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Depression among Black Bisexual Men with Early and Later Life Adversities

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Abstract

This study examined the role of adulthood adversities in the relationship between childhood adversities and depression in 117 HIV-positive Black men who have sex with men and women (MSMW) and who have histories of childhood sexual abuse (CSA). Men were participants in the Enhanced Sexual Health Intervention for Men, a six-session health intervention, and at baseline reported their experiences of CSA, childhood adversities, perceived discrimination, chronic stress, social support, and depressive symptoms. The relationship between childhood adversities, including CSA, and depression was mediated by experiences with racial and HIV discrimination ($R^2 = .25$, $F_{3, 112} = 12.67$, $p < .001$) and chronic stress ($R^2 = .17$, $F_{3, 112} = 7.41$, $p < .001$). Social support moderated the mediated effects of both racial and HIV discrimination ($b = -.154$, $t(111) = -2.82$, $p < .01$) and chronic stress ($b = -.019$, $t(111) = -3.759$, $p < .01$). Men's early adverse experiences were predictive of depression in adulthood; however, this relationship was largely affected by adulthood experiences, specifically discrimination, high chronic stress, and low social support. These findings illustrate pathways by which Black MSMW's early vulnerability for depression is either exacerbated or attenuated by their experiences as adults.

Keywords

Black MSMW; chronic stress; CSA; depression; discrimination

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Introduction

Prevalence of childhood sexual abuse (CSA) among gay and bisexual men is two to four times greater than that found among men in the general population, with rates for gay and bisexual men ranging from 4% to 59% and averaging 23% (Paul, Catania, Pllack, & Stall, 2001; Rothman, Exner, & Baughman, 2011). Comparable rates have been shown in a sample of Black men who have sex with men and women (MSMW), with 32% reporting histories of CSA (Fields, Malebranche, & Feist-Price, 2008). CSA is often not a singular event but a recurrent and prolonged traumatic experience that occurs within a constellation of other childhood adversities (Fields et al., 2008). Such adversities may include familial violence, interactions with the law, and financial difficulties, among others (Kessler & Magee, 1993). In combination, Black MSMW with histories of CSA and childhood adversities are at increased risk for the development of psychopathology in adulthood as these early adverse experiences serve as vulnerability factors for greater psychological distress, as well as later mood, anxiety, and substance abuse disorders (Arreola, Neilands, & Diaz, 2009; Fields et al., 2008; McLaughlin, Conron, Koenen, & Gilman, 2010; Molnar, Buka, & Kessler, 2001). Furthermore, depending on the severity of the CSA experience, such as those where penetration occurs (i.e., oral, anal, or digital), the risk for subsequent psychopathology and long-term psychological distress is greater (Beitchman et al., 1992; Briere & Elliot, 2003).

Men with early adverse experiences may also be more vulnerable to adversities in adulthood (Kiecolt-Glaser et al., 2011). Such adversities may include chronic stressors such as financial, housing, and medical difficulties that undermine their ability to meet their daily needs (Dilorio, Hartwell, & Hansen, 2002; McLaughlin et al., 2010). Living with HIV adds to this cumulative burden of stress by increasing the range of stressful experiences to which they are exposed (Gurung, Taylor, Kemeny, & Myers, 2004). Furthermore, early childhood adversities may act as a diathesis for psychopathology in adulthood, such that individuals with adverse childhood experiences have an increased likelihood for depression once stress in adulthood is experienced (McLaughlin et al., 2010). Therefore, men with early childhood adversities are more likely to carry a high stress burden as adults, have a greater likelihood of developing psychopathology in response to stress, and also have a lower threshold for the amount of stress experienced before psychopathology develops (Kiecolt-Glaser et al., 2011; McLaughlin et al., 2010). Among Black MSMW living with HIV, the stress that accompanies experiences of discrimination based on their race, sexual behavior, and HIV status potentially adds to their cumulative burden of stress and increases their vulnerability for depression.

Black MSMW living with HIV experience the intersection of race, sexuality, and health and can become the target of discrimination based on their various socially stigmatized identities. Such concomitant discrimination is positively associated with depressive symptoms among Black men living with HIV (Bogart et al., 2011). Therefore, understanding Black MSMW's experiences with discrimination requires an understanding of the various identities they possess and the ways membership in multiple stigmatized groups are associated with psychological distress. This may be especially true given that, like

chronic stress, discrimination is often recurrent and may be perceived as beyond an individual's control, resulting in a constant source of immutable adversity.

The relationship between perceived racial discrimination and poor mental health outcomes has been well documented (Jackson et al., 1996; Pascoe & Richman, 2009; D. R. Williams, Neighbors, & Jackson, 2003; D. R. Williams & Williams-Morris, 2000). Racial discrimination can be particularly debilitating due to its early introduction in the lives of ethnic minorities as children, often leaving them feeling powerless and stigmatized at an early age (Wyatt, 1990). As a result of Black MSMW's prioritization of their racial identity over their sexual identity, anti-Black views may be particularly salient for these men and experiences of perceived discrimination may be attributed to race, regardless of whether race was the true source of the discrimination (Crawford, Allison, Zamboni, & Soto, 2002). This is particularly true given that experiences of racism commonly occur in the gay community (Jerome & Halkitis, 2011), providing a reminder of the stigma associated with being a Black man, even in spaces thought to be safer for Black MSMW.

Despite increased public awareness regarding HIV, stigma persists toward the disease and people living with it (Lee, Kochman, & Sikkema, 2002). Experiences of HIV-related stigma among people living with HIV/AIDS contribute to fear of discrimination, the potential loss of social support, shame, insecurity, and depression (Rao et al., 2012; Sherr, Clucas, Harding, Sibley, & Catalan, 2011; Teti, Bowleg, & Lloyd, 2010; Wohl et al., 2012). For individuals with additional stigmatized identities, such as being a Black bisexual male, HIV stigma may exacerbate existing feelings of stigma. This may be particularly true if the mode of HIV transmission is related to behaviors associated with one's stigmatized identity, such as same-sex sexual activity (AVERT, 2011). Experiences of HIV stigma can result in HIV-positive individuals internalizing and endorsing negative attitudes toward people living with HIV. Internalized HIV stigma can have deleterious effects on the mental health of people living with HIV as it contributes to depression, anxiety, and feelings of hopelessness (Lee et al., 2002). Experiencing and internalizing HIV stigma adds to the overall burden of risk for psychological distress and depression experienced by Black MSMW.

Having support from family, friends, or community can be an important factor in mitigating the mental health consequences of early and later life adversities (Wohl et al., 2012). These sources of support can buffer the negative effects of HIV stigma, attenuate the development of depressive symptoms among people living with HIV, and create an environment in which men are able to disclose their HIV status and receive the care and support they need (Prachakul, Grant, & Keltner, 2007; Smith, Rossetto, & Peterson, 2008; Wohl et al., 2012). For Black MSMW experiencing adulthood adversities, social support can contribute to developing resilience and enhance their ability to cope effectively with their circumstances.

As stated by Kiecolt-Glaser and colleagues (2011), "childhood adversities cast a very long shadow" the effects of which extend far into adulthood. This is particularly relevant for HIV-positive Black MSMW with histories of CSA. They are at increased risk for additional childhood adversities, adversities in adulthood, and discrimination on the basis of their multiple stigmatized identities. Collectively, these factors make Black MSMW particularly vulnerable for developing depression. Therefore, elucidating the effect of the "shadow" of

childhood adversities on depression among these men necessitates an examination of the ways in which adulthood adversities may exacerbate and/or moderate the harmful effects of early life experiences.

Present study

This study examined the effects of childhood adversities, adulthood adversities, internalized HIV stigma, and perceived social support on depression in a sample of Black MSMW with histories of CSA who are living with HIV. It should be noted that men who have sex with men (MSM) is a broad designation that may include MSMW as well as men who exclusively engage in same-sex sexual behavior. This work attempts to distinguish MSMW from MSM by reporting on the experiences of men who report recent (past 90 days) sexual behavior with both men and women. Specific study hypotheses were:

- Hypothesis 1** Adversities in childhood, including CSA, will significantly predict depression.
- Hypothesis 2** Adversities in adulthood will significantly mediate the relationship between childhood adversities and depression.
- Hypothesis 3** The relationship between experiences of discrimination and depression will be stronger at higher levels of internalized HIV stigma, but moderated by higher levels of perceived social support.
- Hypothesis 4** Greater levels of perceived social support will also moderate the relationships between chronic stress, trauma and depression.

Understanding the relationship between early and later life adversities can be important for better characterizing risk factors for depression in this population, as well as informing more efficacious interventions.

Methods

Procedure

The study hypotheses were tested using the baseline data from the Enhanced Sexual Health Intervention for Men (ES-HIM), a six-session sexual risk and stress reduction intervention for non-gay identified Black MSMW living with HIV and having a history of CSA. See Glover, Williams, and Kisler (2012) and Williams et al., (in press) for a description of the study goals and procedures.

Participants

A community sample of 117 Black men was recruited using fliers, print advertisements, and face-to-face recruitment at collaborating community-based organizations that provided health care to HIV-positive Black men. To be eligible, respondents had to be at least 18-years-old, English-speaking, self-identify as Black/African American, confirmed as HIV-positive, report at least one unprotected sexual activity with both male and female partners in the past 90 days, be non-gay identifying, and have a history of CSA. CSA was defined as having experienced any unwanted or forced sexual contact or sexual experiences with someone at least five years older before the age of 18.

Measures

Participants were administered a questionnaire using a laptop computer with Audio Computer Assisted Self Interview (A-CASI) technology. A-CASI was used to increase confidentiality and comfort for participants when disclosing sensitive information, such as sex and substance use behaviors. This questionnaire took approximately 90 minutes and included demographic variables such as age, household income, education, employment status, and relationship status. Men were also asked the degree to which they considered themselves heterosexual and homosexual, the frequency with which they were attracted to men and women, and whether they disclosed their sexual behavior with men and their HIV status.

History of unwanted sexual contact before 18 years of age was assessed with seven items from the Wyatt Sex History Questionnaire, $\alpha = .84$ (Wyatt, 1984). Participants were asked whether or not someone had ever forced, or tried to force them to perform sexual acts ranging from fondling to anal sex as either the receptive or insertive partner. Severity was defined as CSA “with” or “without penetration.” Sexual abuse in adulthood was assessed by asking respondents whether or not someone had ever forced, or tried to force them to perform sexual acts against their will since the age of 18. Additionally, participants were also asked whether or not they had ever pressured someone else to have sex.

Childhood adversity—The revised 10-item Questionnaire of Early Childhood Adversities ($\alpha = .89$) was used to assess non-sexual adverse early life experiences (Kessler & Magee, 1993), such as separation from parents, family disorganization or violence, and family substance abuse.

Chronic stress—The 21-item Chronic Burden Scale ($\alpha = .88$) was used to assess the extent to which each of 21 stressors (e.g. financial difficulties, immigration/citizenship problems, transportation, etc.) was a problem for participants in the past month. Responses were reported on a four-point scale ranging from one (not a problem in the last month) to four (a major problem for me in the last month) (Gurung et al., 2004).

HIV stigma—Twelve items from the HIV Stigma Scale ($\alpha = .92$) were used to measure HIV-related stigma experienced in the last thirty days (Emlet, 2005; Sowell et al., 1997). The scale included items such as, “I feared that I might lose my job if someone found out about my HIV status,” “I avoided getting treatment because someone might find out about my HIV status,” and “I feared my family would reject me if they learned about my HIV status”. The frequency of these incidents was assessed using a four-point scale from not at all, rarely, sometimes to often.

Racial discrimination—The Brief Perceived Ethnic Discrimination Scale-Community Version ($\alpha = .93$) was used to assess the lifetime frequency of discriminatory experiences of racial/ethnic discrimination across various contexts using a five-point scale ranging from one (never happened) to five (very often) (Brondolo et al., 2005).

Trauma—A series of twenty-one items from the Trauma History Questionnaire ($\alpha = .85$) measured the occurrence of three categories of traumatic events during adulthood, including

physical assault, crime, and general disaster (Green, 1996). Participants responded “yes” or “no” to each item.

Internalized HIV stigma—Six statements ($\alpha = .88$) regarding living with HIV examined the extent to which the men endorsed negative attitudes about individuals living with HIV. This was done using a four-point scale ranging from one (strongly disagree) to four (strongly agree). Four items were used in previous research (Snell, Finney, & Godwin, 1998; World Health Organization, 2009) and two items were newly developed.

Social support—Ten items from the Multidimensional Scale of Perceived Social Support ($\alpha = .96$) assessed perceived support received from friends and family on a six-point scale ranging from one (strongly disagree) to six (strongly agree). The support assessed included emotional support, such as being able to talk to others about one’s problems, as well as receiving tangible help from friends and family (i.e., help making decisions or support when things go wrong) (Zimet, Dahlem, Zimet, & Farley, 1988).

Depression was assessed with the widely used 21-item Beck Depression Inventory II ($\alpha = .93$) that measured depressive symptoms experienced during the past week on a scale from zero to three (Beck, Steer, & Brown, 1996). The measure yields an overall sum score, with higher scores signifying greater depressive symptoms.

Statistical Analyses

Hypothesis testing first began with an examination of Hypothesis 1 using stepwise linear regression. Subsequently, scale measurement properties of the hypothesized mediating adversities in adulthood (i.e., HIV stigma, racial discrimination, adulthood trauma, and chronic stress) were assessed using principal component analysis with varimax rotation. The resulting factors were subjected to stepwise linear regression analyses to test the hypothesized mediated relationships (Hypothesis 2) following the Baron and Kenny method (Baron & Kenny, 1986). Separate regression analyses were also run to examine the hypothesized moderated relationships (Hypotheses 3 and 4). The predictors, CSA severity and childhood adversity, were entered in invariant order to estimate the relative contribution of each predictor.

Results

Demographics

One hundred and seventeen Black MSMWs living with HIV in the Los Angeles area completed the ES-HIM baseline survey. The average age of the men was 46 with the majority of the sample being unemployed, low-income, single, and having a high school education or less.

Disclosure among the men was relatively high with the majority disclosing to significant others that they have sex with men and that they were living with HIV. Disclosure most often occurred with family, friends, and service providers and less often to their female sexual partners. All of the men were victims of sexual abuse in childhood, 29.1% of them

reported experiencing additional sexual abuse in adulthood, and nearly an equal number (23.9%) reported having pressured someone to have sex (See Table I).

Assessing the variables of interest, participants reported relatively low levels of childhood adversity ($M = 3.89$, $SD = 2.93$), traumatic experiences in adulthood ($M = 6.33$, $SD = 4.52$), experiences of HIV stigma ($M = 17.93$, $SD = 7.77$), and internalized HIV stigma ($M = 8.64$, $SD = 3.27$). The men reported moderate, although lower than expected, levels of chronic stress ($M = 33.17$, $SD = 10.61$) and perceived racial discrimination ($M = 35.3$, $SD = 11.7$), but high levels of perceived social support ($M = 46.54$, $SD = 13.68$). Overall, the men reported low levels of depressive symptoms ($M = 7.24$, $SD = 10.1$), with the majority of the men (82%) in the non-depressed range (see Table II).

Factor Analysis

In order to test the mediating effects of each of the adult adversities (Hypothesis 2), factor analyses were conducted assessing the scale measurement properties of the hypothesized mediating adversities in adulthood (i.e., HIV stigma, racial discrimination, adulthood trauma, and chronic stress). Items that contributed a minimum factor loading of .4 were retained in the factors. These analyses identified two factors. The first factor ($\alpha = .94$) was comprised primarily of items measuring perceived racial discrimination and experiences with HIV stigma, and reflects exposure to experiences of discrimination in adulthood (Discrimination). The second factor ($\alpha = .89$) was comprised of chronic stress and trauma items, collectively assessing stressful and traumatic experiences in adulthood (Stress/Trauma).

Hypothesis Testing

Analysis of the effect of CSA severity ($b = 3.11$, $t(114) = 1.66$, $p = .1$) and childhood adversities ($b = .855$, $t(114) = 2.69$, $p < .01$) indicated that the model significantly predicted 10% of the variance in depressive symptoms (Hypothesis 1, $R^2 = .1$, $F_{2, 113} = 6.05$, $p < .01$).

Experiencing adversities in childhood was predicted to lead to greater experiences of discrimination, thereby an increased risk for depression in adulthood (Hypothesis 2). Analyses suggested that the relationship between CSA severity ($b = 3.5$, $t(113) = 2.05$, $p < .05$), childhood adversities ($b = .31$, $t(113) = 1.01$, $p = .32$), and depressive symptoms was partially mediated by Discrimination ($b = 4.31$, $t(113) = 4.85$, $p < .01$), $R^2 = .25$, $F_{3, 112} = 12.67$, $p < .001$.

Adversities in childhood were hypothesized to be predictive of experiencing chronic stress and traumatic events in adulthood, and contribute to risk for depression (Hypothesis 2). However, analyses failed to indicate a significant mediating effect of the Stress/Trauma factor. Given this unexpected finding, the mediating effects of chronic stress and trauma were examined independently. Chronic stress ($b = .29$, $t(113) = 3.04$, $p < .01$) partially mediated the relationship between CSA severity ($b = 1.66$, $t(113) = .89$, $p = .38$), childhood adversities ($b = .4$, $t(113) = 1.18$, $p = .24$), and depressive symptoms, $R^2 = .17$, $F_{3, 112} = 7.41$, $p < .001$. Traumatic experiences in adulthood failed to mediate the relationship.

It was predicted that internalized HIV stigma would strengthen the association between experiences of HIV and racial discrimination and depressive symptoms, particularly for those reporting high levels of discrimination (Hypothesis 3). This effect failed to be supported by the analyses. However, internalized HIV stigma ($b = .70$, $t(111) = 2.49$, $p < .05$) had a significant and positive main effect on depressive symptoms.

High levels of perceived social support were hypothesized to moderate the relationship between experiences of discrimination and chronic stress on depression (Hypothesis 4). The significant interaction term between perceived social support and Discrimination ($b = -.154$, $t(111) = -2.82$, $p < .01$) suggested a significant moderating effect. Median split technique was used to categorize individuals as having low (range: 10 – 50, $n = 69$) vs. high (range: 51 – 60, $n = 48$) perceived social support, as well as experiencing low ($< -.15$, $n = 58$) vs. high ($> -.15$, $n = 59$) levels of Discrimination. Individuals who reported low levels of perceived social support and high levels of Discrimination evidenced the strongest relationship between discrimination and depressive symptoms ($M = 14.05$, $SD = 13.1$, $n = 42$), and had significantly greater symptoms than those experiencing low levels of Discrimination ($M = 4.78$, $SD = 6.36$, $n = 27$) (see Figure 1). Conversely, among those with high levels of perceived social support, mean depression scores for individuals experiencing low levels of Discrimination ($M = 3.19$, $SD = 4.16$, $n = 31$) were not significantly different from those experiencing high levels of Discrimination ($M = 1.71$, $SD = 2.47$, $n = 17$).

Similarly, the significant interaction term between perceived social support and chronic stress ($b = -.019$, $t(111) = -3.759$, $p < .01$) suggested a significant moderating effect on depressive symptoms. Median split technique was used to categorize individuals as having low (range: 20 – 31, $n = 61$) vs. high (range: 32 – 65, $n = 56$) chronic stress. The strongest relationship between chronic stress and depressive symptoms was found in the men who reported low levels of perceived social support and high levels of chronic stress ($M = 15$, $SD = 13.1$, $n = 35$), and had significantly greater depressive symptoms than those with low chronic stress ($M = 5.7$, $SD = 8.16$, $n = 34$) (see Figure 2). Conversely, among those with high levels of perceived social support, mean depression scores for those with low chronic stress ($M = 2.4$, $SD = 4.2$, $n = 27$) were not significantly different from those for high chronic stress ($M = 3$, $SD = 3$, $n = 21$). These findings suggest that the level of perceived social support reported by participants significantly moderated the detrimental effects of discrimination and chronic stress on depressive symptoms.

Discussion

The purpose of this study was to examine the contribution of childhood adversities, including CSA, to depression and whether this effect was mediated by adulthood adversities and moderated by perceived social support and internalized HIV stigma in a sample of Black MSMW with histories of CSA and living with HIV. Our findings are consistent with prior research that experiencing early sexual abuse and additional childhood adversities increases risk for adverse experiences and depression in adulthood (McLaughlin et al., 2010; Wilson, 2010). This confirms that early adverse experiences have lasting effects, which are likely to manifest long after the adversities have been experienced (Kiecolt-Glaser et al., 2011).

We found that the relationship between CSA severity, childhood adversities, and depression was mediated by discrimination, such that men with histories of early adversities were more likely to experience discrimination as adults, putting them at greater risk for developing depressive symptoms. This was expected given that the men in this study were not only subjected to discrimination on the basis of their race, but had the additional experience of discrimination due to their HIV status, further compounding the amount of discrimination they experienced and its subsequent effect on their mental health (Bogart et al., 2011). Much of the prior research in this area has examined discrimination as a predictor having an independent contribution to psychological distress (Pascoe & Richman, 2009). However, these findings indicate that not only do experiences of discrimination contribute directly to risk for depression, but they also mediate the effects of early life adversities on risk for depression. For Black MSMW, discrimination in adulthood likely exacerbated the effect of childhood adversities and was a pathway through which these adversities served as a vulnerability factor for subsequent psychological distress.

Although the examination of sexuality-based discrimination was beyond the realm of the present study, it is likely that these men also experienced discrimination due to their bisexual behavior. Such discrimination may have come from both the heterosexual and the homosexual communities, as negative attitudes toward bisexual individuals are prevalent in both (Mulick & Wright, 2002). The stigma associated with bisexuality may be of particular concern for Black MSMW who are often deemed by Black popular culture as men on the “down low” and the responsible parties for the high rates of HIV infection among Black women (J. Williams, 2004). Such experiences of sexuality-based discrimination, occurring even in spaces presumed to be safe for sexual minorities, may further strengthen the demonstrated association between discrimination and depression for the Black MSMW.

Contrary to expectations, the cumulative effects of chronic stress and trauma exhibited no mediating effect, indicating that although men with early adverse experiences were at increased risk for chronic stress and traumatic experiences in adulthood, this did not explain the pathway between early adverse experiences and depression. Given this unexpected finding, the independent contributions of chronic stress and traumatic experiences were examined and found that chronic stress did mediate the relationship, but traumatic experiences did not. These findings suggest that chronic stress and trauma are different experiences that may yield different results if examined separately, as combining them into one factor masked the mediating effect of chronic stress.

There are a number of possible explanations for these findings, including one that is methodological and may be peculiar to this sample. In this study, participants reported higher stress burdens than trauma experiences. Had the sample been more traumatized it is possible that there may have been a stronger association with depression. In addition, there was a higher correlation between chronic stress and depressive symptoms ($r = .39$) than trauma and depressive symptoms ($r = .28$), possibly contributing to the current findings. An additional possibility is that chronic stress may contribute to risk for depression in two ways, a direct effect and a mediating effect. On the other hand, trauma experiences may have only a somewhat weaker direct effect on depression. This may be especially important to consider given that chronic stress is largely associated with depression while trauma is

largely associated with post traumatic stress disorder (Gurung et al., 2004; Reisner, Mimiaga, Safren, & Mayer, 2009). Therefore, while traumatic experiences may contribute to the risk for depression, the association is not as strong as that of chronic, ongoing stressful experiences. These results will need to be replicated and these possible explanations will require further study.

Internalized HIV stigma did not moderate the relationship between either discrimination or stress and depression. This finding is likely attributable to the fact that the men reported relatively low levels of experiencing and internalizing HIV stigma. Additionally, the majority of the men (87.2%) reported disclosing their HIV status. Given the positive association between disclosure and social support, it is likely that the men only disclosed their status when they were in networks perceived as being supportive and not endorsing negative attitudes toward HIV and people living with the disease (Smith et al., 2008). As a result, the men may not have been frequently exposed to discriminatory attitudes, and thus, did not internalize negative views when these were encountered. Also, the men may have had protective factors that enabled them to positively deal with stigma if experienced. These factors may have included family, the largest group to whom men disclosed, networks of other people living with HIV and supportive services for HIV-positive people. These factors may have contributed to the low levels of experienced and internalized HIV stigma, thus mitigating the effects HIV stigma might have had (Smith et al., 2008).

Finally, and as hypothesized, perceived social support moderated the relationship between depressive symptoms and chronic stress, independent of the effects of trauma and discrimination. Among men with low levels of perceived social support, level of chronic stress and experienced discrimination was strongly associated with depression, such that the highest levels of depressive symptoms were seen among men with low support and high stress, as well as those with low support and high discrimination. This relationship was not observed among men with high levels of perceived social support, for whom the level of chronic stress or discrimination experienced had no significant effect on their likelihood of reporting depression symptoms.

The results from this study are generally consistent with prior findings that childhood adversities, including experiences of CSA, provide a significant risk for depression in adulthood (McLaughlin et al., 2010; Wilson, 2010). However, for the men in this study, this relationship was largely affected by adulthood experiences. Our results demonstrated that experiencing severe levels of CSA and childhood adversities were primary predictors of depression. However, experiences of discrimination, chronic stress, and perceived social support made a stronger contribution to risk for depression than that explained by adverse experiences in childhood alone. These adulthood experiences illustrate a pathway by which Black MSMW's vulnerability for depression is either enhanced or attenuated. Therefore, efforts to understand and address depression among Black MSMW living with HIV and reporting histories of CSA require consideration of both early and later life experiences.

Limitations

There are a few limitations to this study and its findings. Although this study sought to understand the experiences of a subgroup of sexual minority men, the use of such a specific

sample limits the generalizability of the findings. Not only were the participants in this study Black MSMWs living with HIV and reporting histories of CSA, they were also largely unemployed, low income, undereducated, and not partnered. Additionally, the men in this study were all non-gay identified, meaning they either used a signifier they deemed more culturally appropriate such as “same-gender loving,” they resisted the use of common descriptors to label their sexuality, or they identified as bisexual (Glover et al., 2012). Therefore, while this study contributes to the literature on the mental health of sexual minority men, this sample has a unique set of challenges that may not be generalized to Black MSM, or even to Black MSMWs more broadly.

It is important to note that despite all the risk factors for depression that these men exhibited, the majority of them failed to report clinical levels of depressive symptoms, which may warrant an examination into the protective and resiliency resources these men possess. The men did report having high perceived social support, which moderated the effect of chronic stress. However, there could be additional resiliency factors and coping strategies the men employed that were not captured by the present study. Jackson, Knight, and Rafferty (2010) assert that unhealthy yet self-soothing behaviors, such as substance abuse and eating comfort foods, can explain reduced prevalence of psychopathology among Blacks; suggesting that Blacks essentially sacrifice their physical health to maintain their psychological health in the face of adversity. Such an explanation may explain the current findings and would need to be explored further. Additionally, the men participated in this study with the knowledge that it was an intervention. Such help-seeking behavior may generalize to other areas of these men’s lives, and may make them characteristically different from similar men who do not engage in such behaviors.

Given the increased rates of reported CSA among gay and bisexual men, efforts to understand how these and other early adverse experiences affect the mental health of these men are important (Paul et al., 2001; Rothman et al., 2011). This is particularly relevant due to the increased vulnerability for depressive symptoms associated with the adult adversities such men are likely to experience. Greater examination into these early and later life adversities may help to characterize Black MSMW’s experiences and how they contribute to psychological distress. These factors may also impact how they develop their sexuality, sexual practices, risky behaviors, self-image, and attitudes toward other Black men. All of these may be important to the overall well-being of these men.

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Figure 1.
Moderated Effect of Social Support on Discrimination

Figure 2.
Moderated Effect of Social Support on Chronic Stress

Table I**Demographic Characteristics**

<i>Demographic Variables</i>	<i>n (%)</i>
Age, mean (range)	45.77 (24 – 67)
Monthly per capita income, mean (range)	737.36 (33 – 2084)
Education	
High school diploma/equivalent	105 (89.7)
>High school diploma	12 (10.3)
Employment status	
Unemployed	99 (84.6)
Employed	17 (14.5)
Relationship status	
Partnered	25 (21.4)
Not partnered	85 (72.6)
Frequency of attraction to men	
Less than once a month	27 (23.1)
Monthly	12 (10.3)
Weekly	41 (35)
Daily	36 (30.8)
Frequency of attraction to women	
Less than once a month	20 (17.1)
Monthly	29 (24.8)
Weekly	26 (22.2)
Daily	41 (35)
Describe homosexuality	
Not at all homosexual	18 (15.4)
Slightly homosexual	25 (21.4)
Mildly homosexual	16 (13.7)
Moderately homosexual	28 (23.9)
Very homosexual	18 (15.4)
Extremely homosexual	7 (6)
Describe heterosexuality	
Not at all heterosexual	14 (12)
Slightly heterosexual	24 (20.5)
Mildly heterosexual	13 (11.1)
Moderately heterosexual	31 (26.5)
Very heterosexual	21 (17.9)
Extremely heterosexual	8 (6.8)
Child sexual abuse	
Without penetration (oral/anal, receptive/insertive)	47 (40.2)
With at least one penetration	69 (59)
Adult sexual abuse	

<i>Demographic Variables</i>	<i>n (%)</i>
Victim	34 (29.1)
Perpetrator	28 (23.9)
Have you told at least one person that you have sex or have had sex with men?	93 (79.5)
If so, to whom have you disclosed?	
Family	75 (64.1)
Friends	76 (65)
Service providers (minister/priest, doctor)	76 (65)
Female sex partners	20 (17.1)
Have you told to at least one person that you are living with HIV?	102 (87.2)
If so, to whom have you disclosed?	
Family	79 (67.5)
Friends	45 (38.5)
Service providers (minister/priest, doctor)	70 (59.8)
Female sex partners	31 (26.5)
Depressive Symptoms	
Non-depressed	96 (82.1)
Mildly depressed	6 (5.1)
Moderate depressed	9 (7.7)
Severe depression	6 (5.1)

Table II

Correlation Matrix (N = 117)

Variable	Range (Mean)	Standard deviation	1	2	3	4	5	6	7
1. Childhood adversity ($\alpha = .89$)	0 – 10 (3.89)	2.93							
2. HIV stigma ($\alpha = .92$)	12 – 39 (17.93)	7.77	.377**						
3. Racial discrimination ($\alpha = .93$)	16 – 65 (35.3)	11.7	.365**	.488**					
4. Chronic stress ($\alpha = .88$)	20 – 65 (33.17)	10.61	.440**	.384**	.382**				
5. Trauma ($\alpha = .85$)	0 – 17 (6.33)	4.52	.445**	.390**	.423**	.502**			
6. Internalized HIV stigma ($\alpha = .88$)	6 – 19 (8.64)	3.27	.218*	.486**	.329**	.174	.341**		
7. Social support ($\alpha = .96$)	10 – 60 (46.54)	13.68	-.222*	-.268**	-.264**	-.131	-.139	-.257**	
8. BDI scores ($\alpha = .93$)	0 – 54 (7.24)	10.1	.258**	.444**	.407**	.390**	.280**	.398**	-.374**

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

Table III

Factor Analysis of Adversity Variables

	<i>Item Source</i>	<i>Factor 1: Discrimination α = .94</i>	<i>Factor 2: Stress/ Trauma α = .89</i>
10. Have people been nice to you to your face, but said bad things about you behind your back	Brondolo et al. (2005)	0.747	
8. Have you been treated unfairly by co-workers or classmates	Brondolo et al. (2005)	0.738	
5. Have others threatened to damage your property	Brondolo et al. (2005)	0.726	
7. Have others made you feel like an outsider who doesn't fit in because of your dress, speech, or other characteristics related to your ethnicity	Brondolo et al. (2005)	0.722	
9. I feared I would lose my friends if they learned about my H.I.V. status	Sowell et al. (1997)	0.685	
6. Have others actually damaged your property	Brondolo et al. (2005)	0.683	
9. Have others hinted that you are dishonest or can't be trusted	Brondolo et al. (2005)	0.665	
11. Have people who speak a different language made you feel like an outsider	Brondolo et al. (2005)	0.637	
1. Have others thought you couldn't do things or handle a job	Brondolo et al. (2005)	0.635	
14. Have others hinted that you must not be clean	Brondolo et al. (2005)	0.629	
10. I feared my family would reject me if they learned about my H.I.V. status	Sowell et al. (1997)	0.607	
8. I felt people avoided me because of my H.I.V. status	Sowell et al. (1997)	0.604	
3. Have others actually hurt you or tried to hurt you	Brondolo et al. (2005)	0.602	
12. People who know I am H.I.V. positive treated me with kid gloves	Sowell et al. (1997)	0.595	
2. Have others threatened to hurt you	Brondolo et al. (2005)	0.593	
4. Have policemen or security officers been unfair to you	Brondolo et al. (2005)	0.588	
16. Has it been hinted that you must be lazy	Brondolo et al. (2005)	0.579	
3. I thought my H.I.V. status was a punishment for things I've done in the past	Sowell et al. (1997)	0.569	
7. I thought other people were uncomfortable being with me because of my H.I.V. status	Sowell et al. (1997)	0.567	
2. I felt ashamed of my H.I.V. status	Sowell et al. (1997)	0.566	
13. Has your boss or supervisor been unfair to you	Brondolo et al. (2005)	0.564	
1. I felt blamed by others for my H.I.V. status	Sowell et al. (1997)	0.552	
12. Have others ignored you or not paid attention to you	Brondolo et al. (2005)	0.532	
15. Have people not trusted you.	Brondolo et al. (2005)	0.521	
4. I feared that I might lose my job if someone found out about my H.I.V. status	Sowell et al. (1997)	0.493	
11. I felt I wouldn't get as good health care if people learned about my H.I.V. status	Sowell et al. (1997)	0.475	
7. Have you ever experienced a natural disaster such as a tornado, hurricane, flood, major earthquake, etc., where you felt you or your loved ones were in danger of death or injury?	Green (1996)	0.466	
6. I feared that people would hurt my family if they learned about my H.I.V. status	Sowell et al. (1997)	0.458	
5. Has anyone tried to assault or attack you on the street or in a public space?	Green (1996)	0.455	
5. I avoided getting treatment because someone might find out about my H.I.V. status	Sowell et al. (1997)	0.4	
13. Serious accident, injury or new illness which has happened to you or a close family member/spouse/partner/close friend.	Gurung et al. (2004)		0.732
15. Chronic pain or restriction of movements due to injury or illness.	Gurung et al. (2004)		0.673

	<i>Item Source</i>	<i>Factor 1: Discrimination α = .94</i>	<i>Factor 2: Stress/ Trauma α = .89</i>
16. Long-term medical problems.	Gurung et al. (2004)		0.664
20. Losing the help of someone you depend on, such as person moved, got sick, or otherwise was unavailable.	Gurung et al. (2004)		0.598
1. Not having enough money to cover the basic needs of life, such as food, clothing, and housing.	Gurung et al. (2004)		0.592
20. Have you ever experienced or seen violence in your community or neighborhood?	Green (1996)		0.569
8. Long term, unresolved conflict with someone very important to you, such as a child, parent, lover/partner, sibling, or friend.	Gurung et al. (2004)		0.565
11. Having work hours or responsibilities change for the worse.	Gurung et al. (2004)		0.55
12. Partner's work hours or responsibilities change for the worse.	Gurung et al. (2004)		0.549
2. Not having any savings to meet problems that came up	Gurung et al. (2004)		0.524
9. Being fired or laid off.	Gurung et al. (2004)		0.519
3. No reliable source of transportation, such as a car that works or reliable bus service.	Gurung et al. (2004)		0.514
4. Housing problems, such as uncertainty about housing, problems with landlord, or needing to find a new place to live.	Gurung et al. (2004)		0.509
10. Trouble with your employer, such as being in danger of losing job, being suspended or demoted.	Gurung et al. (2004)		0.486
17. Have you ever received news of a serious injury, life-threatening illness or unexpected death of someone close to you?	Green (1996)		0.476
12. Have you ever seen someone seriously injured or killed?	Green (1996)		0.471
24. Have you experienced any other extraordinary stressful situation or event that was not already asked about above?	Green (1996)		0.452
14. You or close family member/spouse/partner/close friend were the victim of a crime or physical assault.	Gurung et al. (2004)		0.443
11. Have you ever been in any other situation in which you feared you might be killed or seriously injured?	Green (1996)		0.44
7. Divorce or separation from partner.	Gurung et al. (2004)		0.419
19. Living in a high-crime area.	Gurung et al. (2004)		0.404