Sexual Orientation Microaggressions on Campus: Prevalence and Outcomes among Lesbian/Gay and Bisexual Students

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Sexual Orientation Microaggressions on Campus: Prevalence and Outcomes among Lesbian/Gay and Bisexual Students

by

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THESIS

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Abstract

Microaggressions are subtle, often-unintentional forms of discrimination that convey negative messages about targeted individuals. While empirical attention to sexual orientation microaggressions is growing, little is known about their prevalence among specific groups of sexual minorities. Using data (n = 438) from the US-based National Study of LGBTQ Student Success, this study examines: (1) the prevalence of both general sexual orientation microaggressions and erasure of sexuality and hypersexualization microaggressions among bisexual college students and their gay/lesbian peers; (2) the relationship between each type of microaggression and sexual orientation on student outcomes (depression, substance use, and social acceptance); (3) the role of gender in prevalence rates of microaggressions and the microaggression-sexuality-outcome relationship. Results indicate that gay/lesbian and bisexual students experience both forms of microaggressions at similar rates, and general microaggressions, and erasure and hypersexualization microaggressions increased gay/lesbian students’ risk for substance use and lower perceptions of social acceptance.

Keywords: Microaggressions, sexual orientation, depression, substance use, social acceptance
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Sexual Orientation Microaggressions on Campus: Responses and Outcomes of Lesbian/Gay and Bisexual Students

Research pertaining to oppression has expanded from focusing primarily on overt forms to including subtle forms of discrimination referred to as microaggressions. Microaggressions are defined as forms of discrimination that are expressed through subtle or unintentional tactics such as name calling, avoidant behaviour, and dismissing the experiences of the oppressed group (Shelton & Delgado-Romero, 2011). The term emerged from anti-racism literature as studies of “modern racism” gained recognition (Pierce et al., 1977; Sue et al., 2007). Literature on microaggressions has expanded to examine discrimination impacting other marginalized groups such as sexual minorities.

Table 1.
Terms and Definitions

| Microaggression | Forms of discrimination that are expressed through subtle or unintentional tactics such as name calling, avoidant behaviour, and dismissing the experiences of the oppressed group (Shelton & Delgado-Romero, 2011). |
| Microassault | Explicit and intentional actions or comments used to demean an individual or a group (Nadal et al., 2011a; Sue et al., 2007). |
| Microinsult | Unconscious ways of demeaning an individual’s heritage or identity (Nadal et al., 2011a; Sue et al., 2007). |
| Microinvalidation | Unconscious forms of microaggressions as they are ways of excluding or negating the experiences of individuals from oppressed groups (Nadal et al., 2011a; Sue et al., 2007). |
| LGBTQ | Lesbian, Gay, Bisexual, Trans*, Queer |
| Transgender | Someone whose gender identity does not match the identity imposed on them by societal ideas of what a man or a woman is. |
| Minority Stress | Excess physical, emotional, or mental strain unique to individuals from marginalized categories as a result of their minority position (Meyer, 2003). |
| Heterosexism | Heterosexism is the societal system that dictates what sexual orientations are seen as predominant or the default assumption. Through heterosexism, heterosexuality is seen as natural and superior (Shidlo, 1994). |
| Heteronormativity | Denoting or relating to a world view that promotes heterosexuality as the normal or preferred sexual orientation |
Homophobia/Biphobia
Homophobia describes the prejudice and discrimination against same-sex attracted people whereas biphobia describes the prejudice and discrimination against bisexual people.

Cisgender
Someone whose gender identity does match the identity imposed on them by societal ideas of what a man or a woman is.

Pansexual
Someone who is attracted to anyone regardless of gender, biological sex, or gender identity.

Increasing interest on sexual orientation microaggressions has led to the development of scales such as the LGBQ Microaggressions on Campus Scale (LGBQ-MCS) and the Homonegative Microaggressions Scale (HMS) (Woodford, Chonody, Kulick, Brennan, & Renn, 2015a; Wright, & Wegner, 2012). The development of scales has allowed for researchers to document the prevalence of microaggressions and their consequences. However, bisexual individuals have generally been ignored in research. When included, they have been categorized into either gay/lesbian or heterosexual groups as they are generally viewed as “in a transition period” (Bostwick & Hequembourg, 2014; Hequembourg, & Brallier, 2009). The current study is designed to focus on bisexuals in comparison to same-sex attracted people and asks if there are differences reflected in the prevalence of microaggressions, the relationship between microaggressions and substance use outcomes, and the role of social support as buffer to the sexuality-microaggression relationship. Additionally, accounting for potential gender differences, attention is given to the potential role of gender, specifically male and female.

Literature Review

Based on one’s standing in systemic societal patterns people may have particular advantages or disadvantages. Lesbian, gay, bisexual, transgender, or queer (LGBTQ) identities are generally marginalized because of this. Marginalized groups are then met with different forms of discrimination such as having their abilities neglected and opportunities denied (Messiou, 2006). Though discrimination varies, research has predominately focused on more
overt forms. Previous research on the victimization of LGBTQ identities has mainly focused on prevalence rates of hate crimes such as physical or verbal violence (Silverschanz, Cortina, Konik, & Magley, 2008; D’Augelli & Grossman, 2001; Herek, 1990). The severities of such overt forms of discrimination were noted in these studies. Beatings, verbal abuse, and LGBTQ related jokes have all been shown to impact the mental health of sexual minorities (Silverchanz et al., 2008; Waldo, Hesson-McInnis, & D'Augelli, 1998). Though overt forms of discrimination still occur, it is also important to understand covert forms of discrimination.

Shifting from focusing on more violent forms of discrimination, literature has moved to more contemporary discrimination. Equal rights movements have had a significant impact on prejudicial attitudes and discriminative behaviours towards minorities (Nadal et al., 2011a; Sue et al, 2007). Changing attitudes around minority groups have made more overt forms of discrimination less socially acceptable. Many subtle forms of discrimination are unconscious and automatic (Sue et al, 2007). Due to the fact that perpetrators are regularly unaware of the implications of their biased comments, they may go unnoticed by dominant groups whereas blatant forms of discrimination may be judged and confronted. However, covert discrimination does not go unnoticed by minorities as research has shown that subtle discrimination is psychologically distressing (Nadal et al., 2011a/2011b; Woodford, Kulick, Sinco, & Hong, 2014c). Noting that all forms of discrimination are distressing shows the importance of examining all forms of discrimination and their impacts on minority groups.

People cannot be fully understood by just one aspect of their identity as there are multiple aspects to one’s identity that add layers to how one experiences their marginalization or privilege. Intersectionality is the theory that the varying aspects of an individual such as race, gender, class, and sexuality are interwoven and mutually reinforcing (Nash, 2008). The privilege
and marginalization faced by an individual influences how deeply their marginalization impacts them (e.g.: a White gay man in comparison to a racialized lesbian woman). Research has focused on comparing one marginalized identity at a time; however there is growing interest in how different identity categories are jointly associated with outcomes (Cole, 2009). Though LGBTQ-identified people must deal with facing discrimination from dominant groups they have different experiences with this discrimination.

**Minority Stress**

There is a particular form of stress that comes from experiencing discrimination based on one’s marginal status. This excess physical, emotional, or mental strain unique to individuals from marginalized groups as a result of their minority position is referred to as minority stress (Meyer, 2003). The health impacts of minority stress are extensive due to its chronic nature. Minority stressors have been shown to significantly predict psychological distress (Kelleher, 2009; Meyer, 1995). This psychological distress is triggered by internal and external factors of minority stress. People experience external stressful events like discrimination, they anticipate such events and vigilantly try to protect themselves, and they internalize negative societal attitudes (Meyer, 2003). Facing discrimination after constantly expecting it and internalizing it puts a strain on the individual; however one’s resiliency combats the effects of minority stress.

Resilience in people facing minority stress helps them cope in spite of prominent societal stereotypes. Resilience is the end state of positive adaptation and development in the context of significant adversity (Russell, 2005). This positive adaptation is brought about when one’s social surroundings encourage resilience. Students who attend schools that have specific anti-harassment policies, teachers who intervene when they hear slurs, and a gay-straight alliance (GSA) or similar student clubs score higher on multiple scales of resilience (Russell, 2005).
These surroundings that encourage resilience are made up of protective factors. Protective factors are characteristics of the individual (e.g.: personality) or characteristics of one’s environment (e.g.: family, friends, or school) (Russell, 2005). Though protective factors and resilience help people with facing minority stress, greater societal systems are part of what cause the stress to begin with.

Heterosexism is the societal system that dictates what sexual orientations are seen as predominant or the default assumption. Through heterosexism, heterosexuality is seen as natural and superior (Shidlo, 1994). This triggers stresses for sexual minorities as they are seen as inferior. Kelleher (2009) found that experiences of heterosexism were the strongest predictor of distress among young people. When these attitudes are internalized it can negatively impact interpersonal connections of individuals. Gay men who display less internalization of heterosexism report more commitment and greater satisfaction in romantic relationships than gay men who displayed more internalization of heterosexism (Kamen, Burns, & Beach, 2011). Internalization of negative societal attitudes such as heterosexism illustrates how pervasive minority stressors are and how internalizing these attitudes can add to this stress. Maintaining one’s self-concept requires energy, which creates conflict between one’s self-identity and the perceptions of others based on stigmatizing social contexts (Meyer, 2003). Internalizing these pervasive attitudes minimizes the conflict between one’s own attitude and the perceptions of others.

Understanding the chronic exposure minorities have to stigmatizing social events emphasizes the energy it takes to be vigilant in anticipating these events and the energy it takes to try to keep them from negatively impacting one’s self-perception (Meyer, 2003). How one is impacted by internalizing these attitudes varies in regard to their experiences and identities.
Racialized LGBT identified individuals face heterosexism from racial/ethnic minority communities and racism from LGBT communities (Balsam, Molina, Beadnell, Simoni, & Walters, 2011). Having two sources of discrimination make the experiences of racialized LGBT identified people different from white LGBT people and other racialized individuals. This stress placed on an individual due to their intersecting minority statuses is referred to as multiple minority stress (Balsam et al., 2011). This stress can also be experienced differently when intersecting gender with sexual orientation.

As a result of male-centric views and masculinity, lesbian and bisexual women face different forms of minority stress and discrimination than gay and bisexual men. Hequembourg and Brallier (2009) found that women’s same sex relationships were eroticized through the heterosexual male gaze whereas gay men were at risk of physical violence as they were negatively viewed as promiscuous. Gay men threaten the societal construction of masculinity whereas lesbian and bisexual women’s sexuality is seen as something for heterosexual men to enjoy. Constructs around masculinity may be why heterosexual men may feel threatened by same-sex attracted men and respond with violence, whereas the lack of threat leads to sexualisation of same-sex attracted women (Hequembourg & Brallier, 2009). Though gay and bisexual men are at risk of harm from heterosexual men, internalization of this notion of masculinity could also lead them to harm themselves. Gay men’s construction of masculinity impacts their substance use and behaviour that puts them at risk for contracting HIV and other sexually transmitted diseases (Hamilton & Mahalik, 2009). In addition to gender one’s particular sexual orientation is also a factor in causing minority stress.

Bisexual experiences of minority stress are unique due to the fact that stressors may be perpetuated from within the group. Hequembourg and Brallier (2009) noted that bisexuals were
uniquely vulnerable to exclusion, discrimination, or stereotyping by heterosexuals as well as other sexual orientation minorities. Seeing that people with different sexual identities are impacted by minority stress in different ways, it is important to understand what these differences are. As mentioned previously, intersecting identities such as gender and race result in a variety of different experiences with minority stress. One’s type of sexual orientation would also play a part in determining one’s experience with minority stress.

**Sexuality**

The dangerous effects of negative attitudes toward LGB people have been noted in a large body of literature. Lesbians and gay men have reported being victimized through anti-gay violence such as verbal and physical abuse (D’Augelli & Grossman, 2001; Herek, 1990). Violence such as this does not only leave physical damage. Lesbian and gay-identified people have reported depression, anxiety, post-traumatic stress, suicidality (Nadal et al., 2011b; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002; Almeida, Johnson, Corliss, Molnar, & Azrael, 2009). Lower self-esteem of gay and lesbian people is also associated with sexual orientation victimization (Wright, & Wegner, 2012; Waldo, Hesson-McInnis, & D’Augelli, 1998). Unfortunately, when people seek help for the distress they have as a result of victimization, they may end up with more stress. Therapists might assume that sexual orientation is the sole reason for clients seeking help or they could minimize how important it is which can leave clients feeling uncomfortable and not trusting of their therapist (Shelton, & Delgado-Romero, 2011). Though LGB people do experience victimization collectively, it is important to remember that each individual still faces this discrimination in a unique way.

Generalizations from the experiences of gay men or lesbians should be made with caution as lesbians are subjected to oppression based on their sexual orientation and gender whereas gay
men must grapple with concepts around masculinity (Hamilton, & Mahalik, 2009; Meyer, 1995). Living one’s sexuality through these different lenses may lead people to face different forms of violence. Women in same-sex relationships are hypersexualized and men in same-sex relationships are threatened with physical violence (Hequembourg & Brallier, 2009). How gay men are treated in comparison to lesbians may not always be as direct as this. Men living with male partners tend to earn less than other men, however women living with female partners tend to earn more than other women (Clain & Leppel, 2001). Differences in discrimination between same-sex attracted men and women are just some of the differences that LGB people face.

Historically, the experiences of LGBQ people have been viewed as homogeneous. Researchers have treated bisexuels as homosexuals when conducting studies because of a binary mentality in which people are either gay/lesbian or heterosexual (Bostwick & Hequembourg, 2014). When bisexuality is acknowledged, it is assumed to mean that bisexual individuals are the exact middle of the spectrum in that they are equally attracted to same-sex and opposite-sex partners (Travers & O’Brien, 1997). Understanding bisexuality in this way ignores the complexity and fluidity of what bisexuality is. Continuing with dichotomous ideologies bisexuality is generally viewed as a transition period in which one moves from heterosexually identified to gay/lesbian or as a state of denying one’s homosexual identity (Hequembourg, & Brallier, 2009; Sarno & Wright, 2013; Travers & O’Brien, 1997). Though some people may identify as bisexual through a transitional state, many people continue to identify as such throughout their life.

Regardless of whether one’s bisexual identity is temporary or life-long, negative stereotypes about bisexuels are held by both heterosexual individuals and gay/lesbian individuals. As a result of biphobia, bisexual people are believed to be dishonest, promiscuous,
and unfaithful in relationships (Ross, Dobinson, & Eady, 2010; Dobinson, MacDonnell, Hampson, Clipsham, & Chow, 2005; Hequembourg, & Brallier, 2009). Stereotyping bisexual people in this manner may make it difficult for them to be accepted. Bisexual men and women have noted that it is not unusual for them to be rejected based on their sexual orientation from both heterosexual and gay/lesbian potential partners (Li, Dobinson, Scheim, & Ross, 2013). Partners that are aware of an individual’s bisexuality tend to be less likely to trust them, believing that they are likely to cheat (Li et al., 2013). Lacking support from partners adds to the lack of social support that bisexual people regularly report from heterosexuals and lesbian/gay people as well as small networks of other bisexual people (Bostwick & Hequembourg, 2014; Hequembourg, & Brallier, 2009). The lack of support contributes to the psychological distress associated with identifying as bisexual.

Stress has been shown to impact bisexual people in a particular way. Bisexuals were found to have worse outcomes than gay/lesbian and heterosexual people on indices of anxiety disorders, depression, suicidality, alcohol misuse, and negative affect (Jorm et al., 2002). Once bisexual people choose to seek help for these issues, they continue to experience discrimination from service providers. Bisexual people are not regularly provided with holistic safer sex information, and they are met with inappropriate comments and assumptions of promiscuity (Dobinson et al., 2005). In addition to the overt discrimination that LGB people face, lack of resources when they are distressed, negative sexual orientation based comments, and ignoring what they say they need are all more subtle ways in which LGB people can be discriminated against.
Microaggressions

Since the 1970’s, unintentional and covert forms of discrimination have been known as microaggressions. One of the earlier definitions was that microaggressions are subtle, stunning, generally automatic, and non-verbal ‘put downs’ of Blacks by offenders (Pierce, Carew, Pierce-Gonzalez, & Wills, 1977). Initially used to describe covert forms of racism, microaggressions have also been known as “modern racism”. As society loses tolerance for old-fashioned and overt forms of racism (e.g.; assaulting racialized individuals), “modern racism” which is covert racist acts and comments became more prominent (Pierce et al., 1977; Sue et al., 2007). Though the study of modern racism has had a long history, the field studying racial microaggressions remains small. The small body of research dedicated to microaggressions suggests overt racist events that can be more easily proven or quantified are still seen as more impactful (Sue et al., 2007). Though the focus on racial microaggressions is still small, the field of research on microaggressions has expanded to account for other marginalized identities.

Studies looking at the intersection of gender and sexual identity allow for a more intricate understanding of microaggressions. When comparing women of heterosexual, lesbian, and bisexual identities, bisexual women were found to have higher rates of mental health disorders than heterosexual or lesbian women (Bostwick, & Hequembourg, 2014). As women with different sexual identities have different health outcomes, it is shown that not all women’s experiences are the same. Not all same-sex attracted people experience their sexuality in the same way as same-sex attracted women are eroticized whereas same-sex attracted men face violence (Hequembourg & Brallier, 2009). Acknowledging the intersectional interaction of gender and sexuality is one of the many ways in which the different aspects of an individual’s identity may impact how they respond to microaggressions. Though sexual minorities are
intentionally treated negatively on some occasions, on others the negative treatment may be unintentional stemming from ignorance.

Regardless of whether people who commit microaggressions intend to be harmful, there is evidence to suggest that microaggressions negatively impact the mental health and well-being of minority groups (Bostwick, & Hequembourg, 2014; Nadal et al., 2011a; Shelton & Delgado-Romero, 2011). Microaggressions are derived from systemic forms of oppression such as racism, sexism and heterosexism. People may believe that they are non-prejudiced, they still harbour biases deeply ingrained in culture (Sue, 2010). Microaggressions are generally followed by dominant social responses to conceal systemic oppression, such as claiming a victim is oversensitive or being executed with enough subtlety to confuse the victim. The ambiguous nature of microaggressions that are indirect and non-verbal leave victims with this confusion.

The varying forms of microaggressions are divided into two categories: interpersonal and environmental. These two types of microaggressions and their subcategories show the variety of statements or actions that can impact the mental wellness of minority groups. Interpersonal microaggressions consist of microassaults, microinsults, and microinvalidations (Sue et al., 2007). Microassaults are explicit and intentional actions or comments used to demean an individual or a group (Nadal et al., 2011a; Sue et al., 2007). Some examples are name-calling, avoidant behaviour, and discriminatory actions (e.g.: choosing not to date bisexual people based on stereotypes, or choosing not to serve a gay couple in s business establishment). Microassaults are similar to overt forms of discrimination (Sue et al., 2007). The direct nature of microassaults results in the victims’ clear understanding of what happened, though the perpetrator may not be aware of this.
Microinsults are defined as unconscious ways of demeaning an individual’s heritage or identity (Nadal et al., 2011a; Sue et al., 2007). Some examples of microinsults are: surprise by the intelligence of a racialized individual, or assumptions that heterosexual couples will inherently make better parents than a gay/lesbian couple. Microinvalidations are also unconscious forms of microaggressions as they are ways of excluding or negating the experiences of individuals from oppressed groups (Nadal et al., 2011a; Sue et al., 2007). An example of a microinvalidation is telling gay/lesbian people not to flaunt their sexuality. The unconscious nature of microaggressions further illustrates how deeply rooted societal norms and biases can be, so much so that even seemingly neutral settings can contain microaggressions.

In addition to the interpersonal microaggressions, environmental microaggressions occur. Environmental microaggressions are not a product of what someone says or does, but of the setting around the victim (Sue et al., 2007). One example of such would be gendered washrooms. Though norms insist that there are two genders, individuals who may not identify with either of the prominent genders may feel invalidated. Environmental microaggressions occur because norms assert that work, school, and or outdoor environments should be set a certain way that invalidates the experiences of minorities.

The unconscious and uncertain nature of microaggressions is what makes them such a strong mechanism for triggering minority stress. Stressors occur frequently and reflect the larger societal biases that cause people of minority groups to feel like second class citizens (Nadal et al., 2011a; Platt & Lenzen, 2013). In addition to the chronic stress minorities’ face, they must deal with how they feel in their reactions to this stress. Victims of microaggressions end up questioning whether ‘that just happened’ or whether they should say something to the perpetrator (Sue et al., 2007). The second-guessing and self-doubt that a person may experience puts a
strain on the individual, leading them away from confrontation. Regardless of whether the recipient of a microaggression confronts it, negative consequences can arise. Silence can lead to loss of integrity and pent-up anger, whereas voicing concern may lead to accusations of paranoia or oversensitivity hindering their well-being (Sue et al., 2007).

The impact that microaggressions have on mental health illustrates the severity of the situation. Victims report low-self-esteem, post-traumatic stress, anger, depression, anxiety, suicidal ideation, and self-destructive behaviour resulting from sexual orientation microaggressions (Nadal et al., 2011a/2011b). Though people may seek help from therapists in attempting to cope with microaggressions and minority stress, there is no guarantee that these supports will be helpful. The prominence of clinicians perpetrating microaggressions have regularly hindered clients’ willingness to trust and open up to their therapist (Owen, Tao, & Rodolfa, 2010; Shelton & Delgado-Romero, 2011). Implications of microaggressions on well-being indicate the importance of a supportive environment in which victims may be able to feel safe and free from such stress, even if it is only temporary.

**Substance Use**

Research has shown the connection between substance use and sexual orientation. LGBTQ youth who report more heterosexist harassment, discrimination, and victimization also tend to have higher responses on substance use scales (Kelly, Davis, & Schlesinger, 2015; Heck et al., 2014; Woodford, Kulick, & Atteberry, 2014b). The current study will assist with understanding whether microaggressions are included in this relationship. People who have faced heterosexist harassment regardless of whether it is ambient or personal report higher rates of substance use problems than people who do not report facing heterosexist harassment at all (Silverchanz et al., 2007). The knowledge that multiple types of harassment have a relationship
with higher substance use further supports that there may be a relationship between microaggressions and substance use.

Understanding what relationships lie with sexual orientation, gender, and substance use help paint a full picture of how LGBTQ people may cope with harassment. Though LGB youth were more likely than heterosexual youth to use substances, bisexual youth were especially likely to do so (Marshall et al., 2008). Bisexual women have been found to have the highest prevalence rates of illicit drug use such as marijuana, ecstasy and amphetamines in comparison to bisexual men, lesbians, gay men, and heterosexual men and women (Corliss et al., 2010). Negating the type of sexual minority, gender still plays a role in the impact of harassment on substance use. Lesbian, bisexual, and questioning girls were significantly more likely to drink to the point of intoxication than heterosexual girls in high school, however; gay, bisexual, and questioning boys did not show this significant difference from their heterosexual counterparts until college (Hatzenbuehler, Corbin, & Fromme, 2008). Knowing these gender differences in substance use occur allows for the anticipation of seeing this difference in the current study.

Social supports have also been shown to buffer the effects of harassment on substance use and mental health issues. Young LGBTQ-identified people report lower levels of substance use when they have higher self-esteem and have a gay-straight alliance (GSA) at their school (Heck et al., 2014; Woodford et al., 2014b). Having supports such as a GSA or having more LGB friends are associated with less perceived victimization and lowered effects of heterosexist harassment which are associated with lower substance use (Heck et al., 2014; Woodford et al., 2014b). Seeing that social supports alleviate tendencies of substance use helps researchers understand the importance of these supports as a moderator impacting the effects of discrimination.
Social Support

Social support provides those receiving it with the opportunity to feel safe and have a sense of belonging. It is conceptualized as the exchange of resources between at least two people that enhance the well-being of those people and has been a topic of interest in literature since the 1970s (Zimet, Dahlem, Zimet, & Farley, 1988; Shumaker, & Brownell, 1984). In researching the presence or lack of social support that people have, one can see how it impacts mental health. Social support has been found to buffer individuals from stress-induced negative outcomes and helps with coping when LGBTQ people are victimized (Hequembourg & Brallier, 2009; Russell, 2005). Lower rates of depression and feelings of victimization are associated with social support (Balsam, 2003; Waldo et al., 1998). Though social support overall can impact one’s mental health, it comes from a variety of sources. Family, friends, and romantic partners are more intimate sources of social support (Zimet et al., 1988).

If one does not have access to support from one source, support from another may increase in significance to them. Living in harmony with one’s social environment is critical for good health though previous research has focused on interpersonal relationships (Woodford, Paceley, Kulick, & Hong, 2015b). These relationships still prove to be important to individuals in need of support. Families that maintain heterosexist attitudes may not be supportive of LGB identified individuals resulting in a special significance of intimate partner support for same-sex couples (Kamen et al., 2011). However, romantic partners are not always supportive of one’s bisexual identity (Dobinson et al., 2005). Friends can also provide the social support that LGBTQ people need. Bisexual friends were particularly valuable sources of support for bisexual individuals (Jorm et al., 2002). Differences in the importance of each source of social support shows a need for examining the impact of each source on the individual.
Purpose of the Current Study

Marginalized groups experience a particular kind of stress known as minority stress and live with this stress when faced with different forms of discrimination. Microaggressions are examples of covert forms of discrimination that occur frequently and cause distress (Nadal et al., 2011a/2011b; Platt & Lenzen, 2013). The way in which people respond to this stress shows its impact as LGBTQ youth report higher rates of substance use than their heterosexual counterparts (Marshall et al., 2008). Bisexual individuals are particularly impacted as they have unique experiences facing microaggressions that target their sexual orientation. Social support assists with coping though people who identify as bisexual are less likely to have access to positive social climates that are available to other sexual minorities (Bostwick & Hequembourg, 2014; Hequembourg, & Brallier, 2009; Woodford et al., 2014b). Research has shown that people who identify as bisexual experience discrimination differently than lesbian and gay identified individuals, however there is limited research in regards to covert forms of discrimination such as microaggressions.

The literature suggests that there would be a difference between how bisexual-identified individuals and same-sex attracted individuals would experience microaggressions. As bisexual-identified individuals experience overt forms of discrimination such as direct exclusion and stereotyping differently than same-sex attracted individuals, one would hypothesize that this may be reflected in how the two groups experience subtle forms of discrimination (Hequembourg & Brallier, 2009; Li et al., 2013). Seeing these differences between same-sex attracted people and bisexual people, the current study will compare bisexuels to same-sex attracted people and asks if there are differences reflected in the prevalence of microaggressions, the relationship between microaggressions and substance use outcomes, and the role of social support as buffer to the
sexuality-microaggression relationship. Additionally, given potential gender differences, attention is given to the potential role of gender, specifically male and female.

Method

Research Questions

Data collected as part of the National Study of LGBTQ student success (NSLGBTQSS) will be used for this study. The NSLGBTQSS was conducted by a team of researchers who are interested in examining a variety of factors that can potentially shape academic, social, and personal wellbeing for LGBTQ College and University students in the United States (National Study of LGBTQ Student Success, ND). The current study is one of many research projects derived from the data collected in 2013 by the NSLGBTQSS team led by Dr. Renn and Dr. Woodford.

For this study, self-identified lesbian, gay, and bisexual individuals will be divided into a same-sex attracted group and bisexual group in order to explore possible differences in the frequency and consequences of sexual-orientation microaggressions among these two groups. Further, potential gender differences, in terms of male and female within the two groups will also be examined. Finally, the role of social support as a potential buffer to the effects of microaggressions will be explored. Keeping gaps in the literature in mind, the following research questions will be addressed:

1. Is there a difference in self-reported rates of microaggressions between bisexual people and same-sex attracted individuals? Is there a difference between men and women within these two groups?
2. Is the association between microaggressions and substance use greater among non-monosexual individuals compared to same-sex attracted individuals? Is there a difference between men and women within these two groups?

3. Would social support be a moderating factor of the responses that lesbian/gay and bisexual individuals’ have to sexual orientation microaggressions? Is there a difference between men and women within these two groups?

**Reflexivity and Reflection**

As a White, cisgender, able-bodied individual I can use my voice to make space for the voices of marginalized individuals. The education that I have received as a Masters student in Community Psychology on research methods (qualitative and quantitative) and social values, such as how to respectfully work with people with different values, experiences, and perspectives from myself will enhance my credibility in the academic community. Though I benefit from many social systems, my identity as a woman and member of the LGBTQ community has left me in a position to be personally targeted with gendered and sexual orientation microaggressions. Having faced these microaggressions myself, I am able to empathize with the respondents of the current study. Sharing my sensitivity to microaggressions allows the audience to have a better understanding of what this work means and what brought me to it. The privileges I have from other social systems provides me with a platform to educate others and expand the literature on microaggressions while the discrimination I have faced enables me to have the passion to do so while advancing my theoretical sensitivity to microaggressions.

Reflection on my relationship with the research topic is important in order to be aware of personal biases and to work at keeping them separate from the work. The design of the current
study stems from the post-positivist paradigm that is rooted in modernist thinking associated with natural sciences. Post-positivist ontology asserts that there is an external reality and universal laws that can be measured, predicted, and explained (Gergen, 2001). Minority stress is part of the external reality of marginalized groups and microaggressions exist as part of this. How one interprets the experiences of microaggressions may be subjective but the existence of these issues are part of a universal reality. Understanding that LGBQ identified individuals experience minority stress and that microaggressions may contribute to this stress allows for the current study to be conducted with a critical lens. Critically examining the experiences of LGBQ individuals encourages the exploration of heterogeneity within the group (Teranishi, R., 2007). Critical quantitative research can help expand knowledge around the unique experiences of bisexual individuals.

Adding a critical quantitative framework to a post-positivist research method can be seen as the best way to convince non-believers of the validity of the message one is trying to convey (Apodaca, C., 2009; Keohane, R.O., 1998). Displaying the experiences of sexual minorities through methods that are believed to convey objective truth allows me to work within the current systems to advocate for LGBQ rights. Critical quantitative framework allows for critical race, feminist, LGBTQ, and other social justice researchers to use the language of the dominant systems to explain the inequalities within them (Apodaca, C., 2009; Teranishi, R., 2007). Using quantitative methods with a critical helps me portray my findings as part of an external reality and not just a personal perspective. The epistemology of the post-positivist paradigm posits that researcher and research study are independent of one another (Gergen, 2001). Due to this fact and the fact that the current study uses data collected as part of a larger project, my separation from the development of the design further encourages the assumed objectivity of the results. In
using a critical framework on a post-positive paradigm, I am able to play the role of advocate and promote social change through my research (Nelson & Prilleltensky, 2010). This is exactly what research as a community psychologist is intended for and even though I will maintain objectivity as best I can, I will use the data to add to literature and raise awareness of the impact of microaggressions.

**Study Design**

The current study is designed to be a correlational study using quantitative measures. Independent variables for the first research question are gender (male/female) and sexual orientation (lesbian/gay or bisexual) with the dependent variables as scores on the LGBQ Microaggressions on Campus Scale (LGBQ-MCS) (Woodford et al., 2015a). The independent variables for the second research question are gender (male/female), sexual orientation (lesbian/gay or bisexual), and microaggressions with dependent variables being scores on the Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), and single items measuring the frequency of smoking and illicit drug use. Finally, the independent variables for the third research question are gender (male/female) and sexual orientation (lesbian/gay or bisexual), and microaggressions with dependent variables as scores social support of friends) from the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988).

**Participants**

The sample for the current analysis is limited to students who self-identified as cisgender and lesbian, gay, or bisexual. With this restriction, 541 respondents are included in the current study: 261 identified as gay, 160 as lesbian, and 120 as bisexual (33 cisgender men, 87 cisgender women).
Procedures

As part of the NSLGBTQSS (http://www.lgbtqsuccess.net/), data were collected from an anonymous online survey (n = 952) conducted in 2013. Criteria for eligibility was that participants must have been 18 years of age and older who identified as a sexual minority and/or transgender and who were current or previous (past year) college students in the United States. One set of questions addressed microaggressions targeting sexual orientation while another set of questions addressed transgender specific microaggressions. The focus of the current study is on sexual orientation microaggressions and as a result, transgender participants will be excluded.

Participants were recruited through convenience sampling implemented at the 2013 Midwest Bisexual Lesbian Gay Transgender Ally College Conference held in February of that year in Lansing, Michigan, as well as through online LGBTQ networks following the conference. The first phase of sampling consisted of recruiting conference participants who were interested in completing the survey. Students were asked to do so during (with laptops provided) or after the conference (postcards with survey information provided). As part of the second phase, conference attendees were asked to distribute postcards advertising the study to peers on their own college campuses. Notices including the survey link were also distributed through LGBTQ listservs and networks. Participants provided informed consent before filling out the survey. Participants recruited at the conference were given a coupon for a free coffee at a local coffee shop and all participants had the opportunity to join a draw for an iPad. The current research questions and objectives were designed after data collection seeing as the current study is one of many using the NSLGBTQSS data.
Measures

**LGBQ Interpersonal Microaggressions.** The LGBQ Microaggressions on Campus Scale (LGBQ-MCS) (Woodford et al., 2015a) assesses the frequency of self-reported rates of interpersonal and environmental microaggressions related to sexual orientation experienced on campus in the last year or since students began college if they had been in school for less than a year (0= Never to 5= Very Frequently). For this study, the interpersonal microaggressions subscale, which contains 15 items will be used. Some example items are: “someone said or implied that all LGBQ people have the same experiences,” and “people assumed that I have a lot of sex because of my sexual orientation.” This measure has been tested and found to be both reliable and valid with an alpha level of .90 on the interpersonal subscale (Woodford, 2014b). Higher score scales indicate experiencing interpersonal microaggressions more frequently.

**Substance Use.** Three aspects of substance use will be investigated, namely excessive substance use, the frequency of smoking, and the frequency of illicit drug use. The Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993) that consists of 10 items will be used to assess levels of substance use by the participants. All items on the AUDIT scale are measured using multiple choice questions. Responses on the AUDIT scale will be dichotomized into scores 19 and lower, and scores 20 and above as scores in the latter category warrant further evaluation of alcohol dependence (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Example items: “how often do you have six or more drinks on one occasion” (Never, less than monthly, monthly, weekly, daily or almost daily), and “Have you or someone else been injured as a result of your drinking” (no, yes-but not in the last year, yes-during the last year). A multiple choice item asking “on average, how many cigarettes did you smoke in the past month” (answers range from none to 2 or more packs a day) and a multiple choice item asking “on
average, other than alcohol, how many times did you use illicit drugs -including prescription medication outside of its intended use- in the past month (answers range from never to 4 or more times a week) are also included in measuring substance use. The AUDIT has been found to be reliable in other studies (Selin, 2003) and an alpha level of .78 for the current sample.

**Perceived Social Support from Friends.** Four items measuring social support from friends from the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988) will be used to measure perceived social support from friends (1=very strongly disagree to 7= very strongly agree). Example items are “my friends really try to help me” and “I can talk about my problems with my friends” (Appendix G). Past research suggests that the MSPSS produces reliable results with coefficients of .90 and above even with a diverse group of participants (Dahlem, Zimet, & Walker, 1991). The Friends subscale has shown an internal reliability of .85 with a test-retest reliability of .75 (Zimet et al., 1988). Higher score on scales indicates more perceived social support from friends.

**Demographics and Controls.** Demographic questions will be used in order to be able to control for certain variables. Some examples are age (what is your age in years?), gender (man, woman, genderqueer, two-spirit, transgender, another identity, unresolved), and race (Black, Asian, Latino, White, Native, Pacific Islander, Multiracial, Other, Arab/Middle Eastern). For the purpose of the present study, focus will be on sexual identity and gender identity. Specifically, the current study will control for whether someone is white or racialized, their level of education (undergraduate or graduate), and whether they are out about their sexual orientation.

**Proposed Analysis**

In order to explore the data, analysis began with running frequencies, descriptive, and crosstab statistics. To address research question 1, a linear regression will be used with the
aforementioned controls to assess whether there is a difference in self-reported responses to microaggressions between the same-sex attracted group and the bisexual group. This will show whether sexual orientation (same-sex attracted or non-monosexual) is significantly correlated with high responses to the Interpersonal LGBQ Microaggression Scale. This will compare the scores on the LGBQ-MCS between the two groups. The sample will also be stratified by gender to note any gender differences, thus allowing the comparison of same-sex attracted men to bisexual men and same-sex attracted women to bisexual women.

Controlling for outness, student standing, and race a logistic regression will examine whether there is a difference in self-reported responses of alcohol abuse between the same-sex attracted group and the bisexual group. This will observe a relationship between participant scores on the AUDIT scale and sexual orientation. The relationship between smoking and illicit drug use and sexual orientation will be measured using a linear regression. Again, the sample will be stratified to note any gender differences, comparing same-sex attracted men to bisexual men in one regression, and comparing same-sex attracted women to bisexual women in the other.

Once again, controlling for outness, student standing, and race a linear regression will examine whether perceived social support moderates the impact of microaggressions on substance use. A three-way interaction of sexual orientation, social support, and LGBQ interpersonal microaggressions will be analyzed to note whether social support moderates the impact of microaggressions on substance use outcome. Again, the sample will be stratified by gender to detect any gender difference, comparing same-sex attracted men to bisexual men in one regression, and comparing same-sex attracted women to bisexual women in the other.
Ethical Implications

The National Study of LGBTQ student success (http://www.lgbtqsuccess.net/) received approval from the ethics review board at Michigan State University. Before participants completed the survey, they provided informed consent. Given that items about suicidal ideation, depression, and discrimination may have been upsetting to participants, the researchers provided contact information for the GLBT National Help Center. Responses were anonymous and voluntary in order to protect the privacy of participants. Respondents were informed that they could decline to respond to any questions that made them uncomfortable. Since the current study is using secondary data analysis, research ethics board approval is not necessary.

Knowledge Translation

Knowledge translation describes any method in which information gained from research is summarized, circulated, and exchanged to be used in benefitting communities with more effective resources, services, and systems (Canadian Institutes of Health Research, 2015). Spreading the results of the current study in an accessible and understandable way will allow for more awareness of the existence of microaggressions and their implications. Knowing who should have access to this information is the first step. The academic community can benefit from the results of this study being added to the literature as anything learned can help fill current gaps and provide suggestions for future directions. A published article on the study may add to the knowledge of other academics who focus on microaggressions or introduce them to other academics that focus on similar constructs like minority stress.

In order to dive in deeper with more audiences, the results of the current study can be added to existing workshops on microaggressions to enrich learning environments. Dr. Woodford and I have already run workshops together at Wilfrid Laurier University’s (WLU)
Gendered Violence Symposium and as part of a training series at WLU’s Diversity and Equity Office. The workshops were adapted to fit the needs of each of these groups as some people were more acquainted with microaggressions and minority stress theories than others. For those not acquainted with microaggressions, more time was spent explaining what they are. However, when participants were very aware of microaggressions and their own lived experiences the focus was shifted to how perpetrators are often well meaning and how even though they may experience microaggressions they can also be perpetrators of such actions. Including results from the current study that are based on responses from university and college students may allow workshop attendees to grasp the relevance this research has to their lives.

Adding the results on responses to microaggressions based on sexual orientations as part of these workshops will allow students to see distinctions within the LGBQ community should be made. Though some people LGBQ people may not find a microaggression offensive, others might and it is important to know that neither position is wrong. This may be confusing to students just learning about microaggressions but having a concrete example showing this can help. Having the example of the current study as part of microaggressions workshops may prompt students to start considering differences within other minority groups as well. The previous target audience has been students involved with or passionate about social justice, though future workshops can include students or employees new to the university as part of their ant-discrimination orientation.

Though the focus with these methods are on researchers and university students because information was collected in an academic setting, results from the current study can also be made accessible to people who identify themselves as or have loved ones who identify as LGBQ. Regardless of whether people are directly or indirectly impacted by these microaggressions,
minimizing the occurrences of microaggressions begins with awareness. Those who are not able to find the article, attend workshops or even understand the language in these situations can have access to infographics. Infographics will be visually appealing, easy to read and understand summaries of the current study that can be easily circulated through social media. Sharing this information across sites such as Facebook will allow for anyone to be aware of microaggressions and the results of this study but having this information on sites such as Everyday Feminism or LGBT News can reach a more targeted audience. Having community-based channels of knowledge translation in addition to the academic channels will allow for more holistic feedback that will drive future research directions.
References


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Sexual Orientation Microaggressions on College Campuses: Prevalence and Outcomes among Gay/Lesbian and Bisexual Students

by

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Sexual Orientation Microaggressions on Campus: Prevalence and Outcomes among Gay/lesbian and Bisexual Students

Lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals have a long history of experiencing marginalization stemming from heterosexism, a system that positions heterosexuality as natural, normal, and superior (Shidlo, 1994). Biphobia, a set of prejudiced attitudes about individuals with a bisexual sexual orientation, involves negative stereotypes and views about individuals who do not fit the binary construct of heterosexual or gay/lesbian (Bostwick & Hequembourg, 2014; Shidlo, 1994; Yost & Thomas, 2012). Heterosexism and biphobia are manifested in blatant (e.g., physical violence) and subtle (e.g., anti-gay comments) forms of discrimination. Microaggressions are forms of subtle discrimination which are expressed through name calling, avoidant behaviour, and dismissing the experiences of oppressed groups (Shelton & Delgado-Romero, 2011; Sue et al., 2007). Constant exposure to heterosexism, including discrimination, can result in sexual minorities dealing with chronic stress — minority stress — which can put them at increased risk for negative physical health, psychological distress, and other negative outcomes (Meyer, 2003). Outcomes such as depression, substance use, and lowered feelings of social acceptance have been associated with experiences of discrimination among sexual minorities (Nadal et al., 2011a; Woodford & Kulick, 2015; Woodford, Kulick, & Atteberry, 2015).

Minimal, although growing, research addresses sexual orientation microaggressions yet few studies explore within group differences. With a couple of exceptions (Balsam, Beadnell, & Riggs, 2012; Sarno & Wright, 2013; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002), studies addressing sexual orientation microaggressions have tended to include bisexual individuals alongside gay and lesbian individuals and other sexual minorities (e.g., queer). In
some cases, sample size may dictate the need to do this. However, the issue with neglecting to
differentiate gay/lesbian individuals from bisexual individuals erases the opportunity to learn
about possible differences between these groups (Jorm et al., 2002). The current study compares
bisexual college students to their gay/lesbian peers on the prevalence of microaggressions both
general sexual orientation microaggressions and microaggressions that reflect erasure of
sexuality and hypersexualization, which are biases that are particularly relevant to bisexual
individuals (Bostwick & Hequembourg, 2014; Ross, Dobinson, & Eady, 2010). Minority stress
theory (Meyer, 2003) suggests that microaggressions can increase minority individuals’ risk for
negative outcomes, we also examine the moderating relationship of sexual orientation
(gay/lesbian versus bisexual) on the microaggression-outcome relationships, specifically
examining depression, substance use indicators, and social acceptance. Attention is also given to
potential gender differences since research suggests that gender may play a role in students’
experiences and wellbeing (Balsam, Beadnell, & Riggs, 2012).

Minority Stress

Minority stress is experienced by marginalized individuals as a result of their
disadvantaged status in society (Meyer, 2003). In the case of sexual minorities, heterosexism
disadvantages lesbian, gay, bisexual, and other sexual minority identities and behaviours, while
privileging heterosexuality (Shidlo, 1994). Heterosexism, similar to other oppressive systems is
socially and culturally based in structures, institutions, and processes beyond the control of
individuals (Meyer, 2007; Shidlo, 1994). In addition to stressors that everyone face, heterosexist
prejudice and stigma can create chronic stress of sexual minorities (Meyer, 2007/1995).

Historically, the experiences of lesbian, gay, and bisexual (LGB) people have been
viewed by researchers as homogeneous with bisexals regularly excluded, discriminated against,
or stereotyped by both heterosexuals as well as other sexual minorities (Hequembourg & Brallier, 2009). Some biphobic stereotypes erase bisexual identities or cast them as hypersexual (Bostwick & Hequembourg, 2014; Ross, Dobinson, & Eady, 2010; Rust, 1992). Erasure often occurs due to assumptions that bisexual people are equally attracted to same and other-sex partners, are in a period of transition from identifying as heterosexual to gay/lesbian, or are in a state of denying their true gay/lesbian identity (Hequembourg & Brallier, 2009; Sarno & Wright, 2013; Travers & O’Brien, 1997). Additionally, bisexual people face stereotypes that they are promiscuous and unfaithful in relationships (Dobinson, MacDonnell, Hampson, Clipsham, & Chow, 2005; Hequembourg & Brallier, 2009; Ross, Dobinson, & Eady, 2010). Evidence suggests that such experiences of biphobia place bisexual individuals at particularly high risk for depression and substance use, as well as feelings of social rejection in comparison to gay/lesbian individuals (Balsam, Beadnell, & Riggs, 2012; Bostwick & Hequembourg, 2014; Jorm et al., 2002).

**Microaggressions**

Microaggressions derived from oppressive systems such as heterosexism (Sue et al., 2007; Herek, 1990). Unlike blatant discrimination, they may be perpetuated by well-intentioned and accepting individuals and reflect deeply ingrained biases that are ingrained in our culture (Sue, 2010). Microaggressions can be expressed interpersonally and systemically (also referred to as environmental microaggressions). They can include microassaults (e.g., slurs), microinsults (e.g., snubs), and microinvalidations (e.g., negating feelings) (Sue et al., 2007).

Researchers have examined sexual orientation microaggressions using both qualitative (Bostwick & Hequembourg, 2014; Nadal et al., 2011a/2011b) and quantitative methods (Woodford, Howell, Kulick, & Silverschanz, 2013; Sarno & Wright, 2013; Wright & Wegner,
2012). These studies have looked at the nature of microaggressions targeting sexual minorities and their effects (Nadal et al., 2011a; Platt, & Lenzen, 2013). Evidence suggests that microaggressions negatively impact the mental health and wellbeing of minority groups (Bostwick & Hequembourg, 2014; Nadal et al., 2011a; Shelton & Delgado-Romero, 2011). Sexual orientation microaggressions have been associated with increased physical health problems (e.g., headaches), physiological distress (e.g., depression and anxiety), and lowered feelings of self-acceptance among sexual minority college students (Nadal et al., 2011a/2011b; Woodford, Howell, Silverschanz, & Yu, 2012; Woodford, Kulick, Sinco, & Hong, 2014). Additionally, the degree at which sexual minorities experience microaggressions as they grow up also has an impact on negative outcomes such as lowered self-esteem (Wright & Wegner, 2012).

Though insightful, most studies tend to examine sexual minorities as a homogeneous group which does not advance knowledge about bisexual individuals’ experiences. Microaggressions specific to bisexuality can include hostility towards bisexuals, denial of or misunderstanding what bisexual identities are, and assumptions that bisexuals are promiscuous and polyamorous (Bostwick & Hequembourg, 2014; Ross, Dobinson, & Eady, 2010). Though few studies that compares bisexual people to gay/lesbian people, even fewer include an additional gender analysis between men and women (Balsam, Beadnell, & Riggs, 2012).

Taking both gender and sexual orientation identities into consideration stems from intersectionality theory. This theory suggests that identities such as race, gender, class, and sexuality are interwoven and mutually reinforcing (Nash, 2008). The intersection of these identities influences the privilege and marginalization individuals face. In addition to encountering heterosexism and biphobia, lesbian and bisexual women experience sexism and hegemonic masculinity is a concern for gay and bisexual men (Balsam, 2003; Hamilton &
Mahalik, 2009). Further, women’s same-sex relationships are often eroticized by heterosexual men in addition to physical violence that lesbian and gay people face (Hamilton & Mahalik, 2009; Hequembourg & Brallier, 2009). Bisexual men and women have tended to be equally accepted by women, however due to the eroticization of women’s same-sex relationships, heterosexual men are generally more accepting of bisexual women than bisexual men (Yost & Thomas, 2012). Given this context, it is possible that gender differences may also play a role in terms of being targeted for sexual orientation microaggressions.

Given that few studies acknowledge bisexual students experience identity erasure and hypersexualization specific to their sexual orientation, we separate bisexual students from gay/lesbian students when examining the relationship between microaggressions and negative outcomes (Nadal et al., 2011a; Ross, Dobinson, & Eady, 2010; Sarno & Wright, 2013; Woodford & Kulick, 2015). Further, we acknowledge that sexism and masculinity are stressors in addition to heterosexism (Balsam, 2003; Hamilton & Mahalik, 2009; Meyer, 1995).

1. Are rates of general sexual orientation microaggressions significantly higher among bisexual students than lesbian/gay students? Are rates of sexual orientation microaggressions specific to erasure and hypersexualization significantly higher among bisexual students than gay/lesbian students?

2. Is the association between general sexual orientation microaggressions and depression, social acceptance, or substance use greater among bisexual individuals compared to gay/lesbian individuals? Is the association between microaggressions specific to erasure/hypersexualization and depression, substance use, or social acceptance greater among bisexual individuals compared to gay/lesbian individuals?
3. Are there differences between men and women when examining research questions one and two?

Method

Participants

The sample for the current analysis consisted of 438 students aged 18-54 with 211 people who identified as men (182 gay and 29 bisexual) and 227 who identified as women (128 lesbian and 99 bisexual). The sample consisted of 3 Arab/Middle Eastern respondents, 14 Asian, 29 Black, 15 Latino, 46 Multiracial, 2 Native, and 326 White. The vast majority of the sample were undergraduate students (24%).

Procedures

Data were collected as part of the US-based National Study of LGBTQ Student Success (NSLGBTQSS, http://www.lgbtqsuccess.net/), which examined a variety of factors that could potentially shape LGBTQ college students’ academic, social, and personal wellbeing. The NSLGBTQSS received ethics approval from the institutional review board at Michigan State University. Eligibility criteria for the study included being 18 years of age or older, self-identify as a sexual minority and/or gender minority, and be a current or previous (past year) college student.

A convenience sample was recruited through convenience sampling at the February 2013 Midwest Bisexual Lesbian Gay Transgender Ally College Conference in Lansing, Michigan, as well as through online LGBTQ networks following the conference. Recruitment occurred over two phases. The first phase consisted of recruiting conference participants who were interested in completing the survey. Students were asked to complete the survey during (laptops provided) or after the conference (postcards with survey information provided). In the second phase,
conference attendees were asked to distribute postcards advertising the study to peers on their own college campuses, and notices including the survey link were also distributed through LGBTQ listservs and networks. Participants provided informed consent before answering the survey questions and were given contact information for the GLBT National Help Center in case they felt any distress as a result of completing the survey. Students recruited at the conference were given a coupon for a free coffee at a local coffee shop and all participants had the opportunity to join a draw for an iPad. Analysis was first conducted on the full analytical sample and then the sample was divided by primary gender identity (man/woman).

**Measures**

**Interpersonal Sexual Orientation Microaggressions.** We assessed both general sexual orientation microaggressions and microaggressions reflecting erasure of sexuality and hypersexualization. For general microaggressions, we used the 15-item interpersonal LGBQ microaggressions subscale from The LGBQ Microaggressions on Campus Scale (Woodford, Chonody, Kulick, Brennan, & Renn, 2015) (Appendix A). This subscale assesses the frequency of self-reported rates of interpersonal microaggressions related to sexual orientation experienced on campus in the last year or since becoming a student if less than a year (0 = *Never*, 5 = *Very Frequently*). This scale reflects an array of microaggressions that sexual minority students in general might experience. Sample items: “someone said or implied that all LGBQ people have the same experiences,” and “people seemed willing to tolerate my LGBQ identity but were not willing to talk about it.” This measure had excellent reliability for the full sample ($\alpha=.95$), the gay/lesbian group ($\alpha=.95$), and for the bisexual group ($\alpha=.95$).

To assess microaggressions reflecting erasure and hypersexualization, we composed a 6-item scale using items from the Interpersonal LGBQ Microaggressions subscale that we believed to
be particularly applicable to bisexual identities (Appendix B). Sample items: “I was told that being lesbian, gay, bisexual, or queer is ‘just a phase’” and “People assumed that I have a lot of sex because of my sexual orientation.” An external expert verified the face validity of the proposed scale. This measure had strong reliability for the full sample (α=.89), the gay/lesbian group (α=.88), and for the bisexual group (α=.90). Higher scores on both scales indicate experiencing microaggressions more frequently on campus.

**Depression.** The 9-item Patient Health Questionnaire-9 (PHQ-9) (Spitzer et al., 1999) was used to assess depressive symptoms. The items reflect DSM-9 diagnostic criteria. Participants reported how often they have been bothered by a list of problems, such as “Feeling down, depressed or hopeless” in the previous two weeks (0 = *Not at all*, 3 = *Nearly all the days*, Appendix C). This measure demonstrates strong reliability for the current sample (α=.88). Higher scale scores indicate a higher frequency of experiencing depressive symptoms.

**Social Acceptance.** Three items from the social acceptance subscale of the campus climate scale (Cortina, Swan, Fitzgerald, & Waldo, 1998) were used to measure perceptions of acceptance on campus (1 = *Strongly disagree*, 7 = *Strongly agree*, see Appendix D). The final item on this scale was reverse scored. Sample item: “In general, I fit in with the other students here.” Reliability was acceptable for the current sample (α=.77). Higher scores on the scale indicate stronger perceptions of being accepted on campus.

**Substance Use.** Four aspects of substance use were investigated, namely alcohol use, harmful alcohol use, smoking cigarettes, and illicit drug use. The 10-item Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was used to assess alcohol use and harmful alcohol use (Appendix E). Alcohol use was assessed based on the scale item inquiring about the frequency of drinking alcohol. Other items address
dependence symptoms and harmful use. All items are measured using multiple-choice questions, and higher scale scores indicate behaviour leading to alcohol related harm. This scale exhibited acceptable internal reliability among the current sample ($\alpha = .79$).

An item asking “on average, how many cigarettes did you smoke in the past month” (none, 2 or more packs a day) and an item asking “on average, other than alcohol, how many times did you use illicit drugs - including prescription medication outside of its intended use - in the past month” (never, 4 or more times a week) were used to assess smoking cigarettes and illicit drug use, respectively (Appendix F). These items and the alcohol use item were dichotomized to accommodate for the small cell sizes of the varying frequencies regarding use of each substance.

**Sexual orientation.** Primary sexual orientation was assessed using the following options: asexual, bisexual, gay, heterosexual, lesbian, man-loving-man, woman-loving-woman, pansexual, queer, questioning, and the option to specify another sexual orientation. The current study included man-loving-man and woman-loving-woman respondents with lesbian and gay individuals, respectively, on the basis that these identity categories reflect interest in their respective same genders. We included pansexual individuals with bisexual individuals on basis that they share interest in multiple genders. Other sexualities were excluded from the current analysis due to the lack of common interest with the same-gender interest group and the multiple-gender interest group.

We assessed the empirical appropriateness before collapsing each of the above groups. T-tests found no significant differences in the responses between bisexual and pansexual students on the two microaggression scales, general microaggressions $t(126)= -0.46$, $p = .65$, erasure and hypersexualization microaggressions, $t(126)= -0.49$, $p = .62$. Likewise, no significant differences were found in responses between lesbian and woman-loving-woman respondents on the general
microaggressions scale, $t(126) = 0.67, p = .50$, or on the erasure and hypersexualization scale, $t(126) = 0.06, p = .95$, or between gay and man-loving-man respondents on the general microaggressions scale, $t(180) = 0.13, p = .90$, or on the erasure and hypersexualization scale, $t(180) = 0.14, p = .89$.

**Controls.** We controlled for whether participants were white or racialized, were undergraduate or graduate students, and sexual orientation outness (6-item scale, $\alpha = .87$). All racial minority groups were grouped together due to the small sample sizes of each race/ethnicity (Table 1).

**Analysis**

Analysis of frequencies, descriptive, and crosstab statistics were used to explore the data. Research question one was assessed using multivariable linear regression models. To test question two, interaction terms were created between sexual orientation (gay/lesbian or bisexual) and general sexual orientation microaggressions, and erasure and hypersexualization microaggressions and multivariable regression models were conducted. Specifically, linear regression was used for depression, AUDIT, and social acceptance; binary logistic regression was used for drinking alcohol, smoking cigarettes, and illicit drug use. Analysis was first conducted on the full analytical sample and then the sample was divided by primary gender identity (man/woman) in order to address research question 3. Post-hoc analyses (described below) were conducted when interpreting statistically significant interaction effects.

**Results**

Table 1 presents the descriptive statistics for the study variables.

**Microaggressions**
On average bisexual students ($M = 1.47, SD = 1.30$) reported experiencing general sexual orientation microaggressions more often than gay/lesbian students ($M = 1.40, SD = 1.20$). Bisexual students ($M = 1.61, SD = 1.46$) also reported experiencing erasure and hypersexualization microaggressions more often than gay/lesbian students ($M = 1.49, SD = 1.23$). As seen in Table 2, according to the linear regression results, these differences are not statistically significantly different.

In terms of gender groups, bisexual women ($M = 1.56, SD = 1.33$) reported experiencing general sexual orientation microaggressions more than lesbian women ($M = 1.49, SD = 1.12$). Further, bisexual women ($M = 1.72, SD = 1.50$) also reported experiencing erasure and hypersexualization more frequently than lesbian women ($M = 1.56, SD = 1.25$). Among the men, bisexual men ($M = 1.18, SD = 1.19$) reported experiencing general sexual orientation microaggressions less often than gay men ($M = 1.33, SD = 1.18$). Additionally, bisexual men ($M = 1.25, SD = 1.29$) reported experiencing erasure and hypersexualization microaggressions less often than gay men ($M = 1.43, SD = 1.21$). As seen in Tables 4 and 6, none of these differences were statistically significant in multivariable models.

**Depression**

Sexual orientation did not moderate the relationship between either general sexual orientation microaggressions or erasure and hypersexual microaggressions and depression (Table 2). However, a main effect was found with general microaggressions, $b = 0.15, t(431)= 4.75, p<.001$, as well as the erasure and hypersexualization microaggressions, $b = 0.15, t(431)= 4.97, p<.001$. In the gender analysis, sexual orientation as a moderator of the general microaggressions-depression relationship was not statistically significant for men or women (Table 4). Similar results were found for erasure and hypersexualization microaggressions
among both groups (Table 6). A main effect of general microaggressions was found for men, $b = 0.13, t(183)= 3.62, p < .001$, and women, $b = 0.18, t(190)= 3.09, p = .002$. Further, a main effect of erasure and hypersexualization was found for men $b = 0.13, t(183)= 3.69, p < .001$, and women, $b = 0.17, t(190)= 3.30, p = .001$.

**Social Acceptance**

As seen in Table 2, sexual orientation did not moderate the relationship between general microaggressions and social acceptance. A main effect of general microaggressions was found in this model $b = -.42, t(425)= -6.51, p < .001$. Contrary to other findings, sexual orientation was found to moderate the relationship between erasure and hypersexualization microaggressions and social acceptance, $b = 0.21, t(425)=2.03, p=.04$. In other words, there is significant interaction between one’s sexual orientation and the experience of erasure and hypersexualization microaggression and one’s perceptions of social acceptance on campus. As seen in Figure 1, gay/lesbian students had a stronger negative relationship between experiencing erasure and hypersexualization microaggressions and social acceptance than bisexual students. Specifically, when looking at the best-fit lines in this figure, we see a more extreme negative slope for gay/bisexual students than when looking at bisexual students. Post-hoc analysis consisting of separate regressions among the gay/lesbian sample and bisexual sample (results not shown) confirmed these results.

When dividing the group by gender, sexual orientation did not moderate the relationship between general microaggressions and social acceptance among either group (Table 4). A main effect of general microaggressions was found for men, $b = -0.39, t(200)= -5.04, p < .001$, and women, $b = -0.44, t(218)= -4.03, p < .001$. In the model addressing erasure and hypersexualization microaggressions, sexual orientation moderated moderate the
microaggression-social acceptance among men $b = 0.53$, $t(200)=2.48$, $p=.01$, but not among women. That is, there is an interaction between men’s sexual orientation and the experience of erasure and hypersexualization microaggression and perceptions of social acceptance. As seen in Figure 2, gay men had a stronger negative relationship between experiencing erasure and hypersexualization microaggressions and social acceptance than bisexual men. Specifically, when looking at the best-fit lines in this figure, we see an extreme negative slope for gay men than when bisexual men have a slight positive slope. Post-hoc analysis consisting of separate regressions among the gay/lesbian sample and bisexual sample (results not shown) confirmed these results.

**Substance Use**

Among the full sample (Table 2) and sub-samples (Tables 4 and 6), sexual orientation did not moderate the relationship between both forms of microaggressions and harmful alcohol use (Table 2). A main effect was found for general microaggressions $b = 0.07$, $t(380)=3.00$, $p =.003$, as well as erasure and hypersexualization microaggressions $b = 0.07$, $t(380)=3.08$, $p =.002$. A main effect of general microaggressions was found for men, $b = 0.08$, $t(183)=3.12$, $p =.002$. Further, a main effect of erasure and hypersexualization was found for men, $b = 0.08$, $t(183)=3.00$, $p =.003$.

As displayed in Table 3, sexual orientation did not moderate the relationship alcohol use-microaggressions (both types) relationship among the full sample, and the same results were observed for illicit drug use. However, the interaction between sexual orientation and general sexual orientation microaggressions increased odds of smoking cigarettes by 1.79. Specifically, lesbian/gay students are at increased risk of smoking when experiencing higher frequencies of general sexual orientation microaggressions than bisexual students. As also seen in Table 3, the
interaction between sexual orientation and erasure and hypersexualization microaggressions increased odds of smoking by 1.63. Specifically, lesbian/gay students are at higher odds of smoking compared to their bisexual peers when facing higher frequencies of erasure and hypersexualization microaggressions. Post-hoc analysis consisting of separate regressions among the gay/lesbian sample and bisexual sample (results not shown) confirmed these interpretations.

When dividing the sample by gender, sexual orientation did not moderate the relationship between general microaggressions and alcohol or illicit drug use. However, as seen in Table 5, sexual orientation moderated the general microaggressions-smoking cigarettes relationship (AOR = 2.34) among women. This suggests that lesbian women are more likely to smoke when facing higher frequencies of general sexual orientation microaggressions than bisexual women.

As seen in Table 7, a significant moderation (AOR = 2.00) was observed for smoking cigarettes and erasure and hypersexualization among women. Specifically, this suggests that lesbian women are at increased risk for smoking when experiencing higher frequencies of erasure and hypersexualization than bisexual women. Among men, sexual orientation moderated the erasure and hypersexualization microaggressions-illicit drug use relationship (AOR = 2.56). That is, in comparison to bisexual men, gay men are at increased risk of using illicit drugs when facing higher frequencies of erasure and hypersexualization microaggressions than bisexual men. Post-hoc analysis consisting of separate regressions among the gay/lesbian sample and bisexual sample (results not shown) confirmed these interpretations.

**Discussion**

Most notably, the findings indicate that sexual orientation moderates the relationship between sexual orientation microaggressions and select outcomes, suggesting that in these cases gay/lesbian students are more negatively affected by microaggressions than their bisexual
Further, gender can also play a role with key differences found between men and women for select outcomes. This research advances minority stress research on microaggressions in important ways, especially in regard to highlighting differential impacts that microaggressions can have on gay/lesbian individuals compared to bisexual individuals.

Research question one asked if the rates of general sexual orientation microaggressions and erasure and hypersexualization microaggressions are significantly higher among bisexual students than gay/lesbian students. We found no significant differences, though bisexual students, on average, reported experiencing each type of microaggression more frequently than their gay/lesbian peers. College is a time of personal and academic growth and development, and involves being in spaces where there is growing acceptance of the LGBTQ community (Holland, Matthews, & Schott, 2013). Though supportive high schools environments with GSAs are associated with fewer negative outcomes for LGBT students, it is interesting to note that the people are more accepting of LGBT identities when they are more advanced in their college careers (Heck et al., 2014; Holland, Matthews, & Schott, 2013; Russell, 2005). Given that acceptance of this community is stronger as students’ progress through their education, and as students learn more about this community, it is possible that regardless of sexual orientation, sexual minorities may experience microaggressions.

Although it was not a specific research question, controlling for sexual orientation and other factors, both forms of microaggressions were risk factors for all outcomes except alcohol use and illicit drug use. Previous research suggests that sexual minority students (as a group) tend to report poorer wellbeing when facing subtle heterosexism on campus (Silverschanz, Cortina, Konik, & Magley, 2008; Woodford & Kulick, 2015).
Research question two asked if sexual orientation (bisexual students in comparison to gay/lesbian students) moderated the relationship between both forms of microaggressions and students outcomes. Among the full sample, analyses found significant moderation findings for sexual orientation and general sexual orientation microaggressions and cigarette smoking, as well as for erasure and hypersexualization and social acceptance and smoking. In each case, results suggest that gay/lesbian students are at increased risk for smoking and perceptions of not being accepted on campus when they face microaggressions, specifically when exposed to them at higher levels. In particular, among the full sample, in terms of general microaggressions and smoking analysis found a statistically negative association between both forms of microaggressions and smoking among gay/lesbian students, whereas the relationship was not significant for bisexual students. In contrast, although erasure and hypersexualization were negatively associated with social acceptance among both gay/lesbian and bisexual students in the full sample, the association was stronger among gay/lesbian students.

Viewing microaggressions as symbolic messages of exclusion – chronic stressors – can help understand the microaggression – outcome relationship in regards to minority stress theory. Consistent with research regarding minority stress theory, we see that students reporting more frequent experiences of microaggressions (stressors) also reported more negative outcomes (Meyer, 2003/1995; Woodford, Kulick, and Atteberry, 2015). Experiences of microaggressions may reinforce perceptions of social rejection as these experiences are associated with psychological distress and negative feelings toward one’s own sexual minority identity (Kelleher, 2009; Wright & Wegner, 2012). Additionally, the connection between experiencing microaggressions and substance use – specifically smoking and illicit drug use – can be interpreted by viewing substance use as a coping mechanisms for minority stress (Meyer, 2003).
Given the particular stressors and rejection that bisexual individuals receive from both heterosexual individuals and other sexual minorities with respect to social acceptance and other outcomes, bisexual individuals may be impacted by more overt forms of discrimination (Dobinson et al., 2005; Hequembourg & Brallier, 2009; Li, Dobinson, Scheim, & Ross, 2013; Ross, Dobinson, & Eady, 2010). Consistent with previous literature on LGBTQ youth and substance use, gay/lesbian students who reported more heterosexist harassment were more likely to smoke (Kelly, Davis, & Schlesinger, 2015; Woodford, Kulick, & Atteberry, 2015). Though previous research suggests that bisexual individuals are particularly at heightened risk of smoking (Balsam, Beadnell, & Riggs, 2012), this was not seen in association with the experience of microaggressions. It was surprising that bisexual individuals were not more negatively affected by both types of microaggressions as previous studies comparing bisexual individuals to gay/lesbian individuals have shown bisexual people be particularly impacted by microaggressions and have negative outcomes related to their bisexuality (Balsam, Beadnell, & Riggs, 2012; Jorm et al., 2002; Sarno & Wright, 2013).

The moderating factor of sexual orientation (gay/lesbian or bisexual individuals) on experiences of microaggressions was not associated with more negative outcomes for bisexual compared to gay/lesbian students which is contrary to the literature (Bostwick & Hequembourg, 2014; Ross, Dobinson, & Eady, 2010). This was particularly surprising when looking at erasure and hypersexualization microaggressions. Seeing as these microaggressions reflect biphobia, one would have assumed that they would be particularly impactful to bisexual individuals (Bostwick & Hequembourg, 2014; Ross, Dobinson, & Eady, 2010). The current study found no significant moderation of sexual orientation on general sexual orientation microaggressions as well as erasure and hypersexualization microaggressions in relation to depression, alcohol use, and
harmful alcohol use. These outcomes may be specifically associated with more overt sexual orientation discrimination such as heterosexist harassment (Kelly, Davis, & Schlesinger, 2015).

Research question three reflected the first two research questions with an added gender comparison. It examined whether rates of general sexual orientation microaggressions, as well as erasure and hypersexualization microaggressions were higher among bisexual men in comparison to gay men and bisexual women in comparison to lesbian women. Additionally, it examined the moderation of sexual orientation (bisexual men in comparison to gay men and bisexual women in comparison to lesbian women) on general sexual orientation microaggressions, as well as erasure and hypersexualization microaggressions on depression, social acceptance, and substance use. There was not a significant difference between bisexual men and gay men or bisexual women and lesbian women when reporting frequencies of general sexual orientation microaggressions. There was not a significant difference between bisexual men and gay men or bisexual women and lesbian women when reporting frequencies of erasure and hypersexualization microaggressions.

Among women, sexual orientation moderated the relationship between general sexual orientation microaggressions and cigarette smoking, as well as erasure and hypersexualization and smoking among this group. Specifically, both types of microaggressions were more positively correlated with smoking for lesbian women in comparison to bisexual women. Among men, sexual orientation moderated the association between erasure and hypersexualization and social acceptance and illicit drug use. Specifically, erasure and hypersexualization were more negatively correlated with social acceptance outcomes and more positively correlated with illicit drug use outcomes for gay men than bisexual men. Although erasure and hypersexualization were negatively associated with social acceptance among both groups in the full sample, the
association was stronger when comparing gay men compared to bisexual men. Seeing as the identities of bisexual men and women tend to be erased, the identities of gay men and lesbian women may be more visible, which may be why they are more negatively impacted by their bisexual counterparts (Ross, Dobinson, & Eady, 2010; Rust, 1992).

A possible rationale for why gay/lesbian students appeared to be at particular risk for negative outcomes when experiencing microaggressions than bisexual students is based in resilience and hypervigilance aspects of minority stress theory. Resilience is the end state of positive adaptation and development in the context of significant adversity (Russell, 2005). Additionally, when people experience external stressful events like discrimination, they anticipate such events and vigilantly try to protect themselves (Meyer, 2003). Black LGB individuals have a greater capacity to cope with minority stress as they had experienced racism prior to coming out (Meyer, 2010). This type of resilience may be reflected in the experiences of bisexuals as they experience biphobia in addition to heterosexism. The particular effort that bisexual individuals need to exert to be accepted by friends, family, partners, and the general LGBTQ community may lead them to build more resiliency (Bostwick & Hequembourg, 2014; Meyer, 2007). Further research is necessary to understand the relationship between different sexual orientations and microaggressions on negative outcomes.

**Limitations and Future Directions**

Limitations of the current study consist of sampling bias, sample size, and design of measures used. A large portion of the results derived from a sample of university students who attended a conference specific to LGBTQ identities may not be generalizable to a more diverse population. Educated individuals with an interest in justice for LGB identities may be more attentive to instances of discrimination. The results for gay/lesbians may have been more
representative than the results for bisexual individuals as larger sample sizes help minimize the influences of any outlier responses. Further, when stratifying the groups by gender, there were far fewer bisexual men than gay men. Specifically, there were more than double the amount of gay/lesbian respondents than bisexual respondents and only 29 bisexual men. A more balanced number of participants and larger sample sizes for bisexual individuals may have provided different results especially since the number of bisexual men was particularly small. Due to the fact that the scales for the current study were not designed specifically to compare lesbian/gay participants to bisexual participants, the development of a bisexual-specific microaggression scale could help with gaining a better understanding of whether microaggressions are particularly impactful for bisexual individuals. Examining the impact of microaggressions on different sexual orientations with multiple identities (e.g., gender) would allow for a more nuanced understanding of sexual orientation microaggressions.

From examining the literature and the information added by the current study we know that the field of microaggression research still has plenty of room for growth. Research should continue to explore within group differences among the LGBTQ spectrum. Since the current study contradicts what was anticipated, it is important to remember that these experiences are very complex and would benefit from qualitative studies to gain a better understanding of lived experiences of microaggressions. Future studies may also look more extensively at the intersectional identities such as race/ethnicity, level of education, and outness to expand on how these variables may interact with participants’ sexual orientation and responses to microaggressions. More research examining how masculinity and heterosexism impact gay/lesbian individuals differently than bisexual individuals can help unveil any reasons as to why gay men have particularly negative outcomes of social acceptance in relation to
experiencing microaggressions. Researching ways in which LGBTQ students can be resilient in response to microaggressions will also be useful. Providing universities with the ability to help students combat the negative implications of microaggressions is one way students can be resilient to minority stress as a whole.

Finally, environmental microaggressions were decidedly not included in the current study. Environmental microaggressions are not a product of what someone says or does, but of the setting around the victim (Sue et al., 2007). Environmental microaggressions occur because norms assert that work, school, and or outdoor environments should be set a certain way that invalidates the experiences of minorities. Future research can examine what environmental microaggressions may be related to negative outcomes among LGB identities and how systems that perpetuate environmental microaggressions can be deconstructed.

In conclusion, microaggressions have been shown to negatively impact mental health, substance use behaviour, and feelings of social acceptance (Jorm et al., 2002; Kelly, Davis, & Schlesinger, 2015; Woodford & Kulick, 2015). The current study has helped to remind researchers about the complexity and diversity within the LGBQ community as well as expand the literature on sexual orientation microaggressions and how they may impact bisexual individuals differently than gay men and lesbians. Particularly, gay men were found to be the most at risk for illicit drug use, and lowered feelings of social acceptance.
References


Table 1

Descriptive statistics for demographics and study variables

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\(^a\) Theoretical range 0-4, higher scores indicate greater levels of outness on campus
\(^b\) Theoretical range 0-5, higher scores indicate greater frequency of microaggressions on campus
\(^c\) Theoretical range 0-3, higher scores indicate frequency at which participants are bothered by depressive issues in the past two weeks
\(^d\) Theoretical range 1-7, higher scores indicate greater feelings of social acceptance on campus
\(^e\) Theoretical range: never- 4 times a week, higher scores indicate more frequent use of alcohol
### Table 2

Multivariable linear regressions predicting outcomes among lesbian/gay and bisexual students

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<td>Outness on Campus</td>
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<td>0.05 (0.06)</td>
<td>.04</td>
<td>0.00 (0.03)</td>
<td>.00</td>
<td>0.03 (0.02)</td>
<td>.08</td>
</tr>
<tr>
<td>Microaggressions</td>
<td></td>
<td></td>
<td></td>
<td>0.15 (0.03)</td>
<td>.30(^***)</td>
<td>0.07 (0.02)</td>
<td>.20(^**)</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td></td>
<td></td>
<td></td>
<td>-0.05 (0.05)</td>
<td>-.08</td>
<td>-0.02 (0.04)</td>
<td>-.04</td>
</tr>
<tr>
<td>(R^2)</td>
<td></td>
<td>.01</td>
<td></td>
<td>.11</td>
<td></td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>(F)</td>
<td></td>
<td>.67</td>
<td></td>
<td>8.11(^***)</td>
<td></td>
<td>2.91(^**)</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) n=438
\(^b\) n=387
\(^c\) n=432

\(^*\) \(p \leq .05\), \(^**\) \(p < .01\), \(^***\) \(p < .001\)
### Table 3

Multivariable logistic regressions predicting outcomes among lesbian/gay and bisexual students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alcohol use$^a$</th>
<th>Cigarette smoking$^b$</th>
<th>Illicit drug use$^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B (SE) AOR (95% CI)</td>
<td>B (SE) AOR (95% CI)</td>
<td>B (SE) AOR (95% CI)</td>
</tr>
<tr>
<td><strong>Interpersonal Microaggressions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>-0.08 (0.51)</td>
<td>0.93 (0.34, 2.51)</td>
<td>-1.61 (0.46)</td>
</tr>
<tr>
<td>Racialized</td>
<td>-0.03 (0.35)</td>
<td>0.97 (0.49, 1.91)</td>
<td>-0.29 (0.30)</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>-2.16 (0.73)</td>
<td>0.12 (0.03, 0.49)$^{**}$</td>
<td>-0.35 (0.30)</td>
</tr>
<tr>
<td>Outness on Campus</td>
<td>0.01 (0.14)</td>
<td>1.01 (0.76, 1.33)</td>
<td>0.33 (0.13)</td>
</tr>
<tr>
<td>Microaggressions</td>
<td>0.20 (0.24)</td>
<td>1.23 (0.76, 1.97)</td>
<td>-0.09 (0.18)</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td>-0.05 (0.29)</td>
<td>0.95 (0.54, 1.68)</td>
<td>0.58 (0.22)</td>
</tr>
<tr>
<td><strong>Cox &amp; Snell R$^2$</strong></td>
<td>.04</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Erasure and Hypersexualization Microaggressions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>-0.11 (0.50)</td>
<td>0.89 (0.34, 2.37)</td>
<td>-1.50 (0.45)</td>
</tr>
<tr>
<td>Racialized</td>
<td>-0.03 (0.35)</td>
<td>0.97 (0.49, 1.92)</td>
<td>-0.24 (0.30)</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>-2.17 (0.73)</td>
<td>0.12 (0.03, 0.48)$^{**}$</td>
<td>-0.35 (0.30)</td>
</tr>
<tr>
<td>Outness on Campus</td>
<td>0.00 (0.14)</td>
<td>1.00 (0.76, 1.32)</td>
<td>0.33 (0.13)</td>
</tr>
<tr>
<td>Microaggressions</td>
<td>0.19 (0.21)</td>
<td>1.21 (0.80, 1.82)</td>
<td>-0.08 (0.16)</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td>-0.02 (0.26)</td>
<td>0.99 (0.59, 1.64)</td>
<td>0.49 (0.20)</td>
</tr>
</tbody>
</table>

$^a$ n=437

$^b$ n=435

$^c$ n=438

$p \leq .05$, **p<.01, ***p<.001
Table 4

Multivariable linear regressions predicting outcomes related to interpersonal microaggressions among gay/lesbian and bisexual students when these groups are stratified by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcomes</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Micromassions</td>
<td>Depression</td>
<td>Harmful alcohol use</td>
<td>Social acceptance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td><strong>Interpersonal Microaggressions</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-0.12 (.26)</td>
<td>-.03</td>
<td>0.18 (.18)</td>
<td>.11</td>
<td>-0.05 (.13)</td>
</tr>
<tr>
<td>Women</td>
<td>0.08 (.17)</td>
<td>.03</td>
<td>0.25 (.16)</td>
<td>.18</td>
<td>0.11 (.10)</td>
</tr>
<tr>
<td>Racialized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-0.16 (.19)</td>
<td>-.06</td>
<td>0.01 (.09)</td>
<td>.01</td>
<td>0.18 (.07)</td>
</tr>
<tr>
<td>Women</td>
<td>0.32 (.19)</td>
<td>.11</td>
<td>0.02 (.12)</td>
<td>.01</td>
<td>-0.06 (.07)</td>
</tr>
<tr>
<td>Graduate Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-0.38 (.19)</td>
<td>-.01</td>
<td>-0.12 (.09)</td>
<td>-.09</td>
<td>0.06 (.07)</td>
</tr>
<tr>
<td>Women</td>
<td>-0.02 (.20)</td>
<td>-.01</td>
<td>-.215 (.11)</td>
<td>-.13</td>
<td>-0.10 (.07)</td>
</tr>
<tr>
<td>Outness on Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.07 (.08)</td>
<td>.07</td>
<td>0.01 (.04)</td>
<td>.13</td>
<td>-0.02 (.03)</td>
</tr>
<tr>
<td>Women</td>
<td>0.07 (.07)</td>
<td>.07</td>
<td>-0.06 (.04)</td>
<td>-.01</td>
<td>0.06 (.03)</td>
</tr>
<tr>
<td>Microaggressions</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>0.13 (.04)</td>
<td>.27***</td>
<td>0.09 (.03)</td>
<td>.24**</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>0.18 (.06)</td>
<td>.31**</td>
<td>0.06 (.04)</td>
<td>.16</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>0.06 (.11)</td>
<td>.06</td>
<td>-0.04 (.08)</td>
<td>-.05</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>-0.06 (.08)</td>
<td>-.10</td>
<td>-0.01 (.05)</td>
<td>-.03</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>.01</td>
<td>.11</td>
<td>.09</td>
<td>.13</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>4.60</td>
<td>3.79**</td>
<td>2.95**</td>
<td>5.04***</td>
</tr>
</tbody>
</table>

*p <= .05, **p < .01, ***p < .001
Table 5

Multivariable logistic regressions predicting outcomes related to interpersonal microaggressions among gay/lesbian and bisexual students when these groups are stratified by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcomes</th>
<th>Cigarette smoking</th>
<th>Illicit drug use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alcohol use</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B (SE)</td>
<td>AOR (95% CI)</td>
<td>B (SE)</td>
</tr>
<tr>
<td>Interpersonal Microaggressions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.81 (1.38)</td>
<td>2.25 (0.15, 33.86)</td>
<td>-1.61 (0.71)</td>
</tr>
<tr>
<td>Women</td>
<td>0.13 (0.64)</td>
<td>1.14 (0.32, 4.03)</td>
<td>-2.36 (0.76)</td>
</tr>
<tr>
<td>Racialized</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-1.53 (0.78)</td>
<td>0.22 (0.05, 1.00)*</td>
<td>-0.12 (0.43)</td>
</tr>
<tr>
<td>Women</td>
<td>0.72 (0.44)</td>
<td>2.06 (0.88, 4.83)</td>
<td>-0.42 (0.44)</td>
</tr>
<tr>
<td>Graduate Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-2.10 (1.05)</td>
<td>0.12 (0.02, 0.95)*</td>
<td>-0.73 (0.39)</td>
</tr>
<tr>
<td>Women</td>
<td>-2.16 (1.04)</td>
<td>0.12 (0.02, 0.87)*</td>
<td>0.26 (0.52)</td>
</tr>
<tr>
<td>Outness on Campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.18 (0.23)</td>
<td>1.20 (0.77, 1.86)</td>
<td>0.14 (0.18)</td>
</tr>
<tr>
<td>Women</td>
<td>-0.13 (0.19)</td>
<td>0.88 (0.61, 1.27)</td>
<td>0.50 (0.20)</td>
</tr>
<tr>
<td>Microaggressions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>104.12 (8674.96)</td>
<td>1.65 (45, 00, .)</td>
<td>-0.09 (0.40)</td>
</tr>
<tr>
<td>Women</td>
<td>0.30 (0.26)</td>
<td>1.38 (0.82, 2.24)</td>
<td>-0.09 (0.21)</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-103.90 (8674.96)</td>
<td>0.00 (00, .)</td>
<td>0.47 (0.43)</td>
</tr>
<tr>
<td>Women</td>
<td>-0.10 (0.36)</td>
<td>0.91 (0.45, 1.82)</td>
<td>0.85 (0.32)</td>
</tr>
<tr>
<td>Cox &amp; Snell $R^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>.09</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Women</td>
<td>.06</td>
<td>.09</td>
<td>.13</td>
</tr>
</tbody>
</table>

*p ≤ .05, **p < .01, ***p < .001
Table 6

Multivariable linear regressions predicting outcomes related to erasure and hypersexualization microaggressions among gay/lesbian and bisexual students when these groups are stratified by gender.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcomes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micagg.</td>
<td>B (SE) β</td>
<td>Depression B (SE) β</td>
<td>Harmful alcohol use B (SE) β</td>
<td>Social acceptance B (SE) β</td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>Erasure</td>
<td>-0.17 (.25) - .05</td>
<td>0.27 (.17) .16</td>
<td>-0.05 (.13) -.41</td>
<td>-0.82 (.37) -.21*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>0.17 (.20) .06</td>
<td>0.28 (.16) .20</td>
<td>0.11 (.10) 1.15</td>
<td>0.05 (.30) .02</td>
<td></td>
</tr>
<tr>
<td>Racialized</td>
<td>Erasure</td>
<td>-0.09 (.19) - .03</td>
<td>0.01 (.09) .01</td>
<td>0.18 (.07) 2.52*</td>
<td>-0.22 (.20) -.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>0.36 (.22) .11</td>
<td>0.01 (.12) .01</td>
<td>-0.07 (.07) -.93</td>
<td>-0.18 (.22) -.08</td>
<td></td>
</tr>
<tr>
<td>Graduate Student</td>
<td>Erasure</td>
<td>-0.05 (.20) - .02</td>
<td>-0.11 (.09) -.09</td>
<td>0.06 (.07) .89</td>
<td>0.21 (.20) .07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>-0.11 (.23) - .03</td>
<td>-0.20 (.11) -.12</td>
<td>-0.09 (.07) -1.33</td>
<td>0.08 (.23) .02</td>
<td></td>
</tr>
<tr>
<td>Witness on Campus</td>
<td>Erasure</td>
<td>0.04 (.08) .03</td>
<td>0.02 (.04) .03</td>
<td>-0.02 (.03) -.57</td>
<td>0.09 (.08) .07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>0.08 (.08) .07</td>
<td>-0.01 (.04) -.01</td>
<td>0.06 (.03) 2.11*</td>
<td>0.27 (.08) .21*</td>
<td></td>
</tr>
<tr>
<td>Microaggressions</td>
<td>Erasure</td>
<td>- -</td>
<td>0.13 (.04) .28*</td>
<td>0.08 (.03) 3.00**</td>
<td>-0.40 (.08) -.38***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>- -</td>
<td>0.17 (.05) .34**</td>
<td>0.06 (.03) 1.80</td>
<td>-0.38 (.10) -.36***</td>
<td></td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td>Erasure</td>
<td>- -</td>
<td>-0.01 (.10) -.01</td>
<td>-0.04 (.08) -.49</td>
<td>0.53 (.21) .24*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyperse.</td>
<td>- -</td>
<td>-0.08 (.07) -.15</td>
<td>-0.01 (.04) -.23</td>
<td>0.12 (.14) .11</td>
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<tr>
<td>R²</td>
<td>Men</td>
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<td>.10</td>
<td>.09</td>
<td>.15</td>
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</tr>
<tr>
<td></td>
<td>Women</td>
<td>.02</td>
<td>.11</td>
<td>.07</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Men</td>
<td>.25</td>
<td>3.54**</td>
<td>2.84*</td>
<td>5.70***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.17</td>
<td>3.76**</td>
<td>2.43*</td>
<td>5.67***</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .05, **p < .01, ***p < .001
Table 7

Multivariable logistic regressions predicting outcomes related to erasure and hypersexualization microaggressions among gay/lesbian and bisexual students when these groups are stratified by gender.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcomes</th>
<th>Alcohol use</th>
<th>Cigarette smoking</th>
<th>Illicit drug use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B (SE)</td>
<td>AOR (95% CI)</td>
<td>B (SE)</td>
</tr>
<tr>
<td><strong>Erasure and hypersexualization microaggressions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>-0.03 (1.23)</td>
<td>0.97 (0.09, 10.74)</td>
<td>-1.65 (0.69)</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>0.02 (0.62)</td>
<td>1.02 (0.30, 3.45)</td>
<td>-2.15 (0.73)</td>
</tr>
<tr>
<td>Racialized</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>-1.48 (0.78)</td>
<td>0.23 (0.05, 1.04)</td>
<td>-0.08 (0.42)</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>0.74 (0.44)</td>
<td>2.10 (0.89, 4.93)</td>
<td>-0.37 (0.44)</td>
</tr>
<tr>
<td>Graduate Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>-2.10 (1.05)</td>
<td>0.12 (0.02, 0.96)</td>
<td>-0.72 (0.39)</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>-2.18 (1.04)</td>
<td>0.11 (0.02, 0.86)*</td>
<td>0.25 (0.52)</td>
</tr>
<tr>
<td>Outness on Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>0.20 (0.22)</td>
<td>1.22 (0.79, 1.88)</td>
<td>0.14 (0.18)</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>-0.13 (0.19)</td>
<td>0.88 (0.60, 1.27)</td>
<td>0.50 (0.20)</td>
</tr>
<tr>
<td>Microaggressions</td>
<td></td>
<td>84.76 (8331.88)</td>
<td>6.45*36 (0.00, .)</td>
<td>-0.20 (0.36)</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>0.27 (0.22)</td>
<td>1.31 (0.85, 2.01)</td>
<td>-0.06 (0.18)</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>-84.58 (8331.88)</td>
<td>0.00 (0.00, .)</td>
<td>0.50 (0.40)</td>
</tr>
<tr>
<td>Bisexual x Microaggressions</td>
<td></td>
<td>0.00 (0.32)</td>
<td>1.00 (0.54, 1.86)</td>
<td>0.69 (0.28)</td>
</tr>
<tr>
<td>Cox &amp; Snell R²</td>
<td></td>
<td>.08</td>
<td>.05</td>
<td>.07</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>.08</td>
<td>.05</td>
<td>.07</td>
</tr>
</tbody>
</table>

*p ≤ .05, **p < .01, ***p < .001
Fig 1: The relationship between erasure and hypersexualization microaggressions and social acceptance on campus. Moderated by sexual orientation, this figure illustrates the strong negative relationship between these microaggressions and social acceptance on campus for gay/lesbian students in comparison to a weaker negative relationship for bisexual students.
Fig 2: The relationship between erasure and hypersexualization microaggressions and social acceptance on campus in men. Moderated by sexual orientation, this figure illustrates the strong negative relationship between these microaggressions and social acceptance on campus for gay men in comparison to a weak positive relationship for bisexual men.
Appendix A

LGBQ Microaggressions on Campus Scale

We are interested in your experiences of discrimination on campus. Over the PAST YEAR (or if you have been a college student for less than 1 year, since you have been a college student) how often have you experienced these incidents on campus.

Never, very rarely, rarely, occasionally, frequently, very frequently (coded 0–5)

Subscale: Interpersonal LGBQ Microaggressions

1. Someone said or implied that all LGBQ people have the same experiences.
2. I was told I should act “less lesbian, gay, bisexual, or queer.”
3. People said or implied that I was being overly sensitive for thinking I was treated poorly or unfairly because I am LGBQ.
4. Someone told me they were praying for me because they knew or assumed I am lesbian, gay, bisexual, or queer.
5. People seemed willing to tolerate my LGBQ identity but were not willing to talk about it.
6. Others thought I would not have kids because they knew or assumed I am lesbian, gay, bisexual, or queer.
7. Someone said they couldn’t be homophobic, biphobic, or queerphobic because they have (a) lesbian, gay, bisexual, or queer friend(s).
8. I was told that being lesbian, gay, bisexual, or queer is “just a phase.”
9. Straight people assumed that I would come on to them because they thought or knew I am lesbian, gay, bisexual, or queer.
10. I have heard people say that they were tired of hearing about the “homosexual agenda.”
11. Someone said or implied that LGBQ people engage in unsafe sex because of their sexual orientation.
12. Other people said, “that’s just the way it is” when I voiced frustration about homophobia, biphobia, or queerphobia.
13. Someone said or implied that my sexual orientation is a result of something that went “wrong” in my past (e.g., “your mother was too overbearing”).
14. People assumed that I have a lot of sex because of my sexual orientation.
15. Others have said that LGBQ people should not be around children.
Appendix B

Erasure and Hypersexualization Microaggressions on Campus Scale

Never, very rarely, rarely, occasionally, frequently, very frequently (coded 0–5)

1. I was told I should act “less lesbian, gay, bisexual, or queer.”
2. Someone said they couldn’t be homophobic, biphobic, or queerphobic because they have (a) lesbian, gay, bisexual, or queer friend(s).
3. I was told that being lesbian, gay, bisexual, or queer is “just a phase.”
4. Straight people assumed that I would come on to them because they thought or knew I am lesbian, gay, bisexual, or queer.
5. Other people said, “that’s just the way it is” when I voiced frustration about homophobia, biphobia, or queerphobia.
6. People assumed that I have a lot of sex because of my sexual orientation.
### DEPRESSION (PHQ-9)

Over the past 2 weeks, how often have you been bothered by the following problems? (PHQ9).

<table>
<thead>
<tr>
<th>Question</th>
<th>(0) Not at all</th>
<th>(1) Several days</th>
<th>(2) More than half the days</th>
<th>(3) Nearly all the days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling tired or having little energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor appetite or overeating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble concentrating on things, such as reading the newspaper or watching television</td>
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</tr>
<tr>
<td>Moving or speaking so slowly that other people could have noticed. Or the opposite—being too fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts that you would be better off dead, or of hurting yourself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### INSTRUCTOR RELATIONS

Please indicate your level of agreement with the following statements: (instructor_relations) (social) (social_acceptance) (accept)

<table>
<thead>
<tr>
<th></th>
<th>(1) Strongly Disagree</th>
<th>(2)</th>
<th>(3)</th>
<th>(4) Neutral</th>
<th>(5)</th>
<th>(6)</th>
<th>(7) Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) I have found the atmosphere at this university to be friendly.</td>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(2) In general, I fit in with the other students here.</td>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(3) I feel left out of things here at my college.</td>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
## Appendix E

### DRINKING (AUDIT SCALE)

**How often do you have a drink containing alcohol?** *(audit1)*

- (0) Never
- (1) Monthly or less
- (2) 2 to 4 times a month
- (3) 2 to 3 times a week
- (4) 4 or more times a week

**How many drinks containing alcohol do you have on a typical day when you are drinking?** *(audit2)*

- (0) 1 or 2
- (1) 3 or 4
- (2) 5 or 6
- (3) 7 to 9
- (4) 10 or more standard drinks

**How often do you have six or more drinks on one occasion?** *(audit3)*

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

**How often during the last year have you found that you were not able to stop drinking once you had started?** *(audit4)*

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

**How often during the last year have you failed to do what was normally expected from you because of drinking?** *(audit5)*

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

**How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?** *(audit6)*

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily
How often during the last year have you had a feeling of guilt or remorse after drinking? (audit7)

- (9) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

How often during the last year have you been unable to remember what happened the night before because you had been drinking? (audit10)

- (9) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

Have you or someone else been injured as a result of your drinking? (audit9)

- (9) No
- (1) Yes, but not in the last year
- (2) Yes, during the last year

Has a relative, friend, or a doctor, or other health worker been concerned about your drinking or suggested you cut down? (audit12)

- (9) No
- (1) Yes, but not in the last year
- (2) Yes, during the last year
### Appendix F

#### DRINKING

How often do you have a drink containing alcohol? (audit1)

- (0) Never
- (1) Monthly or less
- (2) 2 to 4 times a month
- (3) 2 to 3 times a week
- (4) 4 or more times a week

#### SMOKING

On average, how many cigarettes did you smoke the PAST MONTH? (class_frequency)

- (0) None
- (1) Less than one cigarette per day
- (2) 1-5 cigarettes per day
- (3) About 1/2 pack per day
- (4) About a pack per day
- (5) About 1-1.5 packs per day
- (6) 2 or more packs per day

#### ILLICIT DRUGS

On average, other than alcohol, how many times did you use illicit drugs (including prescription medication outside of its intended use) in the PAST MONTH? (drug_frequency)

- (0) Never
- (1) Monthly or less
- (2) 2 to 4 times a month
- (3) 2 to 3 times a week
- (4) 4 or more times a week
### SOCIAL SUPPORT FRIENDS

Read each statement carefully. Indicate how you feel about each statement.

<table>
<thead>
<tr>
<th></th>
<th>Very strongly disagree</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Very strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(social1) My friends really try to help me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>(social2) I can count on my friends when things go wrong</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>(social3) I have friends with whom I can share my joys and sorrows</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>(social4) I can talk about my problems with my friends</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>