Published in final edited form as:

Arch Sex Behav. 2019 January ; 48(1): 131–141. doi:10.1007/s10508-018-1247-y.

Depression and Victimization in a Community Sample of Bisexual and Lesbian Women: An Intersectional Approach

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Abstract

Mental health inequities among bisexual and lesbian women are well-documented. Compared to heterosexual women, both bisexual and lesbian women are more likely to report lifetime depressive disorders, with bisexual women often faring the worst on mental health outcomes. Risk factors for depression, such as victimization in childhood and adulthood, are also more prevalent among bisexual women. Less is known about the intersection of racial/ethnic and sexual minority identities, and how depression and victimization may differ across these multiple, co-occurring identities. Data were from Wave 3 of the Chicago Health and Life Experiences of Women study, an 18-year, community-based longitudinal study of sexual minority women's health. We constructed a six-category "intersection" variable based on sexual identity and race/ethnicity to examine group differences in lifetime depression and victimization. We tested childhood and adult victimization as moderators of lifetime depression ($n = 600$). A majority (58.2%) of the total sample met criteria for lifetime depression. When considering the intersection of race/ethnicity and sexual identity, Black bisexual and Black lesbian women had significantly lower odds of depression than White lesbian women, despite their higher reports of victimization. Latina bisexual and lesbian women did not differ from White lesbians on depression. Victimization did not moderate the association between the intersection variable and depression. More research is needed to better understand risk and protective factors for depression among racially/ethnically diverse sexual minority women (SWM). We highlight the need to deliberately oversample SWM of color to accomplish this goal.

Keywords

bisexual women; lesbian; sexual orientation; depression; mental health; victimization

INTRODUCTION

Mental health inequities among bisexual and lesbian women are well-documented. Compared to heterosexual women, both bisexual and lesbian women are more likely to report lifetime depressive disorders (Bostwick, Boyd, Hughes, & McCabe, 2010;

Fredriksen-Goldsen, Kim, Barkan, Balsam, & Mincer, 2010; Hughes, Szalacha, & McNair, 2010); anxiety disorders or symptoms (Bostwick et al., 2010; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002); suicidal thoughts (Blosnich, Nasuti, Mays, & Cochran, 2016), and suicide attempts (Blosnich et al., 2016; Bolton & Sareen, 2011). When bisexual and lesbian women are treated as separate groups, findings further suggest that depression and poor mental health outcomes are often most prevalent among bisexual women (Bostwick et al., 2010; Conron, Mimiaga, & Landers, 2010; Gorman, Denney, Dowdy, & Medeiros, 2015; Ward, Dahlhamer, Galinsky, & Joestl, 2014). In a study using data from Wave 3 of the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC), a national probability sample in the U.S., Kerridge et al. (2017) reported prevalence of past-12-month DSM-5 depressive disorder as 13.0%, 19.1%, and 28.2% among heterosexual, lesbian, and bisexual women, respectively. Using Wave 2 NESARC data, Bostwick et al. (2010) found that prevalence of lifetime DSM-IV depression was 32.1%, 41.8% and 52.3% among heterosexual, lesbian, and bisexual women, respectively.

The predominant hypothesis as to the underlying cause of these sexual-orientation-based inequities is minority stress (Meyer, 2003). The minority stress model posits that sexual-minority-specific stressors, such as prejudice and discrimination, exact an additional health burden, above and beyond everyday stressors. Further, there are additional risk factors that may also contribute to high rates of depression among sexual minority women (SMW). Specifically, victimization experiences, such as physical and sexual abuse, whether experienced in childhood or adulthood, have been shown to be strongly associated with poor mental health in adulthood (Bonomi, Anderson, Rivara, & Thompson, 2007; Edwards, Holden, Felitti, & Anda, 2003; E. C. Nelson et al., 2002; Smith et al., 2017; Szalacha, Hughes, McNair, & Loxton, 2017). As many have noted, rates of victimization experiences are much higher among SMW than heterosexual women in adulthood (Balsam, Lehavot, & Beadnell, 2011; Drabble, Trocki, Hughes, Korcha, & Lown, 2013; Hughes, McCabe, Wilsnack, West, & Boyd, 2010) as well as in adolescence (Austin et al., 2008; Friedman et al., 2011) and childhood (Schneeberger, Dietl, Muenzenmaier, Huber, & Lang, 2014; Wilsnack, Kristjanson, Hughes, & Benson, 2012).

Findings from the Centers for Disease Control's National Intimate Partner and Sexual Violence Survey also point to stark disparities in lifetime experiences of victimization and interpersonal violence among SMW. Bisexual women in particular report alarmingly high rates of rape, other sexual violence, and physical violence. For example, in a study by Walters, Chen, and Breiding (2013), 46.1 % of bisexual women reported rape by any perpetrator in their lifetime, compared to 17.4% of heterosexual women and 13.1% of lesbians. Seventy-five percent of bisexual women reported experiencing sexual violence other than rape, compared to 46% of lesbian women and 43% of heterosexual women. These higher rates of victimization increase the risk of poor mental and physical outcomes for bisexual women.

Taken together, the literature points to bisexual women faring the worst across most health domains, as well as having heightened risk factors for poor mental health, such as experiences of victimization and violence. Although studies have recently begun to examine within-group differences among SMW (e.g., direct comparisons of lesbian and bisexual

groups) (Bostwick, Hughes, & Everett, 2015; Fredriksen-Goldsen et al., 2010; Puckett, Surace, Levitt, & Horne, 2016), far less is known about bisexual women of color, or how intersecting racial/ethnic and sexual minority identities may differentially affect mental health outcomes for Black and Latina bisexual women. For example, a recent systematic review of the literature on Black bisexual women's health (Lassiter, 2017) found only nine studies that specifically reported data from Black bisexual (cisgender) women. To our knowledge, there are no comparable published reviews of the health literature on Latina bisexual women. In one study that compared Hispanic and Non-Hispanic bisexual and lesbian women to each other and to heterosexual counterparts, Kim and Fredriksen-Goldsen (2012) found that frequent mental distress was the only health outcome, of 13, on which Hispanic bisexual women fared significantly worse than both Non-Hispanic White bisexual women and heterosexual Hispanic women.

Regarding mental health in particular, there are compelling reasons why Black and Latina bisexual women may differ from both their White and lesbian counterparts. First, studies have found that stigma, prejudice, and discrimination may differentially impact bisexual women as compared to lesbian women (Callis, 2013; Hequembourg & Brallier, 2009). Whereas societal attitudes toward lesbian and gay individuals have improved steadily over the past decade (Newport & Himelfarb, 2013), attitudes toward bisexuality have gone from poor (Herek, 2002) to "neutral" (Dodge et al., 2016), suggesting only modest improvement in attitudes towards bisexual individuals. In their nationally representative study of attitudes toward bisexuality, Dodge et al. (2016) found that although most participants neither agreed nor disagreed with a series of stereotypical assumptions about bisexual men and women (e.g., they are incapable of being faithful, their bisexuality is "just a phase") almost a third agreed to some extent that bisexual men and women are confused about their sexuality, and should be feared as sexual partners because of HIV/AIDS risk. Studies have demonstrated negative attitudes toward bisexuality among both heterosexual and gay and lesbian groups, as well as the family members and partners of bisexual women and men (Bostwick & Hequembourg, 2013; Roberts, Horne, & Hoyt, 2015; Ross, Dobinson, & Eady, 2010). Both quantitative (the number of stressors) and qualitative (the type or sources of stressors) differences in identity-based stressors between bisexual and lesbian women may produce an additional mental health burden, and may explain, at least in part, mental health inequities observed among bisexual women. Whether or not this pattern of disparity remains when taking into account a simultaneously marginalized racial/ethnic identity is unclear.

Two recent studies that explicitly focused on SMW of color and mental health—Black women in one study (Calabrese, Meyer, Overstreet, Haile, & Hansen, 2015) and African American, Latin American, and Asian American women in another (Balsam et al., 2015)—did not present results separately for bisexual participants. However, both studies found that depressive symptoms assessed using the CES-D (Robins, Helzer, Croughan, & Ratcliff, 1981) did not differ across racial groups. That is, Black SMW did not differ significantly from White SMW (Balsam et al., 2015; Calabrese et al., 2015), nor did Latina American or Asian American SMW differ from their White counterparts (Balsam et al., 2015). In follow-up analyses of data collected by Balsam et al., when examining within-group sexual minority differences, bisexual women were more likely than lesbian women to report symptoms of depression and anxiety; however, race/ethnicity was entered as a control

variable, rather than as an interaction term in these analyses (Y. Molina, personal communication, August 27, 2017).

The current literature on victimization among sexual minority women of color is sparse and findings are somewhat inconsistent. For example, in a national on-line survey of 669 lesbian, gay, and bisexual female and male participants, Balsam et al. (2010) found that Latina/o and Asian American participants reported the highest rates of childhood physical abuse and Latina/o and African American participants reported the highest rates of childhood sexual abuse. Because female and male participants were combined in analyses, it is unknown whether these findings hold for women only.

Current Study

We used an intersectional framework to examine potential sexual identity and racial/ethnic differences in depression—a major mental health outcome—within a diverse community-based sample of SMW, while accounting for the potential influence of childhood and adult victimization. By intersectional, we mean a perspective that acknowledges the indivisibility of women's multiple co-occurring identities, and the “recognition of multiple interlocking identities that are defined in terms of relative sociocultural power and privilege and shape women's individual and collective identities and experiences” (Parent, DeBlaere, & Moradi, 2013, p. 640). Indeed, the genesis of intersectionality was work among feminist scholars (Collins, 1998; Crenshaw, 1991) seeking to center the experiences of Black women within discussions of violence in order to highlight the interdependence of race and gender. Thus, addressing the problem of violence required/s a framework that acknowledges and accounts for this interdependence or “intersection.” Given our interest in victimization and depression, the use of an intersectional lens seems particularly appropriate. Further, the current study responds to explicit calls for work among sexual and gender minority populations (Graham et al., 2011), and in public health research (Bauer, 2014; Bowleg, 2012), that deliberately employs perspectives that account for multiple co-occurring minority identities and statuses.

We examined the associations between lifetime depression and victimization across six distinct groups of SMW: Black lesbian, Latina lesbian, White lesbian, Black bisexual, Latina bisexual, and White bisexual women. Our aims were to:

- (1) Compare the prevalence of depression and adult and childhood victimization experiences among bisexual and lesbian women, across three racial/ethnic groups;
- (2) Examine the associations between depression and victimization at the intersection of racial/ethnic and sexual minority identities;
- (3) Test the moderating effects of childhood and adult victimization on the relationship between intersecting racial/ethnic and sexual minority identities and depression.

METHOD

Participants.

Data were from the Chicago Health and Life Experiences of Women (CHLEW), an 18-year longitudinal study of adult SMW. The study began in the greater Chicago metropolitan area in 2000–2001 using a broad range of recruitment strategies to obtain a diverse sample of 447 English-speaking women, aged 18 and older, who identified as lesbian. Although all women screened for eligibility identified as lesbian, 11 participants identified as bisexual in the actual interview. In Wave 2, conducted in 2004–2005 ($N = 384$ women; response rate = 86%), 21 participants identified as bisexual. In Wave 3 we retained 354 participants (response rate = 79%) from the original cohort. In addition, we recruited a supplemental sample of younger women (ages 18–25), Black and Hispanic women, and bisexual-identified women ($N = 373$) using a modified version of respondent-driven sampling (Martin, Johnson, & Hughes, 2015).

The original sample was recruited using advertisements in local newspapers, on Internet listservs, and flyers posted in churches and bookstores. Other recruitment sources and locations included community-based organizations, informal community social groups, and individual social networks, including those of women who participated in the study. Data were collected in face-to-face interviews by trained female interviewers. The interviews covered a wide range of health experiences, behaviors, and outcomes, as well as a variety of risk and protective factors known to influence health. In Wave 3, 102 of the study participants were interviewed by phone. We tested for mode effects (face-to-face vs telephone) and found no significant differences in any substance use outcome (the major focus of the CHLEW) other than any illicit drug use, giving us confidence that mode of interview administration did not significantly influence self-reports of other major survey topics.

We used data from Wave 3 because it included more bisexual women and women of color than previous waves, and thus allowed for comparisons by sexual identity and race/ethnicity concurrently. The analytic sample ($n = 600$) included only women who identified as exclusively lesbian, mostly lesbian, or bisexual at Wave 3; who identified their race as White, Black or Latina; and for whom we had data on all study variables.

Measures

Demographic Variables—Sexual orientation was assessed using the following question: “Recognizing that sexual identity is only one part of your identity, how do you define your sexual identity? Would you say that you are only lesbian/gay, mostly lesbian/gay, bisexual, mostly heterosexual/straight, only heterosexual/straight or Other (specify)?” As noted above, only women who indicated that they were only or mostly lesbian, or bisexual, were included in our analyses.

Race/ethnicity was determined based on two questions asking participants to indicate their race and whether they were of Hispanic or Latina origin or descent. Responses were categorized into White, Black, and Latina—with the largest group (White women) serving as the reference group.

Demographic control variables included age (continuous), education (highest level completed, 4 categories), past year household income (5 categories, including “missing”), relationship status (single, partnered not living together, partnered living together), presence of children under 18 in the home, and a cohort variable. This last variable indicated whether participants were part of the original Wave 1 sample or the newly recruited Wave 3 supplemental sample. Because the new sample was recruited using a modified version of respondent-driven sampling techniques that targeted younger women, bisexual women and women of color, participants in the Wave 3 supplemental sample differ from the Wave 1 sample on age, education, and income.

Outcome Variables—Lifetime depression was assessed using questions and criteria from the National Institute of Mental Health Diagnostic Interview Schedule (Robins et al., 1981). Participants were asked about a variety of symptoms (e.g., decreased appetite, problems with sleeping, thoughts of death). Persistence of four or more of these symptoms for at least 2 weeks, accompanied by feeling sad, blue, or depressed or by loss of interest or pleasure in things usually cared about, was defined as a depressive episode. We dichotomized lifetime depressive episodes into any (i.e., one or more) versus none.

Given their associations with poor mental health, experiences of childhood victimization and adult victimization were tested as independent and moderating variables in logistic regression models.

We assessed three forms of childhood victimization experienced prior to age 18: childhood sexual abuse, childhood physical abuse, and parental neglect. Childhood sexual abuse (CSA) was assessed using questions about eight types of sexual activities before age 18, ranging from exposure and fondling to anal and vaginal penetration. Using criteria established by Wyatt (1985), a dichotomous CSA variable was created (Wilsnack et al., 2012). Childhood physical abuse (CPA) was measured by asking participants who reported being physically hurt or injured by parents or other family members, “Do you feel that you were physically abused by your parents or other family members when you were growing up?” Responses were dichotomous (yes or no). Parental neglect was assessed using the question, “Thinking back to when you were about 10 years old, what were your parents’ usual methods of disciplining you?” Response options included a variety of methods, one of which was “neglected my basic needs (food, clothing, shelter, love).” Women who indicated neglect of their basic needs as a usual method of discipline were categorized as having experienced parental neglect. A positive endorsement of one or more of the three childhood victimization experiences was coded as indication of “any childhood victimization.”

We also assessed three forms of adult victimization (experienced after age 18): adult sexual assault, adult physical assault, and intimate partner violence. In Wave 1, adult sexual assault (ASA) was measured with a single question “Since you were 18 years old, was there a time when someone forced you to have sexual activity that you really did not want? This might have been intercourse or other forms of sexual activity, and might have happened with partners, lovers, or friends, as well as with more distant persons and strangers.” The Wave 3 survey had a slight modification, asking two separate questions that distinguished between rape and any other types of sexual assault. If a participant responded yes to either, adult

sexual assault was coded as present. Responses were dichotomized to reflect any versus no ASA.

Adult physical assault (APA) was assessed by asking, “Not counting experiences involving conflicts with your partner or unwanted sexual experiences, has anyone other than your partner attacked you with a gun, knife or some other weapon, whether you reported it or not?” and “Has anyone, excluding your partner, ever attacked you without a weapon but with the intent to kill or seriously injure you?” Affirmative responses to one or both of these questions were used to indicate any (versus no) APA.

Questions used to assess intimate partner violence (IPV) in the CHLEW came from a modified version of the Conflict Tactics Scale (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Participants were asked whether their most recent partner ever “threw something at you, pushed you, or hit you?” or “threatened to kill you, with a weapon or in some other way?” A yes response to one or both of these were used to indicate any IPV.

A positive endorsement of one or more of the three aforementioned variables was coded as an indicator of “any adult victimization.”

Data Analysis

We used Pearson chi-square statistics and independent samples *t*-tests to describe the sample and to examine differences by sexual identity. We constructed a six-category “intersection” variable of sexual identity (bisexual, lesbian/mostly lesbian) and race (Black, White, and Latina) to examine subgroup differences in reports of depression and victimization. Using logistic regression, we regressed depression onto our intersection variable and indicators of childhood and adulthood victimization in a stepped modeling approach, controlling for age, education, relationship status, having a child under 18 in the household, household income, and recruitment cohort. We used White lesbian women as our primary referent group. We also examined childhood and adult victimization as potential modifiers of the relationship between depression and the intersectional (race/ethnicity $\times$ sexual identity) groups

Finally, we tested the full models to account for possible interdependence of observations among the new Wave 3 participants. Logistic regression models assume independent observations, and when this assumption is violated, standard errors are often too small leading to Type I errors. We conducted mixed effect logistic regression analyses that included a random intercept for each seed (referring) participant to account for correlations among participants sharing a referral connection. Those not connected through referral were included as individuals, i.e., clusters of size $n = 1$. All analyses were conducted using SAS statistical software, version 9.4; *p* values $< .05$ indicated statistical significance.

RESULTS

Demographic characteristics for the total sample and by sexual identity are summarized in Table 1. The sample included 225 (37.5%) Black women, 140 (23.3%) Latina women, and 235 (39.2%) White women. Race/ethnicity did not differ between bisexual and lesbian women. Otherwise, bisexual women were younger, had less education, and had lower

household incomes. They were more likely than lesbian women to be single (49.0% versus 34.5%), and more likely to have a child under age 18 living in the home. Given the deliberate recruitment of bisexual women for the supplemental sample in Wave 3, the majority of bisexual participants (77.1%) were in the “new” cohort.

Prevalence of depression and victimization variables by sexual identity is shown in Table 2. A majority (58.2%) of the analytic sample met criteria for lifetime depression. There were no statistically significant differences by sexual identity. Differences by race/ethnicity and sexual identity are shown in Table 3. Lifetime depression was significantly different across groups ($p < .0001$), with Black bisexual women being least likely to meet criteria for lifetime depression (37.7%) and White bisexual (69.2%) and White lesbian (69.4%) women most likely to meet such criteria. Other significant differences were found for any childhood victimization, childhood physical abuse, and IPV. Each of these outcomes was more prevalent among SMW of color than among White SMW. For example, 90.2% of Black lesbian women and 84.0% of Latina lesbian women reported any childhood victimization compared to 68.3% of White lesbian women.

In general, irrespective of race/ethnicity, bisexual and lesbian women were more alike than different in terms of victimization and depression. The one exception was in reports of IPV. More Latina bisexual (45.0%) and lesbian women (29.0%), and more Black bisexual (44.3%) and lesbian (39.0%) women reported IPV than did White bisexual (17.3%) and White lesbian (18.0%) women.

Table 4 shows adjusted odds ratios for lifetime depression across race/ethnicity and sexual identity categories. Tests of victimization as potential effect modifiers of lifetime depression were not significant, and thus not included in our final models. Model 1 includes demographic control variables only. In this model, the only statistically significant finding was that Black bisexual women were less likely than White lesbian women to meet criteria for lifetime depression. This finding held across all four models. In Model 2, childhood victimization was included and was significantly associated with lifetime depression. With its addition, the odds of lifetime depression among Black lesbian women became significantly lower than the referent group of White lesbians. Model 3 considered adult victimization alone and Model 4 included both childhood and adult victimization simultaneously. In the final model, childhood victimization was no longer significantly associated with lifetime depression but the association between any adult victimization and depression remained significant. In this model, adjusted odds of lifetime depression were 0.51 (95% CI: .29, .88) for Black lesbian women and 0.28 (95% CI: .13, .59) for Black bisexual women.

The mixed effect model, including the random effect for clusters of individuals related by referral seed, had virtually identical parameter estimates, and yielded consistent statistical conclusions as the previous models. Our full model showed a small clustering effect for referral seed (conditional ICC = 0.069, 95% CI: .012-.312) indicating a small but statistically significant association within clusters of participants having a common referral seed, after controlling for all variables in the model.

DISCUSSION

In a community-based sample of racially/ethnically diverse bisexual and lesbian women, Black bisexual and lesbian women were significantly less likely than White lesbian women to report lifetime depression, despite higher reports of both adult and childhood victimization among Black lesbian and bisexual women. Latina bisexual and lesbian women, on the other hand, did not differ significantly from White lesbians on lifetime depression. These findings raise a number of intriguing questions.

Both Black bisexual and lesbian women were less likely to meet criteria for lifetime depression than their White lesbian counterparts, despite the fact that they were more likely to report any childhood victimization and any intimate partner violence. This finding is somewhat at odds with models or frameworks—sometimes termed double (Beal, 2008) or triple (Bowleg, Huang, Brooks, Black, & Burkholder, 2003) jeopardy—which suggest that multiply marginalized groups will accrue a higher burden of disadvantage due to occupying multiple subordinate identities, and will in turn demonstrate correspondingly worse health outcomes. In other words, we would expect Black women to fare worse than White women, and Black SWM to fare worse than White SMW in regard to health outcomes. However, this has often not proven to be the case, whether in the general population literature (Gavin et al., 2010; Kessler & Waehler, 2005; Williams et al., 2007) or the LGBT (lesbian, gay, bisexual, transgender) health literature (Balsam et al., 2015; Bostwick, Hughes, & Johnson, 2005; Calabrese et al., 2015). An example of the former, in a presumptively “heterosexual” national probability sample, the National Survey of American Life (Williams et al., 2007) found that lifetime prevalence of major depressive disorder was higher among White women and men than among either African-American or Caribbean Black counterparts. This echoes findings from the National Comorbidity Study (Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005; Kessler & Waehler, 2005), in which the authors found that Black groups were significantly less likely to report major depression than Whites (though findings were not disaggregated by gender). Generally speaking, then, findings related to Black women in our study are not inconsistent with findings from national probability studies of depression and race/ethnicity, wherein Blacks report lower rates of depression than Whites.

One explanation for this pattern of findings may be rooted in what some have termed the “strong Black woman” phenomenon (Beauboeuf-Lafontant, 2008; Nelson, Cardemil, & Adeoye, 2016). This concept suggests that strength “is not an objective description of Black women, but a prescriptive discourse embedded in both racist and sexist characterizations of Black women as laborers for others” (Beauboeuf-Lafontant, 2008, p. 395). This discourse constructs “good” Black women as those who gain strength from adversity, and who are selfless caretakers of others, with no need for support from others, and no need for self-care in the face of life’s struggles (Beauboeuf-Lafontant, 2008; Nelson et al., 2016). Contrary to notions of strength serving as a buffer for depression, in this conception strength can serve to silence Black women and disallow not only expressions of need for help, but also prevent women from acknowledging or recognizing depression in the first place (Beauboeuf-Lafontant, 2008; Nicolaidis et al., 2010). The literature on this topic has focused on women in the general population without regard to sexual orientation. How the construct of the “strong Black woman” may influence or play a role in the mental health of Black SMW

remains to be understood, and points to the need for qualitative inquiry in the realm of intersectional health research.

Another, more positive interpretation of our findings is that there may be possible benefits of occupying multiple minority statuses (Bowleg, 2012; Purdie-Vaughns & Eibach, 2008) specifically for Black SMW. This more phenomenological perspective of “intersectional” identities (Parent et al., 2013) allows for the possibility that multiply marginalized groups may experience unique advantages (not just disadvantages) vis-à-vis their social identities. In this regard, despite risk factors that would predict otherwise, Black SMW also experience protective factors that serve to buffer some of the deleterious mental health effects of interpersonal and structural minority stressors. For instance, in their review of resiliency among LGBT Black persons, Follins and colleagues discuss possible sources of support that foster positive adaptation in the face of threat or adversity (Follins, Walker, & Lewis, 2014). These sources include engagement with racial communities and religious communities, strong racial identities, and social support through the development of fictive kin relationships. The current study did not include an exploration of these factors. They are notable areas in need of further study, particularly among bisexual populations—most studies in the Follins review were of Black lesbian women, or Black men who have sex with men (see Mosley, Abreu, & Crowell, 2017).

Latina bisexual and lesbian women did not differ significantly from White lesbian women in their odds of reporting lifetime depression, despite higher levels of intimate partner violence and childhood physical abuse. In post-hoc analysis (data not shown), Latina bisexual women had almost four times the odds of lifetime depression as Black bisexual women, and Latina lesbian women had almost three times the odds of lifetime depression as Black lesbian women. Yet, rates of victimization among Black and Latina SMW were similar. These findings suggest that Latina bisexual and lesbian women may have access to fewer protective factors (e.g., social support) that help buffer against depression, or that they experience additional risk factors in comparison to Black SMW. For example, in previous analysis of CHLEW data, Latina SMW were found to have the highest unmet need for treatment for depression (Jeong, Veldhuis, Aranda, & Hughes, 2016), highlighting the need for research and interventions specific to Latina SMW.

The difference in odds of lifetime depression in the direct comparison of Latina and Black SMW emphasizes that omnibus analyses of “women of color” in comparison to White women will obscure potential variations in patterns of risk—and/or protective factors—across different racial and ethnic minority groups. In order to make meaningful comparisons across multiple minority identity axes, future studies should deliberately over-sample racial/ethnic minorities (Anderssen & Malterud, 2017), as in the current study.

Our findings related to victimization, and specifically its association with lifetime depression, yielded mixed results. Although neither childhood nor adult victimization moderated the relationship between depression and intersecting identities, both were independently and positively associated with lifetime depression. However, when both were included in the model predicting depression, only adult victimization remained statistically significant. This attenuation is likely due to the overlap between childhood and adult

victimization in the sample—54% of women in the sample reported both childhood and adult victimization. This finding is consistent with extant literature that demonstrates strong associations between childhood abuse and later re-victimization (Filipas & Ullman, 2006; Messman-Moore & Long, 2003).

Finally, when comparing bisexual and lesbian women directly, neither depression nor victimization differed significantly, despite the fact that the two groups differed significantly on key demographic variables. Findings of comparable outcomes for bisexual and lesbian women, particularly in the realm of mental health, differs from results of other studies that have made direct comparisons of the two groups (Fredriksen-Goldsen et al., 2010; Gorman et al., 2015; Jorm et al., 2002). In these studies, bisexual women demonstrated poorer mental health outcomes than lesbian women. Poorer health outcomes among bisexual women have sometimes been explained on the basis of differences in demographic characteristics in samples of bisexual and lesbian women. That is, bisexual women typically are younger, have lower levels of education and lower incomes than lesbian women (Conron et al., 2010; Fredriksen-Goldsen et al., 2010; Gorman et al., 2015). Lower levels of education (Sareen, Afifi, McMillan, & Asmundson, 2011) and income (Olshansky et al., 2012) are typically strongly correlated with poor health outcomes, as well as higher rates of victimization (Walters et al., 2013). Although bisexual women in the current sample also showed these demographic differences, in contrast to most other studies, we found few differences in depression or victimization experiences between lesbian and bisexual women.

As is often the case, comparing outcomes across studies can be complicated by different measures of sexual orientation, sampling methodologies, and measures of depression. The fact that our sample was recruited using non-probability methods, and that our measure of depression was more robust than those used in many other studies of SMW, may partially explain the variation in findings among our study sample, as compared to others. It is also possible that the racial/ethnic heterogeneity of our sample (37.5% Black, 23.3% Latina, 39.2% White), which differs markedly from most probability samples, may also explain some of the differences in findings, as compared to previous studies.

Despite strengths of the current study—including the large and diverse sample that afforded the ability to examine sexual identity and racial/ethnic differences simultaneously—several limitations should be considered when evaluating outcomes of the study. First, because the study used a convenience sample, the findings are not generalizable to the larger population of bisexual and lesbian women. Second, there was no heterosexual comparison group, which would have provided a more thorough picture of how intersecting racial/ethnic and sexual identities may be differentially associated with depression and victimization. Newer work based on the National Health Interview Survey (Trinh, Agénor, Austin, & Jackson, 2017) demonstrated that White, Black, and Latina SMW each had higher odds of reporting that they felt “depressed” in the last week than their heterosexual counterparts. However, when compared to White heterosexual women, only White and Black SMW women had higher odds of weekly feelings of depression, whereas Latina SMW did not differ from White heterosexual women. Future quantitative research aimed at understanding the health of women with multiple intersecting identities will benefit from data sets that allow for comparisons across a range of sexual orientation and racial/ethnic sub-groups.

In our analyses of victimization, we were unable to include dimensional measures of abuse like frequency or severity for most of our indicators of abuse and victimization, thus we reported only the presence or absence of each type of victimization. Future research could take a more dimensional approach to examine whether variables such as severity of abuse or closeness of relationship with the abuser might differentially be associated with mental health outcomes.

For our Latina participants, we did not account for immigration status and/or length of time in the United States, both of which are associated with health outcomes (Lara, Gamboa, Kahramanian, Morales, & Hayes Bautista, 2005). Also, the current study, while racially and ethnically diverse, does not include women from all racial/ethnic groups (e.g., Asian women or Native American women); thus, we have only a partial picture of how intersections of race/ethnicity and sexual identity may be associated with depression. Finally, we did not take into account individual (e.g., social support, religiosity) or structural factors (e.g., discriminatory policies, racism) that may serve to moderate the relationship between intersecting racial/ethnic and sexual minority identities and mental health.

Although our direct comparisons of bisexual and lesbian women produced few significant differences, this should not distract from the fact that lifetime depression and various forms of victimization were notably high. Regardless of whether SMW differ from one another, collectively they exhibit poorer mental health outcomes than their heterosexual counterparts.

Conclusion

The current study contributes unique findings to the literature on sexual minority women's health generally, as well as to the growing bisexual health literature specifically. Employing an intersectional approach, we were able to quantitatively assess how depression and victimization outcomes differed among SMW, across six groups based on race/ethnicity and sexual identity. Results point to the possibility that for some SMW of color, racial identity, and social and cultural factors associated with their racial identities, may serve as protective factors against depression, although this needs more investigation. Further, bisexual women fared the same as, or in some instances better than, lesbian women in regard to depression. Our findings suggest the need for additional qualitative and quantitative inquiry, specifically among Black and Latina bisexual and lesbian women, related to depression and associated risk and protective factors. To accomplish this future research should deliberately oversample these populations, to ensure sufficient samples sizes for comparisons of intersecting sexual identity and racial/ethnic identity sub-samples.

Acknowledgments

Research reported in this publication was supported by the National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health under Award Number R01AA013328 (Bostwick, Hughes, Wilsnack). Dr. Veldhuis' participation in this research was made possible through an NIH/NIAAA Ruth L. Kirschstein Postdoctoral Research Fellowship (F32AA025816). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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Table 1.

Sample Demographics

	Bisexual women (n = 153)	Lesbian Women (n = 447)	p-value
M Age^a (SD) range 18–82 years	34.1 (12.3)	42.3 (14.4)	<.001
	% (n)	% (n)	
Race/ethnicity			.30
Black	39.9% (61)	36.7% (164)	
Latina	26.1% (40)	22.4% (100)	
White	34.0% (52)	40.9% (183)	
Education			.005
High school or less	30.7% (47)	17.9% (80)	
Some college	30.1% (46)	31.5% (151)	
Bachelor's degree	19.6% (30)	21.3% (95)	
Graduate/professional degree	19.6% (30)	29.3% (131)	
Income			.001
<20K	47.7% (73)	26.2% (117)	
20K–<40K	21.6% (33)	17.5% (78)	
40K–<75K	16.3% (25)	25.6% (110)	
75K+	8.5% (13)	28.0% (125)	
missing	5.9% (9)	3.8% (17)	
Relationship status			<.001
Partnered, living together	23.5% (36)	44.1% (197)	
Partnered, not living together	27.5% (42)	21.5% (96)	
Single	49.0% (75)	34.5% (154)	
Child < 18 in the home	23.5% (36)	15.0% (67)	.0156
Cohort			<.001
Original (Wave 1)	22.9% (35)	55.7% (249)	
New (Wave 3)	77.1% (118)	44.3% (198)	

^a *t*-test, all other variables chi-square test of association

Table 2.
Frequencies, Lifetime Mental Health, and Victimization Variables by Sexual Identity

	White	Black	Latina
	Lesbian n = 447 % (n)	Bisexual n = 153 % (n)	p-value [*]
Lifetime depression	59.7% (267)	53.6% (82)	.184
Any childhood victimization ^a	79.9% (357)	75.8% (116)	.290
Childhood physical abuse	59.1% (264)	56.2% (86)	.537
Childhood sexual abuse	58.2% (260)	51.6% (79)	.160
Neglect	11.6% (52)	6.5% (10)	.074
Any adult victimization ^b	60.9% (272)	64.1% (98)	.482
Adult physical assault	33.6% (150)	32.7% (50)	.843
Adult sexual assault	30.2% (135)	32.0% (49)	.673
Interpersonal Violence	28.2% (126)	35.3% (54)	.098

^{*} chi-square test of association

^a Includes childhood physical abuse, or sexual abuse, or self-reported parental neglect

^b Includes adult physical or sexual assault, or any report of intimate partner violence

Table 3.
Frequencies, Lifetime Mental Health, and Victimization Variables by Race/ethnicity and Sexual Identity

	Lesbian n = 183	Bisexual n = 52	Lesbian n = 164	Bisexual n = 61	Lesbian n = 100	Bisexual n = 40	p-value*
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	
Lifetime depression	69.4% (127)	69.2% (36)	48.8% (80)	37.7% (23)	60.0% (60)	57.5% (23)	<.001
Any childhood victimization ^a	68.3% (125)	69.2% (36)	90.2% (148)	86.9% (53)	84.0% (84)	67.5% (27)	<.001
Childhood physical abuse	43.2% (79)	36.5% (19)	73.8% (121)	77.0% (47)	64.0% (64)	50.0% (20)	<.001
Childhood sexual abuse	53.0% (97)	57.7% (30)	62.2% (102)	54.1% (33)	61.0% (61)	40.0% (16)	.125
Neglect	14.8% (27)	5.8% (3)	9.1% (15)	9.8% (6)	10.0% (10)	2.5% (1)	.157
Any adult victimization ^b	58.5% (107)	51.9% (27)	64.0% (105)	75.4% (46)	60.0% (60)	62.5% (25)	.186
Adult physical assault	29.5% (54)	25.0% (13)	40.9% (67)	41.0% (25)	29.0% (29)	30.0% (12)	.094
Adult sexual assault	36.6% (67)	30.8% (16)	26.8% (44)	34.4% (21)	24.0% (24)	30.0% (12)	.255
Intimate partner violence	18.0% (33)	17.3% (9)	39.0% (64)	44.3% (27)	29.0% (29)	45.0% (18)	<.001

* chi-square omnibus test of association, race x sexual identity

^a Includes any report of childhood physical abuse, or sexual abuse, or self-reported parental neglect

^b Includes any report of adult physical or sexual assault, or any report of intimate partner violence

Table 4.

Adjusted Odds of Lifetime Depression by Race and Sexual Orientation

	Model 1	Model 2	Model 3	Model 4
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
White lesbian (ref)	-	-	-	-
White bisexual	1.89 (0.89, 4.00)	1.78 (0.83, 3.80)	1.85 (0.86, 4.01)	1.79 (0.82, 3.91)
Black lesbian	0.62 (0.37, 1.04)	0.51 (0.30, 0.87) **	0.57 (0.33, 0.97) *	0.51 (0.29, 0.88) *
Black bisexual	0.38 (0.19, 0.78) **	0.32 (0.16, 0.67) **	0.31 (0.15, 0.64) **	0.28 (0.13, 0.59) ***
Latina lesbian	0.92 (0.52, 1.62)	0.78 (0.44, 1.39)	0.85 (0.47, 1.52)	0.77 (0.42, 1.39)
Latina bisexual	1.09 (0.49, 2.42)	1.03 (0.46, 2.32)	1.02 (0.45, 2.31)	0.98 (0.43, 2.24)
Any childhood victimization ^a		1.99 (1.27, 3.12) **		1.52 (0.95, 2.44)
Any adulthood victimization ^b			2.98 (2.03, 4.38) ***	2.76 (1.86, 4.09) ***

*
 $p < .05$ **
 $p < .01$ ***
 $p < .001$ ^aIncludes childhood physical abuse, or sexual abuse, or self-reported parental neglect^bIncludes adult physical or sexual assault, or any report of intimate partner violence

Note: All models control for age, education, partner status, children <18 in the home, income and study cohort.