the second component and again at the fourth component, suggesting the first four components should be retained (see Figure 1). However, visual examination of scree plots is unreliable as a tool for determining which components to retain (O'Connor, 2000). Thus, a parallel analysis was conducted using a Monte Carlo PCA for Parallel Analysis tool (Watkins, 2006). Parallel analysis extracts eigenvalues from random data sets that are parallel to the actual data in terms of number of items and number of cases (or participants). Based on the original description of parallel analysis, the eigenvalues produced during the parallel analysis should be used as a comparison baseline, and only components whose eigenvalues are higher in the PCA than in the parallel analysis should be retained (O'Connor, 2000). Under this rule, the first three components should be retained. However, some suggest that linear interpolation of 95th percentile eigenvalues from random data should be used rather than parallel analysis (Cota, Longman, Holden, Fekken, & Xinaris, 1993; O'Connor, 2000). Yet, under tables provided for the 95th percentile eigenvalues (see Cota et al., 1993), it is also only the first three components that should be retained. See Table 5 for original eigenvalues, parallel analysis eigenvalues, and 95th percentile linear interpolation eigenvalues.

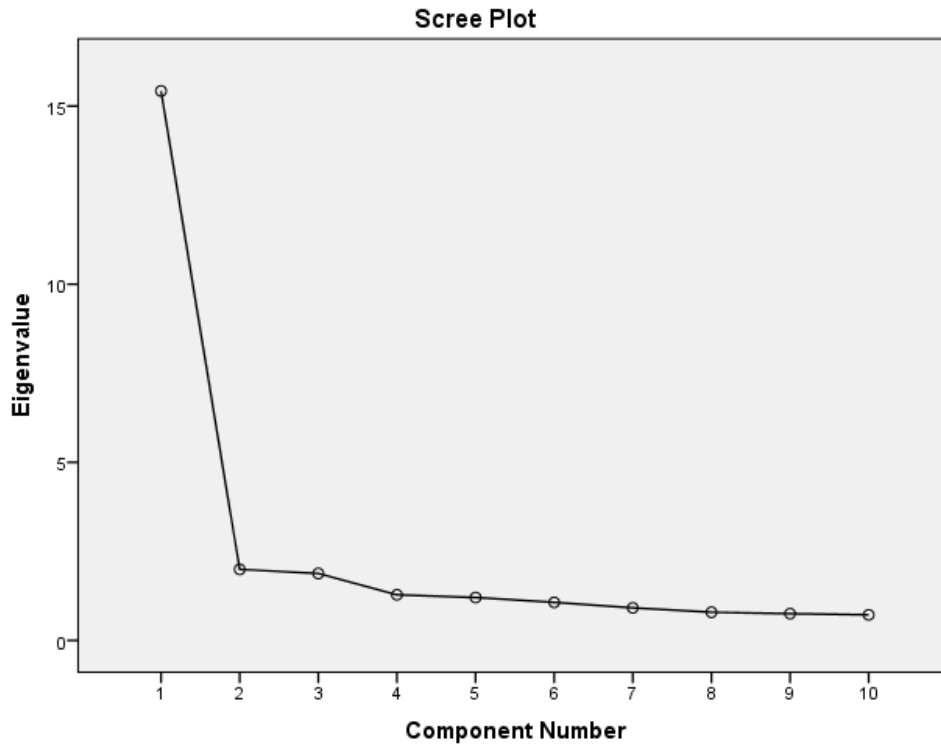


Figure 1. Scree plot for PCA with seven forced components

Table 5.

Eigenvalues from PCA with Seven Forced Components

Component	PCA Initial Eigenvalue	Parallel Analysis Eigenvalue	95% Eigenvalues, 35 variables, $N=200^1$	95% Eigenvalues, 35 variables, $N=300^1$
1	15.423	1.819	2.005	1.800
2	1.997	1.711	1.861	1.675
3	1.880	1.623	1.761	1.602
4	1.282	1.559	1.670	1.537
5	1.207	1.501	1.602	1.484
6	1.070	1.448	1.532	1.430
7	0.915	1.393	1.474	1.385

¹Values taken from Cota et al., 1993

Given this, the principal component analysis was conducted again with extraction of factors set to a fixed number of three factors. Direct oblimin rotation converged in 17 iterations. Component one had an eigenvalue of 15.42 and accounted for 44.07% of the variance; component 2 had an eigenvalue of 2.00 and accounted for 5.71% of the variance; component 3 had an eigenvalue of 1.88 and accounted for 5.37% of the variance. One item did not load onto any component .32 or higher, indicating poor fit with any component (Tabachnick & Fidell, 2007); while another item failed to load at all onto any components. Within the pattern matrix, 10 items cross-loaded onto two factors, meaning that the items loaded at .32 or higher on multiple factors (Tabachnick & Fidell, 2007). These items were grouped with the component for which they had a stronger loading. See Table 6 for all loadings. However, the grouping of the items within the three components within the pattern matrix doesn't map onto theoretical understandings of similarity between microaggressions experiences. Given this, a PCA was conducted with one forced component in order to examine if all items loaded together into a single component – microaggressions. The single component had an eigenvalue of 15.52 and accounted for 44.33% of the variance. All items loaded into the component, with loading values ranging from .37 to .82. See Table 7 for all loadings. Given that all items load into one component, there is indication that all items measure a similar construct, labeled here as microaggressions. However, the PCA results indicate that the scale fails to examine microaggressions that are distinct enough from one another to be considered unique components or subscales. Given this, all subsequent analyses were conducted using the entire Bisexual Microaggressions Scale, rather than examining subscales individually.

Table 6.

Item Loading with Three Components

Item	Component		
	1	2	3
I have experienced verbal or physical hostility from others because I'm bisexual.	.739		
People have yelled negative things at me because I'm bisexual.	.736		
I have felt physically or verbally threatened by straight people because I'm bisexual.	.725		
I have had someone that I was interested in romantically tell me they won't date me because I'm bisexual.	.690		
I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.	.681		
In relationships, my partners have told me they wished I would use different labels for my sexual orientation.	.652		
I have been told I am more likely to have STDs because I'm bisexual.	.648		
I have been told something is wrong with me because I'm bisexual.	.595		-.347
People have told me that I am incapable of having monogamous relationships because I'm bisexual.	.544		
People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.	.527		-.320
A current or past partner has become uncomfortable when I tell other people about my bisexuality.	.510	.302	
I have been referred to as greedy because I'm bisexual.	.453		-.354
I have seen online dating profiles that mention they would not date someone who is bisexual.	.437		
I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.	.436		-.408
LGBT spaces or events have not been welcoming for me because of my bisexuality.		.759	
The LGBT community has ignored issues related to bisexuality.		.740	

Item	Component		
	1	2	3
The LGBT community has viewed me as not gay enough because I'm bisexual.		.680	
People have made incorrect assumptions about my sexual orientation based on my relationship(s).		.521	-.405
I have had to prove that I don't live up to stereotypes about bisexuality in order to be accepted into the LGBT community.	.439	.514	
I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.		.390	
Potential partners have assumed that I am sexually adventurous because I'm bisexual.		.315	
People have questioned if my bisexuality is legitimate.			-.869
I have been told I am wrong about being bisexual or that I am just confused.			-.812
I have been told my bisexuality is just a phase.			-.769
I have found myself having to explain or defend my bisexuality.			-.742
I have found that people don't really understand my bisexuality.		.304	-.686
I have been told to make up my mind with regards to being bisexual.	.358		-.634
I have been told my bisexuality is not real.	.302		-.618
I have been told that my bisexuality isn't legitimate because of my relationship history.			-.470
People have attempted to influence the way that I talk about my sexual orientation.	.355		-.431
I have had friends tell me they could never date someone who is bisexual.	.317		-.409
I have been told to use labels for my sexual orientation that align with my current relationship(s).		.330	-.342
I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.			-.337
I have been pressured to use labels for my sexual orientation that are not in line with how I identify.			

Table 7.

Item Loading with One Component

Item	Loading
I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.	.583
I have been told I am wrong about being bisexual or that I am just confused.	.740
I have been told to use labels for my sexual orientation that align with my current relationship(s).	.701
People have yelled negative things at me because I'm bisexual.	.721
I have been told to make up my mind with regards to being bisexual.	.783
People have questioned if my bisexuality is legitimate.	.741
I have been referred to as greedy because I'm bisexual.	.700
I have been told I am more likely to have STDs because I'm bisexual.	.641
I have been told that my bisexuality isn't legitimate because of my relationship history.	.723
In relationships, my partners have told me they wished I would use different labels for my sexual orientation.	.610
I have had someone that I was interested in romantically tell me they won't date me because I'm bisexual.	.662
People have attempted to influence the way that I talk about my sexual orientation.	.716
People have made incorrect assumptions about my sexual orientation based on my relationship(s).	.524
I have been told something is wrong with me because I'm bisexual.	.700
I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.	.704
I have felt physically or verbally threatened by straight people because I'm bisexual.	.546
People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.	.816

Item	Loading
I have found myself having to explain or defend my bisexuality.	.680
I have had to prove my relationship history in order to be accepted in LGBT spaces.	.704
The LGBT community has ignored issues related to bisexuality.	.470
I have seen online dating profiles that mention they would not date someone who is bisexual.	.517
I have been told my bisexuality is not real.	.773
I have been told my bisexuality is just a phase.	.741
People have told me that I am incapable of having monogamous relationships because I'm bisexual.	.720
I have experienced verbal or physical hostility from others because I'm bisexual.	.720
The LGBT community has viewed me as not gay enough because I'm bisexual.	.701
Potential partners have assumed that I am sexually adventurous because I'm bisexual.	.634
I have had to prove that I don't live up to stereotypes about bisexuality in order to be accepted into the LGBT community.	.743
LGBT spaces or events have not been welcoming for me because of my bisexuality.	.582
I have had friends tell me they could never date someone who is bisexual.	.631
I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.	.375
I have found that people don't really understand my bisexuality.	.550
I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.	.611
A current or past partner has become uncomfortable when I tell other people about my bisexuality.	.656
I have been pressured to use labels for my sexual orientation that are not in line with how I identify.	.652

Composite scores and squared correlations. Composite indicators should create a standardized coefficient that can then be compared to single variables within the model (Bollen & Bauldry, 2011). In order to create the composite indicator, each item within a scale or subscale is weighted and then a composite indicator is calculated. For the purpose of this scale development, all items within the entire scale were given an equal weight under the assumption that each item equally contributes to the overall experience of microaggressions. Subscale composite scores and squared correlations were not calculated, given the results of the PCA. Given that there are thirty-five items in this scale, each item was given the weight of $1/35$ (approximately 2.86%) of the composite variable. In order to calculate the composite score, each item is multiplied by its weight and then the sum of each weighted item is calculated. When all items within a scale are given equal weight, composite scores can also be calculated through traditional mean score calculations.

In order to assess how good of a proxy a single item on the scale is for a composite variable, a squared correlation was calculated for each item within the scale. In order to calculate these squared correlations, the covariance of the item (or composite indicator) and the composite score was squared, and then divided by the variance of the composite indicator and the variance of the composite score (Bollen & Bauldry, 2011). The higher the squared correlation, the better the item is as a proxy for the composite score; however, there is no rule regarding a cutoff for a suitable proxy (Bollen & Bauldry, 2011). These analyses were completed using only bisexual participants, given they are the target audience for the developed scale and the use of lesbian/gay or straight individuals may skew the results. Bivariate correlations were run in SPSS, and then squared correlations were calculated in Excel. Squared correlations ranged from .08 to .39. See Table 8 for a comprehensive chart of item correlations and squared correlations. Given there are

no guidelines for what makes an appropriate squared correlation for composite scales, no items were dropped based on their squared correlation with the composite.

Table 8.

Squared Correlations

Item	Correlation	Composite Score Variance	Item Score Variance	Squared Correlation
I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.	0.59	0.83	1.93	0.22
I have been told I am wrong about being bisexual or that I am just confused.	0.73	0.83	1.85	0.35
I have been told to use labels for my sexual orientation that align with my current relationship(s).	0.70	0.83	2.16	0.27
People have yelled negative things at me because I'm bisexual.	0.71	0.83	1.69	0.36
I have been told to make up my mind with regards to being bisexual.	0.77	0.83	2.01	0.36
People have questioned if my bisexuality is legitimate.	0.73	0.83	1.67	0.39
I have been referred to as greedy because I'm bisexual.	0.69	0.83	1.91	0.30
I have been told I am more likely to have STDs because I'm bisexual.	0.64	0.83	1.78	0.27
I have been told that my bisexuality isn't legitimate because of my relationship history.	0.72	0.83	1.93	0.22
In relationships, my partners have told me they wished I would use different labels for my sexual orientation.	0.61	0.83	1.17	0.38

Item	Correlation	Composite Score Variance	Item Score Variance	Squared Correlation
I have had someone that I was interested in romantically tell me they won't date me because I'm bisexual.	0.66	0.83	1.40	0.37
People have attempted to influence the way that I talk about my sexual orientation.	0.71	0.83	2.15	0.28
People have made incorrect assumptions about my sexual orientation based on my relationship(s).	0.54	0.83	1.84	0.19
I have been told something is wrong with me because I'm bisexual.	0.69	0.83	1.93	0.30
I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.	0.70	0.83	2.15	0.28
I have felt physically or verbally threatened by straight people because I'm bisexual.	0.54	0.83	1.77	0.20
People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.	0.81	0.83	2.02	0.39
I have found myself having to explain or defend my bisexuality.	0.68	0.83	1.69	0.33
I have had to prove my relationship history in order to be accepted in LGBT spaces.	0.71	0.83	1.99	0.30
The LGBT community has ignored issues related to bisexuality.	0.49	0.83	2.01	0.14
I have seen online dating profiles that mention they would not date someone who is bisexual.	0.53	0.83	2.11	0.16

Item	Correlation	Composite Score Variance	Item Score Variance	Squared Correlation
I have been told my bisexuality is not real.	0.77	0.83	2.06	0.34
I have been told my bisexuality is just a phase.	0.73	0.83	1.91	0.34
People have told me that I am incapable of having monogamous relationships because I'm bisexual.	0.72	0.83	1.90	0.32
I have experienced verbal or physical hostility from others because I'm bisexual.	0.72	0.83	1.96	0.31
The LGBT community has viewed me as not gay enough because I'm bisexual.	0.71	0.83	2.10	0.29
Potential partners have assumed that I am sexually adventurous because I'm bisexual.	0.64	0.83	1.91	0.30
I have had to prove that I don't live up to stereotypes about bisexuality in order to be accepted into the LGBT community.	0.75	0.83	2.09	0.32
LGBT spaces or events have not been welcoming for me because of my bisexuality.	0.59	0.83	2.15	0.20
I have had friends tell me they could never date someone who is bisexual.	0.64	0.83	2.07	0.23
I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.	0.39	0.83	2.19	0.08
I have found that people don't really understand my bisexuality.	0.56	0.83	1.39	0.27

Item	Correlation	Composite Score Variance	Item Score Variance	Squared Correlation
I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.	0.61	0.83	1.34	0.33
A current or past partner has become uncomfortable when I tell other people about my bisexuality.	0.66	0.83	1.71	0.28
I have been pressured to use labels for my sexual orientation that are not in line with how I identify.	0.66	0.83	2.46	0.21

ANCOVA. An ANCOVA was conducted to examine differences in scores on the Bisexual Microaggressions Scale by sexual orientation, while controlling for potential confounding variables. First, a bivariate correlation was conducted between the Bisexual Microaggressions Scale and potential confounding variables of centrality of sexual orientation identity, outness about sexual orientation, age, race (White vs. non-White), gender identity (male vs. not male), and TGNC identity (yes vs. no). Centrality, age, gender identity, and TGNC identity were significantly related to bisexual microaggressions, and thus were included in the ANCOVA. There was a significant effect of sexual orientation on reported experiences of microaggressions, $F(2, 567) = 113.50, p < .001$, partial $\eta^2 = 0.29$, when controlling for centrality, age, gender identity, and TGNC identity. It was hypothesized that bisexuals would score significantly higher than lesbian/gay individuals and straight individuals, indicating that the experiences captured by the scale are unique to bisexuals. Tukey post-hoc analyses supported this hypothesis, indicating the bisexual participants scored significantly higher on the scale ($M = 2.71, SD = 0.91$) than lesbian/gay individuals ($M = 2.36, SD = 0.63$) or straight individuals ($M = 1.40, SD = 0.65$), both $ps < .001$. See Table 9 for all multiple comparisons.

Table 9.

Multiple Comparisons of Bisexual Microaggressions Scale Scores by Sexual Orientation

		Mean Difference	SE	<i>p</i> -value
Bisexual	Lesbian/gay	0.35	0.09	.000
	Straight	1.10	0.08	.000
Lesbian/gay	Bisexual	-0.35	0.09	.000
	Straight	0.76	0.09	.000
Straight	Bisexual	-1.10	0.08	.000
	Lesbian/gay	-0.76	0.09	.000

Confounding Variables

Prior to examining discriminant, convergent, and predictive validity, potential confounding variables were explored. These analyses were conducted using only the bisexual subsample, given the scale is theorized to capture experiences unique to bisexuals (supported by the analyses above). Bivariate correlations were conducted examining the relationship between all variables of interest (bisexual microaggressions, neuroticism, homonegative microaggressions, anti-bisexual experiences perpetrated by straight individuals, anti-bisexual experiences perpetrated by lesbian/gay individuals, physical quality of life, psychological quality of life, social quality of life, and environmental quality of life) and potential confounders (centrality of sexual orientation identity, outness about sexual orientation, age, race (White vs. non-White), gender identity (male vs. not male), and TGNC identity (yes vs. no)).

Bisexual microaggressions were significantly related to centrality ($r = .388, p < .001$), outness ($r = .216, p = .002$), gender identity ($r = -.246, p < .001$), and TGNC identity ($r = .264, p < .001$). Neuroticism was significantly related to centrality ($r = .294, p < .001$), age ($r = -.277, p < .001$), and gender identity ($r = -.229, p = .001$). Homonegative microaggressions were significantly related to gender identity ($r = -.197, p = .014$). Anti-bisexual experiences

perpetrated by straight people and by lesbian/gay people were both significantly related to centrality ($r = .240, p < .001$; $r = .205, p = .002$), gender identity ($r = -.205, p = .002$; $r = -.170, p = .010$), and TGNC identity ($r = .165, p = .014$; $r = .165, p = .013$). Physical quality of life was significantly related to TGNC identity ($r = -.319, p < .001$). Psychological quality of life was significantly related to outness ($r = .172, p = .012$), age ($r = .214, p = .001$), and TGNC identity ($r = -.159, p = .151$). Social quality of life was significantly related to outness ($r = .197, p = .004$) and gender identity ($r = -.206, p = .002$). Environmental quality of life was significantly related to outness ($r = .194, p = .004$) and TGNC identity ($r = -.249, p < .001$). Appropriate significant confounding variables were controlled for in subsequent analyses.

Discriminant Validity

The neuroticism subscale of the Big Five Inventory was examined for discriminant validity, as a strong correlation with responses to the Bisexual Microaggressions Scale may indicate that the scale is picking up on neuroticism rather than true experiences. This analysis was conducted using only the bisexual subsample, given the scale is theorized to capture experiences unique to bisexuals (supported by the analyses above). A partial correlation was conducted between neuroticism and bisexual microaggressions, controlling for centrality, outness, age, gender identity, and TGNC identity. Neuroticism was positively correlated with bisexual microaggressions ($r = .257, p < .001$), indicating that those higher in neuroticism report higher levels of microaggressions. However the correlation was low ($r = .257$), indicating that the scales are not measuring a similar construct (Carlson & Herdman, 2012).

Convergent Validity

In order to examine convergent validity, the Bisexual Microaggressions Scale was compared to the Homonegative Microaggressions Scale and the Anti-Bisexual Experiences Scale

(Heterosexual and Lesbian/Gay). These analyses were conducted using only the bisexual subsample, given the scale is theorized to capture experiences unique to bisexuals (supported by the analyses above). To begin, a partial correlation was conducted between homonegative microaggressions and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. In line with hypotheses, experiences of homonegative microaggressions were positively correlated with experiences of bisexual microaggressions ($r=.497, p<.001$), indicating that those who report more homonegative microaggressions report more bisexual microaggressions. However, the correlation did not approach $r=.70$, indicating that the scales do not meet criteria for convergence (Carlson & Herdman, 2012), as predicted.

Next, a partial correlation was conducted between anti-bisexual experiences perpetrated by straight individuals and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. As hypothesized, scores on the Anti-Bisexual Experiences Scale (Heterosexual) and scores on the Bisexual Microaggressions Scale were significantly and positively correlated ($r=.760, p<.001$) at a level indicating convergence (Carlson & Herdman, 2012). Similarly, a partial correlation was conducted between anti-bisexual experiences perpetrated by lesbian/gay individuals and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. As with anti-bisexual experiences perpetrated by straight individuals, experiences of bisexual microaggressions significantly and positively correlated with anti-bisexual experiences perpetrated by lesbian/gay individuals at .70 or higher ($r=.782, p<.001$), indicating convergence (Carlson & Herdman, 2012).

Predictive Validity

Finally, the WHO Quality of Life Brief Scale was examined as it was hypothesized to be significantly predicted by the Bisexual Microaggressions Scale above and beyond the Anti-

Bisexual Experiences Scale. First, partial correlations were conducted between the four components of quality of life and the Bisexual Microaggressions Scale to determine if a significant relationship between the variables existed, indicating that additional analyses were appropriate. Following the correlations, hierarchical linear regressions were conducted as appropriate to examine the predictive validity of the Bisexual Microaggressions Scale on the components of quality of life. Appropriate confounding variables were included based on the outcome variable (TGNC identity for physical quality of life; outness, age, and TGNC identity for psychological quality of life; and outness and TGNC identity for environmental quality of life), as well as both versions of the Anti-Bisexual Experiences Scale.

A partial correlation was conducted between physical quality of life and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. Physical quality of life was significantly and negatively correlated with bisexual microaggressions ($r = -.228, p = .001$), indicating that higher levels of bisexual microaggressions were related to worse physical quality of life. Thus, a hierarchical linear regression was conducted to examine whether the Bisexual Microaggressions Scale explained variance in physical quality of life above and beyond the Anti-Bisexual Microaggressions Scale. While bisexual microaggressions, anti-bisexual experiences, and the confounding variable (TGNC identity) accounted for 10.6% of the variance in physical quality of life, bisexual microaggressions alone only accounted for 0.5% and was not significantly predictive of physical quality of life (see Table 10). Tests to see if the data met the assumption of collinearity indicated that multicollinearity may be partially responsible for the non-significance of the Bisexual Microaggressions Scale ($Tolerance=.335, VIF=2.97$). While many state multicollinearity is an issue when tolerance values are .10 or lower and variance inflation factors (VIF) are 10 or higher

(Cohen, Cohen, West, & Aiken, 2003; DeMaris, 2004), Allison (1999) argues that tolerance values of .40 or lower and VIFs of 2.5 or higher are problematic. Thus, the multicollinearity analyses may indicate that the Bisexual Microaggressions Scale is too strongly correlated with the Anti-Bisexual Experiences scales to assess the individual contribution of the Bisexual Microaggressions Scale to the model, meaning that the measures may be redundant, or at least interchangeable, when exploring physical quality of life.

Table 10.

Hierarchical Regression Analysis Summary for Variables Explaining Physical QoL

Variable	<i>B</i>	<i>SEB</i>	β	<i>R</i> ²	ΔR^2
Model 1				.062	
TGNC Identity	-2.07	.56	-.25***		
Model 2				.102	.040*
TGNC Identity	-1.90	.56	-.23**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.86	.35	-.31*		
Anti-Bisexual Experiences, Heterosexual	0.29	.32	.15		
Model 3				.106	.005
TGNC Identity	-1.75	.57	-.21**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.71	.38	-.26		
Anti-Bisexual Experiences, Heterosexual	0.49	.34	.19		
Bisexual Microaggressions	-0.42	.42	-.12		

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

Next, a partial correlation was run between psychological quality of life and bisexual microaggressions, controlling for centrality, outness, gender identity, TGNC identity, and age. As hypothesized, psychological quality of life was significantly and negatively correlated with bisexual microaggressions ($r = -.204, p = .004$), indicating that higher levels of bisexual

microaggressions were related to worse psychological quality of life. Thus, a hierarchical linear regression was conducted to examine whether the Bisexual Microaggressions Scale explained variance in psychological quality of life above and beyond the Anti-Bisexual Microaggressions Scale. While bisexual microaggressions, anti-bisexual experiences, and the confounding variables (outness, TGNC identity, and age) accounted for 11.6% of the variance in psychological quality of life, bisexual microaggressions alone only accounted for 0.7% and was not significantly predictive of physical quality of life (see Table 11). As with physical quality of life, tests of the assumption of collinearity indicated that multicollinearity may be partially responsible for the non-significance of the Bisexual Microaggressions Scale ($Tolerance=.296$, $VIF=3.38$), potentially indicating that the use of both the Anti-Bisexual Experiences scales and the Bisexual Microaggressions Scale may be redundant when exploring variance in psychological quality of life.

Table 11.

Hierarchical Regression Analysis Summary for Variables Explaining Psychological QoL

Variable	B	SEB	β	R ²	ΔR^2
Model 1				.090	
TGNC Identity	-1.12	.58	-.13		
Outness	0.51	.20	.17*		
Age	0.08	.02	.20**		
Model 2				.110	.019
TGNC Identity	-0.98	.59	-.12		
Outness	0.56	.21	.19**		
Age	0.09	.03	.23**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.56	.38	-.20		
Anti-Bisexual Experiences, Heterosexual	0.20	.35	.08		

Variable	B	SEB	β	R ²	ΔR^2
Model 3				.116	.007
TGNC Identity	-0.80	.61	-.10		
Outness	0.61	.21	.21**		
Age	0.08	.03	.23**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.36	.41	-.12		
Anti-Bisexual Experiences, Heterosexual	0.33	.36	.12		
Bisexual Microaggressions	-0.54	.46	-.15		

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

Then, a partial correlation was run between social quality of life and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. In contrast to the hypothesis, social quality of life was not significantly correlated with bisexual microaggressions ($r = -.040, p = .579$), indicating that additional regression analyses are inappropriate for social quality of life. Finally, a partial correlation was run between environmental quality of life and bisexual microaggressions, controlling for centrality, outness, gender identity, and TGNC identity. As hypothesized, environmental quality of life was significantly and negatively correlated with bisexual microaggressions ($r = -.250, p < .001$), indicating that higher levels of bisexual microaggressions were related to worse environmental quality of life. Thus, a hierarchical linear regression was conducted to examine whether the Bisexual Microaggressions Scale explained variance in environmental quality of life above and beyond the Anti-Bisexual Microaggressions Scale. Anti-bisexual experiences and the confounding variables (outness and TGNC identity) accounted for 13.2% of the variance in psychological quality of life, while bisexual microaggressions failed to account for any additional variance and was not significantly predictive of environmental quality of life (see

Table 12). As with physical and psychological quality of life, tests of the assumption of collinearity indicated that multicollinearity may be partially responsible for the non-significance of the Bisexual Microaggressions Scale (*Tolerance*=.300, *VIF*=3.34), potentially indicating that the use of both the Anti-Bisexual Experiences scales and the Bisexual Microaggressions Scale may be redundant when exploring variance in environmental quality of life.

Table 12.

Hierarchical Regression Analysis Summary for Variables Explaining Environmental QoL

Variable	<i>B</i>	<i>SEB</i>	β	<i>R</i> ²	ΔR^2
Model 1				.082	
TGNC Identity	-1.60	.53	-.21**		
Outness	0.58	.19	.21**		
Model 2				.132	.050**
TGNC Identity	-1.36	.53	-.18*		
Outness	0.64	.19	.24**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.70	.34	-.28*		
Anti-Bisexual Experiences, Heterosexual	0.13	.31	.06		
Model 3				.132	.000
TGNC Identity	-1.38	.55	-.18*		
Outness	0.63	.19	.23**		
Anti-Bisexual Experiences, Lesbian/Gay	-0.72	.36	-.28		
Anti-Bisexual Experiences, Heterosexual	0.12	.33	.05		
Bisexual Microaggressions	0.07	.21	.02		

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

CHAPTER 4

DISCUSSION

Bisexual individuals make up approximately 7.5% of the population within the United States (Copen et al., 2016). However, there is limited research on the experiences of bisexuals. The limited research there is suggests that bisexuals report less past-year discrimination than their lesbian or gay counterparts (Bostwick et al., 2014), while reporting worse mental and physical health outcomes (e.g., Bostwick et al., 2014; Durso & Meyer, 2013; Fredriksen-Goldsen et al., 2013; Lhomond et al., 2014). Additionally, there is evidence that both straight and lesbian/gay individuals hold more negative attitudes towards bisexuals than they do towards lesbian or gay individuals (Fredrick & Williams, 2013; Herek, 2002; Mulick & Wright, 2002). One potential reason for this discrepancy is the lack of previous examination of microaggressions, or everyday slights and insults (Sue et al., 2007).

The goal of this dissertation was to develop and validate a scale to assess microaggressions that are unique to bisexuals. While there is an existing measure of bisexual experiences surrounding stigma (see Brewster & Moradi, 2010), recent qualitative work suggests that there are seven unique types of microaggressions that bisexuals experience, which were not all accounted for in the previous measure. Scale items were developed based on the seven unique types of microaggressions that were identified: hostility, denial/dismissal, unintelligibility, pressure to change, LGBT legitimacy, dating exclusion, and hypersexuality (Bostwick & Hequembourg, 2014). Items were developed based on previous literature and inspected by bisexual individuals for issues related to clarity and relatability, as well as examined by an expert in the field for face and content validity. The final version of the scale was then validated using a

multipronged online sample of bisexual individuals, as well as straight and lesbian/gay individuals used as comparison groups.

Initially, the scale was proposed as a single measure with seven subscales: hostility, denial/dismissal, unintelligibility, pressure to change, LGBT legitimacy, dating exclusion, and hypersexuality. However, examination of the final scale using principal component analysis suggested that the scale items measured a single component (labeled here as microaggressions), and that the items did not load into seven factors as predicted. One potential reason for the lack of coherent component extraction may be the sample size. Like the present study, the majority of previous studies that used principal component analysis used a ratio of less than or equal to 10 participants per scale item (63.2%), with the largest portion of previous research using a ratio of 5:1 or lower (25.8%; Costello & Osborne, 2005). However, there is evidence to suggest that a 10:1 ratio or higher is ideal for reducing error, and that even when using a ratio of 20:1 there are still error rates above the standard $\alpha=.05$ level (Costello & Osborne, 2005). The current scale is comprised of 35 items, indicating that a sample of 350 or higher would be closer to ideal for PCA than the sample of 232 bisexuals who were used in the analyses for this dissertation.

While the results from the PCA indicated a single component of microaggressions that cannot statistically be examined as seven unique types of microaggressions (at least in this sample), I argue that the theoretical basis of the scale and approach to validation still stands. In line with the composite approach that was taken in this study, the experience of one type of microaggression does not make it more or less likely that another type of microaggression will or will not be experienced. Thus, it may be that individuals have one or two experiences with each type of microaggression and do not distinctly experience the microaggression types as separate. However, it is still beneficial to discuss different types of microaggressions theoretically, as it

helps to provide an understanding of all of the unique ways in which bisexuals may experience stigma. In order to accurately assess microaggressions, it is necessary to consider all types of microaggressions that bisexuals may experience, even when considering microaggressions together as a single construct.

In line with the first hypothesis, this study found microaggressions, as measured by this scale, were experienced at higher levels by bisexuals than lesbian/gay or straight individuals. This finding indicates that the scale captures microaggression experiences that are unique to bisexuals. Gay/lesbian individuals had a mean score of 2.31 on the scale, meaning they were generally reporting scores that indicated these experiences had happened to someone that they know, but not personally to themselves. In contrast, bisexual individuals had a mean score of 2.71, meaning they were generally reporting scores that indicated these experiences had happened to them personally.

These unique bisexual microaggressions experiences were related to homonegative microaggressions experiences within bisexual individuals; however, in support of hypothesis 3, the fairly low correlation between the two scales indicates that the scale developed for this dissertation captures unique experiences not previously explored in the broader homonegative microaggressions scale (Wright & Wegner, 2012). While bisexuals share some experiences with lesbians and gay men based on their stigmatized sexual orientations (particularly with regards to stigmatizing attitudes and discriminatory behaviors from straight individuals, such as being called derogatory names), bisexuals face unique stigma (including microaggressions) that many lesbians and gay men do not experience, such as being told that they are “really just gay” or being told that others will not want to date them for fear of competing with “both men and women” (Bostwick & Hequembourg, 2014; Sarno & Wright, 2013). Further, bisexuals

experience this stigma from both straight and lesbian/gay individuals (Fredrick & Williams, 2013; Herek, 2002; Mulick & Wright, 2002). This double discrimination can range from people generally viewing bisexuality as bad or illegitimate to physical or verbal harassment.

This measure helps fill the gap between existing measures (e.g., Brewster & Moradi, 2010) and theoretical understandings of bisexual microaggression experiences (e.g., Bostwick & Hequembourg, 2014). While Brewster and Moradi's (2010) scale captured some forms of microaggressions (i.e., hostility, denial/dismissal, and hypersexuality), the scale developed in this dissertation covers all seven types of microaggression experiences outlined by Bostwick and Hequembourg (2014). Evidence in the convergent analyses indicates that these two scales are strongly correlated, but not completely overlapping, as predicted by hypothesis 4. The scale developed within this dissertation captures a broader range of microaggression experiences.

Experiences of microaggressions as captured by this scale were significantly and negatively related to lower physical, psychological, and environmental quality of life for bisexual individuals when examining partial correlations, indicating that experiences of these microaggressions may be related to lower quality of life. However, the scale was not significantly related to quality of life outcomes within the regression analyses when additionally accounting for the Anti-Bisexual Experiences Scale (Brewster & Moradi, 2010), in contrast to hypothesis 5. This may be in part due to the relatively small sample size within the study. Conversely, this may indicate that, with regards to quality of life, the Anti-Bisexual Experiences Scale and the Bisexual Microaggressions Scale are responsible for similar amounts of variance, thus the Bisexual Microaggressions Scale is not significantly predictive of quality of life when including both scales. This was supported by findings of multicollinearity diagnostics for the scales, indicating that the scales are too closely related to be included together in examinations of

quality of life and that the inclusion of either the Anti-Bisexual Experiences Scale or the Bisexual Microaggressions Scale would be appropriate for measuring the potential impact of bisexual microaggressions on quality of life.

Despite this, the Bisexual Microaggressions Scale may still be a beneficial tool for accounting for variance in a number of psychosocial resources. The Anti-Bisexual Experiences Scale accounts for microaggressions related to hostility, denial/dismissal, and hypersexuality, as well as some aspects of unintelligibility; however, it does not examine microaggressions related to LGBT legitimacy, pressure to change, and dating exclusion. It is possible that the microaggressions that are uniquely accounted for in the Bisexual Microaggressions Scale developed in this dissertation may be more strongly related to psychosocial resources, rather than physical and psychological health and access to physical resources (environmental quality of life). While there was not a significant relationship between social quality of life and the Bisexual Microaggressions scale in this dissertation, the social quality of life subscale is made up of only three items that ask generally about satisfaction in personal relationships, satisfaction with one's sex life, and satisfaction with level of support from friends. Future work should examine how the Bisexual Microaggressions Scale relates to more nuanced scales of psychosocial resources.

For example, pressure to change within a romantic relationship may impact relationship satisfaction or relationship longevity. Additionally, experiences related to dating exclusion may lead people to feel excluded from dating experiences or to have lower self-efficacy with regards to seeking romantic partners. Similarly, microaggressions related to LGBT legitimacy likely relate to how connected bisexuals are to the LGBT community. LGBT community connectedness has been linked with being more out to health care providers, which is linked to

positive health outcomes (Durso & Meyer, 2013). Further, previous research suggests that LGBT community connectedness is a protective factor against feelings of loneliness (Li, Hubach, & Dodge, 2015), as well as being negatively correlated with measures of depression, psychological distress, and social anxiety (Puckett, Levitt, Horne, & Hayes-Skelton, 2015) and positively correlated with measures of psychological and social well-being (Frost & Meyer, 2012). However, previous research also indicates that bisexuals report lower levels of LGBT community connectedness (Frost & Meyer, 2012). This may be due in part to LGBT legitimacy microaggressions. Thus, it may be that LGBT community connectedness serves as a mediator between bisexual microaggressions and physical and psychological quality of life.

Implications

This expanded assessment of the types of microaggressions experienced by bisexuals can help to provide a fuller understanding of bisexual health. There is evidence that bisexuals report less discrimination events (Bostwick et al., 2014), despite reporting worse physical health (e.g., Durso & Meyer, 2013; Fredriksen-Goldsen et al., 2013; Kerr et al., 2013; Newcomb et al., 2014), mental health (e.g., Bostwick et al., 2014; Lhomond et al., 2014; Molina et al., 2015; Shearer et al., 2016), and social and environmental resources (e.g., Kertzener et al., 2009; Klein & Dudley, 2014; Mahoney et al., 2014; McLaughlin et al., 2012). One potential reason for this gap may be an underestimate of the experience of microaggressions among bisexuals. Indeed, bisexuals report not experiencing discrimination while simultaneously describing microaggression experiences (McClelland et al., 2016). This scale expands on an existing measure of bisexual stigma experiences to include a broader range of bisexual microaggressions.

While the scale developed in this dissertation failed to account for additional variance in quality of life above and beyond the existing measure, there are still theoretical benefits to

including a broader range of microaggression experiences. First, it is possible that these additional microaggressions may be related to other psychosocial resources, as described above. Second, a scale that captures more types of experiences provides participants with more opportunities to describe their lived experiences. By expanding upon the existing measure to include items related to microaggression experiences of LGBT legitimacy, dating exclusion, and pressure to change, the Bisexual Microaggressions Scale provides bisexual individuals with the ability to describe their experiences with more nuance.

Overall, the exploration of microaggressions as they relate to bisexual health and well-being helps to fill a gap in the existing literature on bisexual experience. When research is limited to more obvious or macro level stigma experiences, the implications that can be drawn are limited to these events as well. For example, research on the impact of anti-LGBT laws and policies or discrimination in the workplace or school may have implications for policy change but may fail to address the impact that microaggressions have on the health and well-being of the individuals being protected under these policies. Additionally, research on response to these larger stigma experiences may provide clinicians with tools on how to help clients deal with obvious and blatant forms of stigma but may lack the nuance to help client's process microaggression experiences.

The interpersonal experiences of microaggressions can have an equally important impact on health and well-being as the more macro forms of stigma (Platt & Lenzen, 2013; Sue et al., 2007). Thus, research should examine ways to identify microaggressions more readily and to prevent microaggressions from occurring. One potential avenue for this exploration of identifying and preventing microaggressions is the school setting. While interventions exist to address bullying in schools, bullying is often conceptualized as physical or psychological

aggression that is ongoing and intentional (Hawley & Williford, 2015; Salgado, Senra, & Lourenço, 2014), and evidence suggests that prejudice against minority students, including lesbian, gay, and bisexual students, plays a part in bullying behavior but is not adequately addressed in anti-bullying intervention efforts (Minton, 2014). While bullying and microaggressions are theorized as distinct constructs, with bullying being more intentional and persistent than microaggressions (Dupper, Forrest-Bank, & Lowry-Carusillo, 2015), microaggressions should be conceptualized as part of bullying behavior that has a negative impact on LGBT youth (Nadal & Griffin, 2015). Thus, future interventions aimed at reducing bullying behavior should explore the unique impact that microaggressions may have on bullying victims and should teach students to recognize and call out microaggressions as they occur. The scale developed here can be used as a tool to identify microaggression experiences within a school setting to target bullying interventions to address the types of microaggressions being experienced by bisexual students within their schools.

Additionally, clinical interventions aimed at assisting clients with dealing with stigma should also include tools to help clients identify and process microaggression experiences. By giving clients the opportunity to think about the experiences they have had related to their identity, clients may gain a better understanding of how these experiences relate to their mental health. As with bullying interventions, the use of the scale developed in this dissertation may provide clinicians and their clients with the ability to identify specific instances of microaggressions that have occurred and allow them to be processed more fully. Existing clinical interventions, such as a cognitive-behavioral intervention addressing minority stress experiences of gay and bisexual men (Pachankis, 2014), should be tailored to bisexual experiences and should include the identification and processing of microaggressions.

Limitations and Future Directions

The sample size within this dissertation was not ideal for the more advanced analyses, such as the principal components analysis and hierarchical linear regression. A larger sample size would provide more power and may allow for a more nuanced understanding of the data. Future research should expand on the avenues for recruitment that were used within this study to gather larger populations of bisexual individuals. One potential avenue for increasing the sample of bisexual participants would be to do more targeted advertising specifically to bisexual participants through social media and email. Largely, this dissertation was advertised as being targeted towards all individuals regardless of sexual orientation in order to gather straight and lesbian/gay participants for use as comparison groups. Further, a more thorough screening process should be used on Amazon Mechanical Turk so that there is oversampling of the population of interest.

Additionally, the sample for the study was fairly homogenous with regards to race/ethnicity, with over 75% of participants identifying as fully White. Although race/ethnicity was not directly relevant to development of the scale, previous research suggests that LGBT people of color (LGBT-POC) experience identity and stigma in unique ways (Balsam et al., 2001; Kertzner et al., 2009; Meyer, Schwartz, & Frost, 2008; Stirrat, Meyer, Oullette, & Gara, 2008) and this may change how LGBT-POC interpret and respond to other experiences of stigma, such as bisexual microaggressions. Further, the nature of sampling within this dissertation inherently biased the sample. The use of the three-pronged online data collection may have limited who could participate, given the need for internet access and active participation in a social media platform, an email group, or MTurk. Thus, we are limited in the

generalizability of the scale given that the homogenous sample used within this study may not fully capture the experiences of all bisexuals.

It is important for future research to include more diverse samples with regards to race/ethnicity, as well as other factors such as Internet access, as these different factors may impact how individuals experience stigma. Intersectional theory states that our experiences cannot be broken down based on a single identity, but rather that the intersection of all of our identities shape how we experience and respond to the world (Cole, 2009; Crenshaw, 1989). Thus, in order to understand the experiences of bisexuals, we must also examine the experiences of all bisexuals, including bisexuals of color and bisexuals without Internet access. In order to access these more diverse samples, future research should examine ways to combine non-Internet sampling with Internet sampling to gather the broadest sample possible (Babbitt, 2013; Williams & Fredrick, 2015). For example, it may be crucial to pair online data collection with the other sampling strategies recommended by Meyer and Wilson (2009): (1) sampling in population-specific venues (e.g., physical LGBT community centers, LGBT gathering spaces such as gay clubs and bars), (2) time-space sampling (e.g., LGBT Pride celebrations), and (3) respondent-driven sampling (in which an initial wave of participants are asked to then recruit participants into the study through the use of additional incentives). For example, a study by Pastrana (2016) collected data using a mixture of venue-base sampling, snowball sampling (a less strict form of respondent-driven sampling), partnership with LGBT groups and organizations across the United States, and online recruitment, gathering a sample of over 5,000 LGBT participants who were diverse in outness of sexual orientation, centrality of sexual orientation identity, age, education, income, gender identity, and connectedness to the community.

Future research should also examine bisexual microaggressions over time. The current study is limited by its cross-sectional nature and thus cannot draw causal conclusions about the temporal relationship between variables, as well as being unable to examine the potential impact of microaggression experiences across time. Future research should examine microaggression experiences longitudinally, given that repeated experiences of microaggressions over time have been found to be related to decreased well-being in other groups (Platt & Lenzen, 2013; Sue et al., 2007).

Finally, future research that explores minority stress and stigma should aim to include measures of microaggressions for all stigmatized populations. Microaggressions, although described as small, can have a large impact on the target (Platt & Lenzen, 2013; Sue et al., 2007), and therefore should be considered a component of the distal stigma experiences described by Meyer (2003). Thus, they should be examined with as much frequency as more blatant discrimination events. In order to fully understand the link between stigma and health outcomes, all forms of stigma must be considered and assessed. By including measures of both traditionally explored stigma experiences as well as microaggressions, researchers will be able to more fully understand the experience of bisexuals and chart the connection between these experiences and the health disparities that bisexuals face.

Conclusion

Experiences of stigma are linked to a number of mental and physical health disparities (Hatzenbuehler et al., 2013; Meyer, 2003). In order for researchers to identify avenues for decreasing these disparities, it is important to fully understand the relationships between stigma and health, as well as any potentially mediating or moderating pathways. To truly understand those relationships, we must have a complete understanding of what stigma is and how it is

experienced. To do this, we must examine microaggressions. This dissertation developed and validated a quantitative scale to measure seven unique types of microaggressions experienced by bisexuals, expanding existing measures of bisexual microaggressions (Brewster & Moradi, 2010) to include more types of microaggression experiences. While the scale failed to predict quality of life above and beyond the existing measure, the Bisexual Microaggressions Scale still significantly contributes to the literature by providing researchers with a broader understanding of what microaggressions bisexuals may experience. The scale should be further explored in future research to examine how it may predict other outcomes not explored here, such as relationship satisfaction and LGBT community connectedness. Additionally, future research should explore avenues for increasing sample size and diversity, which may allow for more nuance in analysis of the Bisexual Microaggressions Scale.

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APPENDICES
APPENDIX A
Initial Bisexual Microaggressions Scale

Please rate the following in terms of relatability – is this something you have experienced or that someone you know has experienced?

- 1=Has *not* happened to me or anyone that I know
2=Has happened to someone that I know
3=Has happened to me, but only once
4=Has happened to me on a few occasions
5=Has happened to me a lot

One

1. _____ I have experienced hostility from others because of my sexual orientation.
2. _____ I have been told something is wrong with me because of my sexual orientation.
3. _____ People have yelled negative things at me because of my sexual orientation.
4. _____ I have felt threatened by gay or lesbian people because of my sexual orientation.
5. _____ I have felt threatened by straight people because of my sexual orientation.

Two

6. _____ I have been told my sexual orientation is not real.
7. _____ I have been told my sexual orientation is just a phase.
8. _____ People have questioned if my sexual orientation is legitimate.
9. _____ I have been told to make up my mind with regards to my sexual orientation.
10. _____ I have been told I am wrong about my sexual orientation or that I am just confused.

Three

11. _____ I have found that people don't really understand my sexual orientation.
12. _____ I have found myself having to explain or defend my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told that my sexuality isn't legitimate because of my relationship history.
15. _____ I have had to actively work to make sure my sexual orientation is recognized within my intimate relationships.

Four

16. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
17. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).

18. _____ A current or past partner has become uncomfortable when I tell other people about my sexual orientation.
19. _____ People have attempted to get me to change the way that I talk about my sexual orientation.
20. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

Five

21. _____ LGBT spaces or events have not been welcoming for me because of my sexual orientation.
22. _____ The LGBT community has ignored issues related to my sexual orientation.
23. _____ The LGBT community has viewed me as not “gay enough” because of my sexual orientation.
24. _____ I have had to prove that I don’t live up to stereotypes about my sexual orientation in order to be accepted into the LGBT community.
25. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.

Six

26. _____ I have had friends tell me they could never date someone of my sexual orientation.
27. _____ I have seen online dating profiles that mention they would not date someone of my sexual orientation.
28. _____ I have had potential romantic partners tell me they won’t date me because of my sexual orientation.
29. _____ I have avoided telling someone about my sexual orientation because I was afraid they would no longer want to date me.
30. _____ I have been told by people that they couldn’t date someone of my sexual orientation because they would get too jealous.

Seven

31. _____ People have thought that I am promiscuous or will sleep with anybody because of my sexual orientation.
32. _____ I have been told I probably have STDs because of my sexual orientation.
33. _____ People have believed that I cannot have monogamous relationships because of my sexual orientation.
34. _____ Potential partners have assumed that I am sexually adventurous because of my sexual orientation.
35. _____ I have been referred to as greedy because of my sexual orientation.

APPENDIX B

Final Bisexual Microaggressions Scale

Please read the following statements thinking about your personal experiences and the experiences of those that you know who have the same sexual orientation as you. Respond to each statement using the following scale. Please consider both in person and online experiences. *Note: Some of the following questions ask about your experiences with lesbian, gay, bisexual, and transgender (LGBT) spaces and communities. These are defined broadly to include any LGBT-orientated space or community, including but not limited to bars, gay-straight alliances, support groups, community centers, pride events, and online forums.*

- 1=Has *not* happened to me or anyone that I know
2=Has happened to someone that I know
3=Has happened to me, but only once
4=Has happened to me on a few occasions
5=Has happened to me a lot

1. _____ I have had to actively work to make sure my bisexuality is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being bisexual or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).
4. _____ People have yelled negative things at me because I'm bisexual.
5. _____ I have been told to make up my mind with regards to being bisexual.
6. _____ People have questioned if my bisexuality is legitimate.
7. _____ I have been referred to as greedy because of I'm bisexual.
8. _____ I have been told I am more likely to have STDs because I'm bisexual.
9. _____ I have been told that my bisexuality isn't legitimate because of my relationship history.
10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm bisexual.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told something is wrong with me because I'm bisexual.
15. _____ I have been told by people that they couldn't date someone who is bisexual because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm bisexual.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm bisexual.
18. _____ I have found myself having to explain or defend my bisexuality.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.
20. _____ The LGBT community has ignored issues related to bisexuality.
21. _____ I have seen online dating profiles that mention they would not date someone who is bisexual.

22. _____ I have been told my bisexuality is not real.
23. _____ I have been told my bisexuality is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm bisexual.
25. _____ I have experienced verbal or physical hostility from others because I'm bisexual.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm bisexual.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm bisexual.
28. _____ I have had to prove that I don't live up to stereotypes about bisexuality in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my bisexuality.
30. _____ I have had friends tell me they could never date someone who is bisexual.
31. _____ I have avoided telling someone about my bisexuality because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my bisexuality.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm bisexual.
34. _____ A current or past partner has become uncomfortable when I tell other people about my bisexuality.
35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

APPENDIX C
Non-Bisexual Versions of Bisexual Microaggressions Scale

Please read the following statements thinking about your personal experiences and the experiences of those that you know who have the same sexual orientation as you. Respond to each statement using the following scale. Please consider both in person and online experiences. *Note: Some of the following questions ask about your experiences with lesbian, gay, bisexual, and transgender (LGBT) spaces and communities. These are defined broadly to include any LGBT-orientated space or community, including but not limited to bars, gay-straight alliances, support groups, community centers, pride events, and online forums.*

- 1=Has *not* happened to me or anyone that I know
2=Has happened to someone that I know
3=Has happened to me, but only once
4=Has happened to me on a few occasions
5=Has happened to me a lot

Gay/Lesbian

1. _____ I have had to actively work to make sure my homosexuality is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being gay/lesbian or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).
4. _____ People have yelled negative things at me because I'm gay/lesbian.
5. _____ I have been told to make up my mind with regards to being gay/lesbian.
6. _____ People have questioned if my homosexuality is legitimate.
7. _____ I have been referred to as greedy because I'm gay/lesbian.
8. _____ I have been told I am more likely to have STDs because I'm gay/lesbian.
9. _____ I have been told that my homosexuality isn't legitimate because of my relationship history.
10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm gay/lesbian.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told something is wrong with me because I'm gay/lesbian.
15. _____ I have been told by people that they couldn't date someone who is gay/lesbian because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm gay/lesbian.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm gay/lesbian.
18. _____ I have found myself having to explain or defend my homosexuality.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.

20. _____ The LGBT community has ignored issues related to gay people/lesbians.
21. _____ I have seen online dating profiles that mention they would not date someone who is gay/lesbian.
22. _____ I have been told my homosexuality is not real.
23. _____ I have been told my homosexuality is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm gay/lesbian.
25. _____ I have experienced verbal or physical hostility from others because I'm gay/lesbian.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm gay/lesbian.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm gay/lesbian.
28. _____ I have had to prove that I don't live up to stereotypes about homosexuality in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my homosexuality.
30. _____ I have had friends tell me they could never date someone who is gay/lesbian.
31. _____ I have avoided telling someone about my homosexuality because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my homosexuality.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm gay/lesbian.
34. _____ A current or past partner has become uncomfortable when I tell other people about my homosexuality.
35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

Straight

1. _____ I have had to actively work to make sure my heterosexuality is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being straight or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).
4. _____ People have yelled negative things at me because I'm straight.
5. _____ I have been told to make up my mind with regards to being straight.
6. _____ People have questioned if my heterosexuality is legitimate.
7. _____ I have been referred to as greedy because I'm straight.
8. _____ I have been told I am more likely to have STDs because I'm straight.
9. _____ I have been told that my heterosexuality isn't legitimate because of my relationship history.
10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm straight.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).

14. _____ I have been told something is wrong with me because I'm straight.
15. _____ I have been told by people that they couldn't date someone who is straight because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm straight.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm straight.
18. _____ I have found myself having to explain or defend my heterosexuality.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.
20. _____ The LGBT community has ignored issues related to heterosexuality.
21. _____ I have seen online dating profiles that mention they would not date someone who is straight.
22. _____ I have been told my heterosexuality is not real.
23. _____ I have been told my heterosexuality is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm straight.
25. _____ I have experienced verbal or physical hostility from others because I'm heterosexual.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm straight.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm straight.
28. _____ I have had to prove that I don't live up to stereotypes about heterosexuality in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my heterosexuality.
30. _____ I have had friends tell me they could never date someone who is straight.
31. _____ I have avoided telling someone about my heterosexuality because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my heterosexuality.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm straight.
34. _____ A current or past partner has become uncomfortable when I tell other people about my heterosexuality.
35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

Pansexual

1. _____ I have had to actively work to make sure my pansexuality is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being pansexual or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).
4. _____ People have yelled negative things at me because I'm pansexual.
5. _____ I have been told to make up my mind with regards to being pansexual.
6. _____ People have questioned if my pansexuality is legitimate.
7. _____ I have been referred to as greedy because I'm pansexual.
8. _____ I have been told I am more likely to have STDs because I'm pansexual.
9. _____ I have been told that my pansexuality isn't legitimate because of my relationship history.

10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm pansexual.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told something is wrong with me because I'm pansexual.
15. _____ I have been told by people that they couldn't date someone who is pansexual because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm pansexual.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm pansexual.
18. _____ I have found myself having to explain or defend my pansexuality.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.
20. _____ The LGBT community has ignored issues related to pansexuality.
21. _____ I have seen online dating profiles that mention they would not date someone who is pansexual.
22. _____ I have been told my pansexuality is not real.
23. _____ I have been told my pansexuality is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm pansexual.
25. _____ I have experienced verbal or physical hostility from others because I'm pansexual.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm pansexual.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm pansexual.
28. _____ I have had to prove that I don't live up to stereotypes about pansexuality in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my pansexuality.
30. _____ I have had friends tell me they could never date someone who is pansexual.
31. _____ I have avoided telling someone about my pansexuality because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my pansexuality.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm pansexual.
34. _____ A current or past partner has become uncomfortable when I tell other people about my pansexuality.
35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

Asexual

1. _____ I have had to actively work to make sure my asexuality is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being asexual or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).

4. _____ People have yelled negative things at me because I'm asexual.
5. _____ I have been told to make up my mind with regards to being asexual.
6. _____ People have questioned if my asexuality is legitimate.
7. _____ I have been referred to as greedy because I'm asexual.
8. _____ I have been told I am more likely to have STDs because I'm asexual.
9. _____ I have been told that my asexuality isn't legitimate because of my relationship history.
10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm asexual.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told something is wrong with me because I'm asexual.
15. _____ I have been told by people that they couldn't date someone who is asexual because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm asexual.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm asexual.
18. _____ I have found myself having to explain or defend my asexuality.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.
20. _____ The LGBT community has ignored issues related to asexuality.
21. _____ I have seen online dating profiles that mention they would not date someone who is asexual.
22. _____ I have been told my asexuality is not real.
23. _____ I have been told my asexuality is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm asexual.
25. _____ I have experienced verbal or physical hostility from others because I'm asexual.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm asexual.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm asexual.
28. _____ I have had to prove that I don't live up to stereotypes about asexuality in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my asexuality.
30. _____ I have had friends tell me they could never date someone who is asexual.
31. _____ I have avoided telling someone about my asexuality because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my asexuality.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm asexual.
34. _____ A current or past partner has become uncomfortable when I tell other people about my asexuality.
35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

Queer

1. _____ I have had to actively work to make sure my queerness is recognized within my romantic relationships.
2. _____ I have been told I am wrong about being queer or that I am just confused.
3. _____ I have been told to use labels for my sexual orientation that align with my current relationship(s).
4. _____ People have yelled negative things at me because I'm queer.
5. _____ I have been told to make up my mind with regards to being queer.
6. _____ People have questioned if my queerness is legitimate.
7. _____ I have been referred to as greedy because I'm queerness.
8. _____ I have been told I am more likely to have STDs because I'm queer.
9. _____ I have been told that my queerness isn't legitimate because of my relationship history.
10. _____ In relationships, my partners have told me they wished I would use different labels for my sexual orientation.
11. _____ I have had someone that I was interested in romantically tell me they won't date me because I'm queer.
12. _____ People have attempted to influence the way that I talk about my sexual orientation.
13. _____ People have made incorrect assumptions about my sexual orientation based on my relationship(s).
14. _____ I have been told something is wrong with me because I'm queer.
15. _____ I have been told by people that they couldn't date someone who is queer because they would get too jealous.
16. _____ I have felt physically or verbally threatened by straight people because I'm queer.
17. _____ People have told me that I am promiscuous or will sleep with anybody because I'm queer.
18. _____ I have found myself having to explain or defend my queerness.
19. _____ I have had to prove my relationship history in order to be accepted in LGBT spaces.
20. _____ The LGBT community has ignored issues related to queerness.
21. _____ I have seen online dating profiles that mention they would not date someone who is queer.
22. _____ I have been told my queerness is not real.
23. _____ I have been told my queerness is just a phase.
24. _____ People have told me that I am incapable of having monogamous relationships because I'm queer.
25. _____ I have experienced verbal or physical hostility from others because I'm queer.
26. _____ The LGBT community has viewed me as not "gay enough" because I'm queer.
27. _____ Potential partners have assumed that I am sexually adventurous because I'm queer.
28. _____ I have had to prove that I don't live up to stereotypes about queerness in order to be accepted into the LGBT community.
29. _____ LGBT spaces or events have not been welcoming for me because of my queerness.
30. _____ I have had friends tell me they could never date someone who is queer.
31. _____ I have avoided telling someone about my queerness because I was afraid they would no longer want to date me.
32. _____ I have found that people don't really understand my queerness.
33. _____ I have felt physically or verbally threatened by gay or lesbian people because I'm queer.

34. _____ A current or past partner has become uncomfortable when I tell other people about my queerness.

35. _____ I have been pressured to use labels for my sexual orientation that are not in line with how I identify.

APPENDIX D
Demographic Questionnaire

How old are you (in years)?

Please indicate which state you currently live in. _____

Please indicate which state you grew up in. _____

Please indicate the kind of area you currently live in:

- Urban (over 100,000 residents)
- Suburban (10,000-100,000 residents)
- Rural (less than 10,000 residents)

Please indicate your level of education:

- Some high school, no diploma
- High school graduate or GED
- Some college, no diploma
- Associate's Degree
- Bachelor's Degree
- Advanced Degree (Masters, Professional Degree, Doctoral Degree)

What is your gender identity?

- Man
- Woman
- Genderqueer
- Another identity not listed (specify)
- Do not know
- Prefer not to answer

“Transgender/gender non-conforming” describes people whose gender identity or expression is different, at least part of the time, from the sex assigned to them at birth. Do you consider yourself to be transgender/gender non-conforming in any way?

Yes No Do not know Prefer not to answer

Please indicate your sexual orientation:

- Asexual
- Bisexual
- Gay/lesbian/homosexual
- Pansexual
- Straight/heterosexual
- Queer
- Another identity not listed (please specify)

Please indicate your race/ethnicity (select all that apply):

- Black, Afro-Caribbean, or African American
- East Asian or Asian American
- Latino or Hispanic American
- Middle Eastern or Arab American
- Native American or Alaskan Native
- Native Hawaiian or Pacific Islander
- South Asian or Indian American
- White or Euro-American
- Another identity not listed (please specify)

How would you rate your mental health?

Poor Fair Good Very good Excellent

How would you rate your physical health?

Poor Fair Good Very good Excellent

Do you have health insurance?

Yes No

If yes, how would you rate your health insurance?

Poor Fair Good Very good Excellent N/A

Please describe your current relationship status:

- Single
- In a relationship(s)
- Cohabiting
- Separated
- Married
- Domestic partnership

If you are currently in a relationship(s), what is the gender identity of your current partner? (open ended)

Are you currently working a paid job?

Yes No

How would you classify your personal financial situation?

- Low income
- Low-middle income
- Middle income
- Upper-middle income
- Upper income

APPENDIX E

Outness Inventory

Use the following rating scale to indicate how open you are about your sexual orientation to the people listed below. Try to respond to all of the items, but leave items blank if they do not apply to you.

- 1 = person definitely does NOT know about your sexual orientation status
- 2 = person might know about your sexual orientation status, but it is NEVER talked about
- 3 = person probably knows about your sexual orientation status, but it is NEVER talked about
- 4 = person probably knows about your sexual orientation status, but it is RARELY talked about
- 5 = person definitely knows about your sexual orientation status, but it is RARELY talked about
- 6 = person definitely knows about your sexual orientation status, and it is SOMETIMES talked about
- 7 = person definitely knows about your sexual orientation status, and it is OPENLY talked about
- 0 = not applicable to your situation; there is no such person or group of people in your life

1. Mother
2. Father
3. Siblings (sisters, brothers)
4. Extended family/relatives
5. My new straight friends
6. My work peers
7. My work supervisor(s)
8. Members of my religious community (e.g., church, temple)
9. Leaders of my religious community (e.g., church, temple)
10. Strangers, new acquaintances
11. My old straight friends

APPENDIX F
Centrality Measure

Please read the following statements and indicate your agreement.

1 2 3 4 5 6 7

Strongly disagree

Strongly agree

1. My sexual orientation is an important reflection of who I am.
2. In general, my sexual orientation is an important part of the way I see myself.
3. My sexual orientation defines who I am.
4. It is impossible to understand me without knowing about my sexual orientation.
5. I would be a different person without my sexual orientation.
6. My sexual orientation is a central part of my self-definition.

APPENDIX G
Big Five Inventory – Neuroticism Subscale

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Disagree strongly 1	Disagree a little 2	Neither agree nor disagree 3	Agree a little 4	Agree Strongly 5
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I see myself as someone who...

1. Is depressed, blue _____
2. Is relaxed, handles stress well _____
3. Can be tense _____
4. Worries a lot _____
5. Is emotionally stable, not easily upset _____
6. Can be moody _____
7. Remains calm in tense situations _____
8. Gets nervous easily _____

APPENDIX H
Homonegative Microaggressions Scale

The following questions ask you about experiences you've had
in the recent past (the past 6 months).

Hardly ever/never/ not at all 1	Occasionally, but rarely/a little bit 2	Occasionally/ from time to time/ somewhat 3	Consistently/ often/a good deal 4	Constantly/a great deal 5	Not applicable 6
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1. How often have people conveyed that it is your choice to be gay?
2. How often have people acted as if you have not come out?
3. How often have people asked about former boyfriends (if you are a woman) or girlfriends (if you are a man)?
4. How often have people assumed you are straight?
5. How often have people used the phrase "sexual preference" instead of "sexual orientation"?
6. How often have people assumed you were more sensitive (if you are a man) or less sensitive (if you are a woman) than you are?
7. How often have people assumed you were skilled in stereotypically gay tasks (like interior design for men or carpentry for women)?
8. How often have people assumed you knew a lot about stereotypical LGB interests like wine (if you are a man) or sports (if you are a woman)?
9. How often have people assumed you were knowledgeable about women's clothing (if you are a man) or men's clothing (if you are a woman)?
10. How often have people of the same sex assumed you were attracted to them simply because of your sexual orientation?
11. How often have people told you they just see you as a person, regardless of your sexual orientation?
12. How often have people said blanket statements about how society is full of diversity, minimizing your experience of being different?
13. How often have family members simply ignored the fact that you are a LGB individual?
14. How often have people changed the subject/topic when reference to your sexual orientation comes up?
15. How often have people assumed you were a pervert or deviant?
16. How often have people assumed you were a pedophile?
17. How often have people assumed you have HIV/AIDS because of your sexual orientation?
18. How often have people assumed you are sexually promiscuous because of your sexual orientation?
19. How often have people physically shielded their child/children from you?
20. How often have people avoided proximity, like crossing the street to walk?
21. How often have people said things like "I watched Will & Grace" to show they know about gay culture?
22. How often have people equated themselves and their experience to yours as a minority?

23. How often have people indicated they know other LGB individuals by saying things like "My hairdresser is gay" or "I have a gay friend"?
24. How often have people showed surprise at how not effeminate (if you are a man) or not masculine (if you are a woman) you are?
25. How often have people assumed you like to wear clothing of the opposite sex?
26. How often have people made statements that you are "more normal" than they expected?
27. How often have people addressed you with the pronoun of the opposite sex (she/her for men, he/him for women)?
28. How often have people told you to "calm down" or be less "dramatic"?
29. How often have people either told you to be especially careful regarding safe sex because of your sexual orientation or told you that you don't have to worry about safe sex because of your sexual orientation?
30. How often have people dismissed you for bringing up the issue of your sexual orientation at school or work?
31. How often have people stared at you or given you a dirty look when expressing affection toward someone of the same sex?
32. How often have people made statements about LGB individuals using phrases like "you people" or "you know how gay people are"?
33. How often have people said it would bother them if someone thought they were gay?
34. How often have people made statements about why gay marriage should not be allowed?
35. How often have people made statements against LGB individuals adopting?
36. How often have people (directly or indirectly) called you a derogatory name like fag, queer, homo, or dyke?
37. How often have people told you to act differently at work or school in order to hide your sexual orientation?
38. How often have people made offensive remarks about LGB individuals in your presence, not realizing your sexual orientation?
39. How often have people used the phrase "that's so gay" in your presence?
40. How often have people told you it's wrong to be gay or said you were going to hell because of your sexual orientation?
41. How often have people told you to dress differently at work or school in order to hide your sexual orientation?
42. How often have people told you not to disclose your sexual orientation in some context (like work or school)?
43. How often have you felt that TV characters have portrayed stereotypes of LGB individuals?
44. How often have you felt like your rights (like marriage) are denied?
45. How often have religious leaders spoken out against homosexuality?

APPENDIX I
Anti-Bisexual Experiences Scale – Heterosexual

Please rate how often the experience reflected in each of the following items has happened to you personally ***with heterosexual/straight people***. We are interested in your personal experiences as a bisexual individual and realize that each experience may or may not have happened to you. To tell us about your experiences, please rate each item using the scale below.

Never	Once in a while	Sometimes	A lot	Most of the time	Almost all of the time
1	2	3	4	5	6

1. People have not taken my sexual orientation seriously because I am bisexual.
2. People have denied that I am really bisexual when I tell them about my sexual orientation.
3. People have acted as if my bisexuality is only a sexual curiosity, not a stable sexual orientation.
4. People have acted as if my sexual orientation is just a transition to a gay/lesbian orientation.
5. When my relationships haven't fit people's opinions about whether I am really heterosexual or lesbian/gay, they have discounted my relationships as "experimentation".
6. People have addressed my bisexuality as if it means that I am simply confused about my sexual orientation.
7. Others have pressured me to fit into a binary system of sexual orientation (i.e., either gay or straight).
8. When I have disclosed my sexual orientation to others, they have continued to assume that I am really heterosexual or gay/lesbian.
9. People have stereotyped me as having many sexual partners without emotional commitments.
10. People have assumed that I will cheat in a relationship because I am bisexual.
11. People have treated me as if I am likely to have an STD/HIV because I identify as bisexual.
12. People have treated me as if I am obsessed with sex because I am bisexual.
13. Others have treated me negatively because I am bisexual.
14. Others have acted uncomfortable around me because of my bisexuality.
15. I have been excluded from social networks because I am bisexual.
16. I have been alienated because I am bisexual.
17. People have not wanted to be my friend because I am bisexual.

APPENDIX J
Anti-Bisexual Experiences Scale – Lesbian/Gay

Please rate how often the experience reflected in each of the following items has happened to you personally ***with lesbian/gay people***. We are interested in your personal experiences as a bisexual individual and realize that each experience may or may not have happened to you. To tell us about your experiences, please rate each item using the scale below.

Never	Once in a while	Sometimes	A lot	Most of the time	Almost all of the time
1	2	3	4	5	6

1. People have not taken my sexual orientation seriously because I am bisexual.
2. People have denied that I am really bisexual when I tell them about my sexual orientation.
3. People have acted as if my bisexuality is only a sexual curiosity, not a stable sexual orientation.
4. People have acted as if my sexual orientation is just a transition to a gay/lesbian orientation.
5. When my relationships haven't fit people's opinions about whether I am really heterosexual or lesbian/gay, they have discounted my relationships as "experimentation".
6. People have addressed my bisexuality as if it means that I am simply confused about my sexual orientation.
7. Others have pressured me to fit into a binary system of sexual orientation (i.e., either gay or straight).
8. When I have disclosed my sexual orientation to others, they have continued to assume that I am really heterosexual or gay/lesbian.
9. People have stereotyped me as having many sexual partners without emotional commitments.
10. People have assumed that I will cheat in a relationship because I am bisexual.
11. People have treated me as if I am likely to have an STD/HIV because I identify as bisexual.
12. People have treated me as if I am obsessed with sex because I am bisexual.
13. Others have treated me negatively because I am bisexual.
14. Others have acted uncomfortable around me because of my bisexuality.
15. I have been excluded from social networks because I am bisexual.
16. I have been alienated because I am bisexual.
17. People have not wanted to be my friend because I am bisexual.

APPENDIX K WHOQOL-BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one. Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks.

1. How would you rate your quality of life?
1 – Very poor 2 – Poor 3 – Neither poor nor good 4 – Good 5 – Very good
2. How satisfied are you with your health?
1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

The following questions ask about how much you have experienced certain things in the last four weeks.

3. To what extent do you feel that physical pain prevents you from doing what you need to do?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
4. How much do you need any medical treatment to function in your daily life?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
5. How much do you enjoy life?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
6. To what extent do you feel your life to be meaningful?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
7. How well are you able to concentrate?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
8. How safe do you feel in your daily life?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount
9. How healthy is your physical environment?
1 – Not at all 2 – A little 3 – A moderate amount 4 – Very much 5 – An extreme amount

The following questions ask about how completely you experienced or were able to do certain things in the last four weeks.

10. Do you have enough energy for everyday life?
1 – Not at all 2 – A little 3 – Moderately 4 – Mostly 5 – Completely
11. Are you able to accept your bodily appearance?
1 – Not at all 2 – A little 3 – Moderately 4 – Mostly 5 – Completely

12. Have you enough money to meet your needs?

1 – Not at all 2 – A little 3 – Moderately 4 – Mostly 5 – Completely

13. How available to you is the information that you need in your day-to-day life?

1 – Not at all 2 – A little 3 – Moderately 4 – Mostly 5 – Completely

14. To what extent do you have the opportunity for leisure activities?

1 – Not at all 2 – A little 3 – Moderately 4 – Mostly 5 – Completely

15. How well are you able to get around?

1 – Very poor 2 – Poor 3 – Neither poor nor good 4 – Good 5 – Very good

16. How satisfied are you with your sleep?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

17. How satisfied are you with your ability to perform your daily living activities?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

18. How satisfied are you with your capacity for work?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

19. How satisfied are you with yourself?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

20. How satisfied are you with your personal relationships?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

21. How satisfied are you with your sex life?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

22. How satisfied are you with the support you get from your friends?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

23. How satisfied are you with the conditions of your living place?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

24. How satisfied are you with your access to health services?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

25. How satisfied are you with your transportation?

1 – Very dissatisfied 2 – Dissatisfied 3 – Neither satisfied nor dissatisfied 4 – Satisfied
5 – Very satisfied

The following question refers to how often you have felt or experienced certain things in the last four weeks.

26. How often do you have negative feelings such as a blue mood, despair, anxiety, depression?

1 – Never 2 – Seldom 3 – Quite often 4 – Very often 5 – Always

VITA

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- Publications: Williams, S. L., & **Fredrick, E. G.** (2015). One size may not fit all: The need for a more inclusive and intersectional psychological science on stigma. *Sex Roles*, 73, 384-390.
- Williams, S. L., Mann, A. K., & **Fredrick, E. F.** (in press). Proximal minority stress, psychosocial resources, and health in sexual minorities. *Journal of Social Issues*.
- Select Presentations: **Fredrick, E. G.**, & Williams, S. L. (June 2016). *Creation, implementation, and dissemination of campus climate research*. In Targeting LGBTQ+ Outcomes: Dissemination of Research Findings to Improve Wellbeing conducted at the meeting of the Society for the Psychological Study of Social Issues, Minneapolis, MN.

Fredrick, E. G. (April 2016). *I saw it on Tumblr: Social media, intersectionality, and queer research*. In *Intersectionality, New Materialisms, and Health: Technological Animacies and the Maldistribution of Life Chances* conducted at the meeting of Southeastern Women's Studies Conference, Rock Hill, SC.

Fredrick, E. G., Klik, K. A., LaDuke, S. L., Williams, S.L., Mann, A.K. (January 2015) *Methodology in Sexual Minority Stigma Research*. Poster session presented at the meeting of the National Multicultural Conference and Summit, Atlanta, GA.

Fredrick, E. G., Williams, S. L. (June 2014; April 2014) *An intersectional approach to the study of sexual stigma*. Oral presentation at the meeting of the Society for the Psychological Study of Social Issues, Portland, OR and at the meeting of the Appalachian Student Research Forum, Johnson City, TN.

Select Honors and Awards: Department of Psychology Graduate Student Excellence in Research Award, Doctoral Level, Spring 2017

First Place, Cutting Edge Research from Emerging Psychological Scientists: Late-Breaking Poster Session, American Psychological Association Annual Convention, Summer 2016

First Place Oral Presentation, Doctoral Candidates Social & Behavioral Sciences Group A, Appalachian Student Research Forum, Spring 2016

Society for the Psychological Study of Social Issues Graduate Student Travel Award for 2015 National Multicultural Conference and Summit, Fall 2014

APA Division 44's Student and Recent Graduates Travel Award, Summer 2014