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# Childhood Abuse and Mental Health Indicators among Ethnically Diverse Lesbian, Gay, and Bisexual Adults

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## **Abstract**

**Objective**—Prior research has established that lesbian, gay, and bisexual (LGB) people experience higher rates of childhood abuse compared to heterosexuals. However, there has been little research on the mental health impact of these experiences, or how race/ethnicity might influence prevalence and mental health impact of childhood abuse in this population. The study's objective was to examine the relationships between race/ethnicity and childhood abuse and their effect on mental health indicators in a national sample of LGB adults.

**Method**—Participants were recruited via the internet using snowball and targeted sampling methods. 669 LGB adults, 21% of whom were people of color, participated in an online survey. Participants completed the Childhood Trauma Questionnaire-Short Form, the Center for Epidemiologic Studies Depression Scale, the Patient Health Questionnaire Generalized Anxiety Disorder Scale, the PTSD Checklist-Civilian Version, and the Perceived Stress Scale Short-Form.

**Results**—Latina/o and Asian American participants reported the highest levels of physical abuse (p < .01), and Latina/o and African American participants reported the highest levels of sexual abuse (p < .01). Childhood emotional abuse was the strongest predictor of current psychopathology symptoms for all participants (ps < .01). Relative to White participants, emotional abuse showed a stronger relationship with current PTSD and anxiety symptoms for African American participants (ps < .01), and physical abuse showed a stronger relationship with current PTSD and anxiety symptoms for Latina/o participants (ps < .05).

**Conclusions**—Findings suggest that race/ethnicity may be an important factor when examining childhood abuse and mental health correlates among LGB populations.

## Keywords

Sexual orientation; race; child abuse; gay; lesbian

Childhood abuse is a common problem in U.S. society. According to the National Child Abuse and Neglect Data System (NCANDS), an estimated 905,000 children were found to be victims of child maltreatment in 2006 (U.S. Department of Health and Human Services [DHHS, 2006]). Risk for childhood abuse can vary according to a number of social and

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cultural factors. In particular, one disadvantaged social status that has been examined with respect to child abuse is sexual orientation. Indeed, higher risk of child maltreatment, including emotional, physical, and sexual abuse, among lesbian, gay and bisexual (LGB) individuals relative to heterosexuals has been consistently found across research studies with a wide range of sampling methodologies (e.g., Austin et al., 2008; Balsam, Rothblum, & Beauchaine, 2005; Corliss, Cochran, & Mays, 2002; Tjaden, Thoeness, & Allison, 1999).

While there has been relatively little research on LGB people who are also racial/ethnic minorities, the literature to date indicates that this is a population subject to multiple minority and life stressors, including stigma associated with their sexual orientation, rejection by their cultural or ethnic community, and prejudice and discrimination associated with their race/ethnicity (Cochran & Mays, 1994; Diaz, Ayala, Bein, Jenne, & Marin, 2001; Greene, 1997). Only a handful of studies examine childhood abuse among LGB people of color. Morris and Balsam (2003), in a large national survey, found higher rates of childhood physical and sexual abuse among lesbian and bisexual women of color compared to White lesbian and bisexual women. Similarly, two studies of gay and bisexual men have found higher prevalence rates of childhood sexual abuse among African American and Latino men compared to White men (Doll et al., 1992; Feldman & Meyer, 2007). LGB people of color may experience elevated risk not only compared to White LGB people, but also compared to their ethnic heterosexual counterparts. For example, Balsam et al. (2004) found higher rates of childhood physical abuse among LGB Native Americans compared to heterosexual Native Americans.

There are several potential explanations for why one might hypothesize elevated rates of child abuse among LGB people of color compared to their White LGB counterparts. Some of these reasons parallel reasons for childhood abuse in the general population, such as additional stress on families and economic disadvantage (Freisthler, Bruce, & Needell, 2007). Additionally, cultural or religious beliefs within ethnic minority families may include strong prohibitions against homosexuality (e.g., Chung & Katayama, 1998). Although ethnic minority youth may be less likely to disclose their sexual orientation to their families (Dube & Savin-Williams, 1999; Pilkington & D'Augelli, 1995), gender atypicality may elevate their risk for abuse (Grossman, D'Augelli, Howell, & Hubbard, 2006). Indeed, two studies of Latina/o LGB adults (Finlinson et al., 2003; Guarnero, 2007) found that these participants linked their childhood physical and sexual abuse experiences to homophobia among family members.

## Childhood Abuse and Mental Health among Diverse LGB People

Research on mental health of LGB populations indicates that this group is at elevated risk for mental health disorders compared to heterosexual populations (see Cochran, 2001, for a review). Although relatively little LGB mental health research has examined the role of race/ethnicity, findings from two recent studies indicate that some LGB people of color may experience elevated risk for suicidality and depressive disorders relative to heterosexual people of color (Cochran, Mays, Alegria, Ortega, & Takeuchi, 2007) and elevated risk for suicidality compared to white LGB people (Meyer, Dietrich, & Schwartz, 2008). However, despite evidence that LGB people are at elevated risk for both childhood abuse and mental health problems in adulthood, very little research has examined the linkage between these two constructs within this population. In the general population, a vast body of literature documents the adverse adult mental health outcomes associated with a history of childhood abuse, including posttraumatic stress disorder (PTSD), depression, anxiety, and increased stress (Arias, 2004; Edwards, Holden, Felitti, & Anda, 2003; Gibb, Chelminski, & Zimmerman 2007; Hyman, Paliwal, & Sinha, 2007; Kaplow, Dodge, Amaya-Jackson, & Saxe, 2005). A few studies of LGB people have examined adult health correlates of childhood sexual abuse, yielding similar results (Descamps, Rothblum, Bradford, & Ryan,

2000; Hughes, Johnson, Wilsnack, & Szalacha, 2007; Ratner et al., 2003); however, little is known about correlates of childhood emotional and physical abuse among LGB people.

Furthermore, we know little about if and whether childhood abuse differentially affects LGB people according to their race or ethnicity. Prior research indicates that traumatic events may be more likely to lead to PTSD among racial/ethnic minorities compared to Whites (Brewin, Andrews, & Valentine, 2000), although the link is stronger among military than civilian populations, the average effect size is small (.29–.37), and there is little examining this question specifically among childhood abuse survivors.

## The Current Study

The overall goal of the current study was to examine the relationships between race/ethnicity and childhood abuse and their effect on mental health indicators in a non-random national sample of LGB adults. Our first aim was to explore differences between African American, Latina/o, Asian American, and White LGB adults on self-reported emotional, physical, and sexual abuse in childhood using a standardized childhood abuse measure. We hypothesized that ethnic minority LGB adults would report higher rates of childhood abuse compared to their White LGB counterparts. Our second aim was to examine the relationship between childhood abuse history and current self-reported depression, anxiety, post-traumatic stress symptoms, and perceived stress. We hypothesized that childhood abuse would be associated with more negative self-reported mental health indicators for all participants. Finally, given the possibility that multiple minority status might alter the impact of abuse, our third aim was to examine whether the relationships between childhood abuse and current self-reported mental health was moderated by race/ethnicity. Given that our study included participants from four race/ethnicity groups who were administered measures of multiple types of abuse and mental health indicators, this aim was included for hypothesis-generating purposes.

#### Method

## **Procedure**

Recruitment for the study was conducted using a combination of snowball and targeted sampling methods. Announcements about the study were sent electronically to LGB listservs, websites, groups, organizations, and clubs in all 50 states, with specific targeted advertising sent to venues focused on LGB people of color. Examples of such venues include yahoo groups, LGBT community centers, email lists specifically for LGBT people of color, LGBT social clubs specifically for people of color, and Craig's list. All participants were asked to forward information about the study to other individuals and groups that might be eligible to participate. Potential participants who followed our link were taken to our web-based information statement, which explained that the study was being conducted in order to "understand how the unique experiences of LGBT people affect their health and well-being" as well as to "refine our survey questions about experiences of lesbian, gay, bisexual, and transgender (LGBT) adults." The information statement also explained the criteria for participation (age 18 or older, identify as lesbian, gay, bisexual, transgender, queer, or two-spirit), purpose of the study, its risks and benefits, and our confidentiality agreement. Participants who agreed to participate then completed the questionnaire online using Survey Monkey data collection software (http://www.surveymonkey.com/). The questionnaire was followed by a listing of LGB and mental health resources. Questionnaire completers could then voluntarily choose to enter a lottery to win one of three \$100 prizes.

#### **Participants**

A total of 1217 questionnaires were completed. In order to have sufficient statistical power for all racial/ethnic group comparisons, we included only participants who self-identified as

African American, Latina/o/a, Asian American, or White, excluding those who selected more than one race/ethnicity or other race/ethnicities (n=207). Similarly, we excluded those participants who identified as transgender (n=184) or were missing data on gender (n=23) due to insufficient representation within some of the four racial groups. Finally, we excluded 180 participants who did not finish the questionnaire. There was some overlap in reason for exclusion; for example, some participants were both transgender and multiracial, or missing data on gender and did not complete the questionnaire. We compared the 180 non-completers with the 669 completers on demographic variables. Non-completers were significantly more likely to be people of color (31.1% vs. 21.8%;  $\chi^2$  (1, 849) = 6.75, p < .01) and had lower levels of education (t (843) = 2.65, p < .01) than completers. There were no significant ethnic differences in age or sexual identity.

#### Measures

The overall web-based questionnaire included a number of standardized and new measures of stressors and traumatic experiences, coping process, and mental health symptoms. For the current study, the following measures were used:

*Demographic* questions were adapted from previous research by the investigative team (Balsam et al., 2005). These questions assessed gender, age, race/ethnicity, employment status, educational level, individual income, household income, and sexual orientation (lesbian, gay, bisexual, heterosexual, queer<sup>1</sup>, two-spirit, or other).

Childhood abuse was assessed using emotional, physical, and sexual abuse subscales of the Childhood Trauma Questionnaire-Short Form (CTQ-SF; Bernstein & Fink, 1998), a standardized, retrospective self-report questionnaire with strong internal consistency and test-retest reliability. In our sample, the internal consistency coefficients for each subscale were as follows: .87 for emotional abuse, .86 for physical abuse, and .94 for sexual abuse. Scores for each subscale range from 5–25. The CTQ scoring guidelines also indicate four abuse classifications for each scale: none or minimal, low to moderate, moderate to severe, and severe to extreme. In order to calculate prevalence rates for each of the three subscales in the current study, we classified any score above the "none or minimal" range as indicating abuse. This threshold is recommended by the authors of the CTQ for maximizing identification of any abuse while keeping specificity to an acceptable level (Bernstein & Fink, 1998).

Depression was assessed using the mean of the 10-item Center for Epidemiologic Studies Depression (CESD-10; Radloff, 1977) Scale, a brief self-report measure with good reliability and validity characteristics (Andresen, Malmgren, Carter, & Patrick, 1994). Responses are recorded using a four-point Likert scale ranging from 0 (*rarely*) to 3 (*most of the time*) during the past week, with higher scores representing greater depressive symptoms. In our sample, Cronbach's alpha was .91.

Anxiety was assessed as the mean of the 7-item Patient Health Questionnaire Generalized Anxiety Disorder Scale (PHQ GAD-7; Kroenke, Spitzer, Williams, & Löwe, 2006), which has strong reliability and validity as a measure of general anxiety (Kroenke, Spitzer, Williams, Monahan, & Löwe, 2007; Löwe et al., 2008; Spitzer, Kroenke, Williams, & Löwe, 2006). On the GAD-7, participants are asked how often, over the last two weeks, they have been bothered by each of seven anxiety symptoms (e.g., feeling nervous, anxious or on

<sup>&</sup>lt;sup>1</sup>The term "queer" is used by some LGB people as a more broad and inclusive term for LGB identity. This study aimed to be inclusive of diverse individuals within the LGB community; thus, we allowed people to use the "queer" label rather than forcing them to choose "lesbian, gay or bisexual." However, this means that we cannot infer whether they have only same-sex partners or both same- and opposite-sex partners.

edge; trouble relaxing). Response options are *not at all, several days, more than half the days* and *nearly every day*, scored as 0, 1, 2 and 3, respectively. In our sample, Cronbach's alpha was .86

Posttraumatic stress symptoms were assessed using the mean of the items from the PTSD Checklist-Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993), a 17-item self-report measure with strong reliability and validity as a screen for PTSD (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers et al., 1993). The PCL-C consists of 17 items corresponding to each symptom of PTSD occurring in the past month in DSM-IV criteria B, C, and D. Symptoms are rated from 1 (not at all) to 5 (extremely), reflecting the extent to which each symptom bothered the individual in the last month. In the current study, Cronbach's alpha was .95.

Perceived stress was assessed using the Perceived Stress Scale-Short Form, a 4-item self-report questionnaire with strong reliability and validity (PSS-4; Cohen, Kamarck, & Mermelstein, 1983). Respondents are asked to indicate how often they have felt or thought a certain way in the past month (e.g., "In the last month, how often have you been upset because of something that happened unexpectedly?") on a 5-point scale that ranges from 0 (never) to 4 (very often). Responses are then summed to indicate the level of perceived (subjective) stress. In the current study, Cronbach's alpha was .83.

## **Analytic Strategy**

Analyses were performed in SPSS v15.0 and Mplus v5.2. Preliminary analyses compared race/ethnicity groups on CTQ abuse scores (Analysis of Variance) and experience/non-experience of abuse (Chi-square).

The main analyses were conducted separately for each mental health outcome and used a two-step regression approach. These analyses controlled for age, education, and gender. The first step tested the effects of emotional, physical, and sexual abuse on the outcome. Predictors were the CTQ scores for each type of abuse in effect testing the unique effects of each, controlling for the others. Race/ethnicity was also included as predictors in the form of dummy coded variables representing being African American, Asian American, and Latina/ o (hence, White participants served as the reference group). The second step added the interaction of the race/ethnicity dummy codes with each type of abuse to test whether race/ethnicity moderated their effects on current mental health symptoms. In other words, a significant interaction would mean that experiencing a particular type of abuse was associated with either better or worse scores on the outcome for a particular race/ethnicity (compared to Whites).

The change in  $R^2$  between the first and second steps was then calculated, and how results are reported depend on the results of this and the regression estimates. If  $R^2$  change and the interaction terms were not statistically significant, this was considered an indication that race/ethnicity did not moderate the effect of abuse (given that the addition of the interaction terms did not explain any more of the variance in the outcome, nor were they significant). In this case, the Step 1 regression results are reported. However, if the change in  $R^2$  was significant, this reflected that some moderation was likely (since more variance in the outcome was being explained), and the Step 2 results are reported.

Maximum Likelihood (ML) regression using robust standard errors was used in these, an appropriate statistic when there is some skew in variables. As implemented in Mplus, this approach also allowed the inclusion in the analyses of cases missing one but not all of the variables in a particular analysis. This was considered optimal for these analyses given that ML is considered a 'state of the art' approach for allowing the inclusion of individuals with

some missing data, thereby reducing the amount of bias in results (Schafer & Graham, 2002).

## Results

## **Sample Description**

The 669 participants included in the current study consisted of 256 (38.3%) men and 413 (61.7%) women. Based on the self-rating of sexual orientation, 234 (35.0%) identified as lesbian, 204 (30.5%) as gay, 152 (22.7%) as bisexual, 47 (7.0%) as queer, and 32 (4.8%) as other. Participants ranged in age from 18 to 74, with a mean age of 36.5 (SD = 11.4). The race/ethnicity of the participants was 523 (78.2%) European American/White, 49 (7.3%) African American/Black, 52 (7.8%) Latina/o/Hispanic, and 45 (6.7%) Asian/Asian American. Participants were generally highly educated, with 79.0% reporting at least a college degree and 42.1% reporting a graduate or professional degree. With respect to employment status, 59.2% were employed full-time, 15.2% part-time, and 30.2% were students. The mean reported individual income fell in the \$30,000–39,000 per year range, and the mean household income fell in the \$40,000–\$59,000 per year range.

## **Preliminary Analyses: Race/Ethnicity Comparisons**

**Abuse histories**—Using the CTQ cutoff scores, gender differences were found for emotional abuse (50.2% men vs. 60.8% women;  $\chi^2(1)$ =7.19, p<.01) and sexual abuse (32.0% vs. 42.4%;  $\chi^2(1)$  = 7.07, p<.01), but not physical abuse (35.3% vs. 37.5%;  $\chi^2(1)$  =0.32, ns). Racial/ethnic differences in the percent reporting any of each type of abuse are shown in Table 1. No significant racial/ethnic differences were seen for emotional abuse. A greater proportion of Latina/o and African American participants reported physical abuse compared to White participants and sexual abuse compared to both Asian American and White participants.

Controlling for age, education, and gender, race/ethnicity was related to the continuously measured CTQ abuse scores in a MANCOVA analysis, F(9, 1962) = 4.06, p < .001. Similar to the findings with the dichotomized measures, univariate follow-up ANCOVAs showed that these differences were significant for physical and sexual abuse, but not for emotional abuse. Table 1 shows the mean of each variable after adjusting for control variables (hence, the means reflect scores for people of average age and education, and the average across genders). Post-hoc tests showed that Whites had lower scores on physical abuse than Asian American and Latina/o participants, and lower scores on sexual abuse than African American and Latina/o participants. Asian Americans had lower mean sexual abuse scores than Latina/os.

**Current mental health symptoms**—Race/ethnicity was not associated with any of the four mental health symptoms in the study (controlling for age, education, and gender).

## Preliminary Analysis: Interrelationship of Abuse Types and Mental Health Symptoms

Examined using zero-order correlations, the three types of abuse were positively and significantly correlated with each other (rs ranged from .37 to .65, p < .001). Additionally, zero-order correlations between emotional, physical, and sexual abuse were positive and statistically significant with PTSD (rs = .45, .37, and .25, respectively, all ps < .001), anxiety (rs = .33, .23, and .13, all ps < .001), depression (rs = .33, .24, and .08, ps for first two < .001 and for last .05), and perceived stress (rs = .22, .17, and .09, ps for first two < .001 and for last .05).

## Main Analyses Predicting Current Mental Health Symptoms

**Perceived stress and depression**—For the perceived stress and depression outcomes, there was not a significant change in  $R^2$  between the regression with only main effects ( $R^2 = .128$  and .168, respectively) and the second regression in which the interactions of abuse by race were added ( $R^2 = .143$  and .179, respectively), F(9, 669) = 1.264 and 0.968, p = .25 and .47, respectively. Because no interaction terms were significant, and the second step did not explain more variance than the first, Table 2 shows the simpler Step 1 regression results. Among the three childhood abuse variables, emotional abuse was the only significant predictor of either symptom. Overall these findings imply two things: (1) that the effects of abuse did not differ due to race/ethnicity and (2) that physical and sexual abuse, despite having the significant zero-order correlations with these outcomes that are reported above, did not have any additive effects above and beyond the effects of emotional abuse when all three are included in a regression (and, hence, controlling for each other's effects).

Anxiety and PTSD symptoms—Results from these analyses are shown in Table 3. In analysis of both outcomes, there was a significant  $R^2$  change in the second step in which the interaction terms were added, and some interaction terms were significant. Anxiety  $R^2$  changed from .169 to .205, F(9, 669) = 3.270, p < .001; and PTSD symptoms  $R^2$  changed from .274 to .307, F(9, 669) = 3.44, p < .001. Positive and significant interaction coefficients showed similar findings for both outcomes. Specifically, relative to White participants, emotional abuse showed a stronger relationship with current PTSD and anxiety symptoms for African American participants (the African American X emotional abuse interaction), and physical abuse showed a stronger relationship with current PTSD and anxiety symptoms for Latina/o participants (the Latina/o X physical abuse interaction term).

Figures 1 and 2 illustrate the overall regression findings by charting the predicted values of PTSD and anxiety. The values are the predicted means for someone of average education and age in the sample, and the average across genders. The predicted anxiety and PTSD associated with varying levels of physical abuse (Figure 1) and emotional abuse (Figure 2) are depicted separately for each race. Specifically, for each race the figure contrasts expected outcomes based on having no versus high scores on abuse (for illustrative purposes, high abuse was considered scores at the 95<sup>th</sup> percentile for that type of abuse in this sample). As can be seen for anxiety, Table 3's significant interaction of emotional abuse with being African American reflected that emotional abuse had a greater effect on outcomes for African Americans as compared to White Americans. Indeed, follow-up regressions done separately for each race showed that the effect of emotional abuse was stronger for African Americans (Standardized  $\beta = .71$  vs. .31).<sup>2</sup> Similarly, for Latina/o/s physical abuse had a larger association with anxiety than for Whites (Standardized  $\beta = .25$ vs. -.01). Similar patterns were seen for PTSD. Emotional abuse was more strongly related to PTSD symptoms for African Americans than for Whites (Standardized  $\beta = .73$  vs. .30). Physical abuse was more strongly related to PTSD symptoms among Latina/os than for Whites (Standardized  $\beta = .41$  vs. .08).

## **Discussion**

The current study is one of the first to examine childhood abuse and its relation to adult mental health indicators in an ethnically diverse sample of LGB adults. Prior studies on race and childhood abuse have not generally assessed sexual orientation, while studies of LGB populations typically include very few ethnic minority participants. Our recruitment strategy

 $<sup>^2</sup>$ Standardized  $\beta$  coefficients allow the evaluation of the relative strength of associations. Here, they reflect how many standard deviations change in the mental health outcome there will be when there is a one standard deviation change in the in the emotional abuse predictor.

using targeted sampling to increase our percentage of African American, Latina/o, and Asian American participants yielded a 21% ethnic minority LGB sample and allowed us to make comparisons across racial/ethnic groups.

Another unique feature of this study is the use of a standardized measure of emotional, physical, and sexual abuse. In the development of the CTQ, Bernstein and Fink (1998) studied the psychometric characteristics of the instrument across 7 samples of both clinical and non-clinical adults. The representation of ethnic minorities among these samples ranged from 21.1% to 31.1%; sexual orientation of participants was not reported. Compared to the sample means reported by Bernstein and Fink for these validation samples, our sample means on emotional, physical, and sexual abuse for all participants generally fell between those reported for clinical and non-clinical populations (because of highly skewed distributions, difference of means testing was not performed; Blalock, 1979). This is consistent with the growing body of literature documenting a minority sexual orientation as a risk factor for various forms of childhood abuse (Balsam et al., 2005; Corliss et al., 2002). Indeed, the rates of abuse we found using the cutoff scores on the CTQ are similar to those found in studies of childhood abuse using other measures. For example, Balsam et al. (2005) found rates of childhood sexual abuse ranging from 31.6% to 47.6% among LGB women and men. In Corliss et al.'s (2002) study, rates of emotional maltreatment by a parent were 52.6% for gay/bisexual men and 45.5% for lesbian/bisexual women, and rates of physical maltreatment were 46.7% for gay bisexual men and 43.6% for lesbian/bisexual women.

## Race/Ethnicity Differences in Childhood Abuse

As predicted, the current study found racial/ethnic differences in self-reported experiences with physical and sexual abuse. Latina/o and Asian participants reported the highest levels of physical abuse, while Latina/o and African American reported the highest levels of sexual abuse. In this regard, our study parallels several other retrospective studies of presumably heterosexual adults which found higher levels of childhood abuse among racial/ethnic minorities (Hussey, Chang, & Kotch, 2006; Meston, Heiman, Trapnell, & Carlin, 1999; Ullman & Filipas, 2005). Our study adds to this body of literature by focusing specifically on ethnic/racial differences among LGB adults. Along with a handful of other studies (e.g., Arreola, Neilands, Pollack, Paul, & Catania, 2005; Morris & Balsam, 2003), our results suggest that LGB people of color, who face prejudice and marginalization based on both race/ethnicity and sexual orientation, may also face unique risks for childhood abuse compared to their White counterparts. Identifying factors within ethnic minority families that may contribute to this risk, such as negative attitudes towards homosexuality (Finlinson et al., 2003; Greene, 1997; Guarnero, 2007) is an important area for future research.

Our study also adds to the literature in that it provides preliminary evidence that childhood emotional abuse is the strongest predictor of current mental health among LGB adults, regardless of their ethnic or racial background. Specifically, although physical and sexual abuse were bivariately related to mental health outcomes, this relationship was not significant when controlling for emotional abuse, suggesting that the emotional aspects of abuse were the most damaging. Childhood emotional abuse is an understudied topic compared to other forms of abuse, and lacks a universal definition (Allen, 2008). Nonetheless, prior theory and research has addressed the unique properties of childhood emotional abuse that might contribute to adult mental health difficulties. For example, Rose and Abramson (1992) hypothesized that emotional abuse in childhood contributes to a cognitive style that might predispose an individual to developing a depressive disorder. Following up on this theory, Gibb, Chelminski, and Zimmerman (2007), using the CTQ, found that the emotional abuse subscale correlated more strongly with both depressive and anxiety disorders among adult psychiatric outpatients than other forms of abuse. Similarly, a study comparing adults with treatment-resistant depression versus treatment responsive

adults, also using the CTQ, found that those who were treatment-resistant reported significantly more emotional abuse, but not sexual or physical abuse (Kaplan & Klinetob, 2000). Other empirical studies with presumably heterosexual populations have shown an association between childhood emotional abuse and increased levels of depression, anxiety, somatic complaints (Sachs-Ericsson, Verona, Joiner, & Preacher, 2006), worse overall emotional functioning (Higgins & McCabe, 2000), and difficulties with interpersonal relationships in adulthood (Mullen, Marin, Anderson, Romans, & Herbison, 1996).

For LGB people, the negative messages internalized in response to childhood emotional abuse might be particularly salient because they occur against a backdrop of negative social and cultural messages about a sexual minority orientation. A growing body of literature documents that such internalized negative messages about homosexuality are associated with lower self-esteem and greater distress in LGB populations (Balsam & Mohr, 2007; Szymanski, Chung, & Balsam, 2001). Indeed, the items on the emotional abuse subscale of the CTQ (e.g., "I thought that my parents wished I had never been born" and "People in my family said hurtful or insulting things to me") may potentially be tapping into some childhood experiences that are directly related to the child's sexual orientation. Along these lines, Savin-Williams (2003) reviewed the results of literature on LGB youth and their parents, concluding that rejection, victimization and verbal abuse are some consequences LGB youth may face when disclosing sexual orientation to parents. Nonetheless, he also states that the prevalence of these consequences is difficult to assess because very few empirical studies have examined the relations that LGB youth have with their parents. Indeed, in a study with LGB adolescents, more than three-quarters reported verbal abuse because of their sexual orientation (D'Augelli, 2002). In a study with LGB adults, 24% who experienced emotional abuse in childhood attributed this abuse directly to their sexual orientation (Balsam, 2002). A more recent study by Ryan, Huebner, Diaz, and Sanchez (2009) provides evidence that sexual orientation-related family rejection in adolescence is associated with a number of negative health indicators among LGB adults, including depression and suicidality.

Brown (2008) also notes that even in families with no overt abuse, generalized negative comments about homosexuality can be experienced as traumatic by children who will later grow up to be LGB. Thus, given the subjective nature of the experience of emotional abuse, it is possible that LGB adults may have a lower threshold for perceiving emotional abuse because they are particularly sensitized to such attitudes among family members. Furthermore, despite racial/ethnic differences in physical and sexual abuse, it is interesting that no significant differences were found in reported levels of emotional abuse. This may have been due to a ceiling effect, such that all participants reported high levels of this type of abuse. Our study did not assess whether child abuse in general and emotional child abuse in particular were perceived to be related to homophobia and sexual orientation; clearly, this is an important area for future research.

Overall, our findings suggest that the relationship between childhood abuse and adult mental health is similar for LGB people of diverse racial backgrounds. PTSD and anxiety symptoms did show a stronger relationship with emotional abuse for African American participants, while these same variables showed a stronger relationship with physical abuse for Latina/o participants. There is existing evidence from non-LGB research that Latina/os may be at elevated risk for PTSD following a range of other types of traumatic events (e.g., Galea et al., 2002); this has been linked to post-trauma factors such as differences in coping style and perceived racism (Pole, Best, Metzler, & Marmar, 2005). However, future research needs to determine whether these factors might affect symptom levels following childhood abuse.

For LGB people of color, family support can provide an important buffer against the negative health impact of homophobic and racist experiences (Greene, 1997). Conversely, abuse within the family of origin may be particularly anxiety provoking, as it signals the lack of such a buffer. For example, in one study of LGB adults, low levels of parental support for one's sexual orientation was associated with higher anxiety (Mohr & Fassinger, 2003). Additionally, such abuse may accompany a sense of self-blame for betraying one's cultural or ethnic heritage (Rutter & Estrada, 2006). It is also important to consider that there may be other unmeasured variables that confound the relationship between childhood abuse and adult mental health among African American and Latina/o participants, such as having a parent in jail and/or out-of-home placements, both of which occur at higher rates in these populations (Beck & Karberg, 2001). Future research should explore these potential explanations for differential effects of childhood abuse among ethnically diverse LGB populations.

## **Limitations of the Current Study**

While this study provides data on an understudied topic, some limitations must be considered in drawing conclusions. Participants were recruited in a non-random manner over the internet. We cannot, therefore, generalize these results to all LGB individuals, nor do we know how the participants may differ in any systematic way from those who did not see our recruitment materials or who chose not to participate. It is possible that individuals who are less well-connected to other LGB people, even via the internet, and individuals who have fewer economic resources and thus less internet access may have been less likely to participate in the study. The web-based format of our study may have resulted in lower participation by ethnic minority participants, who may have less internet access at home (Cheeseman, Janus, & Davis, 2005), although the extent to which ethnic minorities access the internet at other locations relative to White individuals is not known. Another consideration is that despite our relative success in recruiting adequate numbers of ethnic minority participants, the sample sizes for our African American, Latina/o, and Asian American participants were relatively small, thereby reducing our power to be able to detect race differences, and also precluding some potentially interesting analyses such as gender by race comparisons. Future research should continue inquiry on this topic by examining whether such findings are potentially moderated by gender.

Regarding measurement issues, our study was conducted on the internet, while the measures we used were all normed using paper-based formats. Although there is little existing information about how web-based methodologies may impact psychometrics, there is some indication that participants may respond differently to items administered on the internet than on paper (McCoy, Marks, Carr, & Mbarika, 2004). Finally, as with much other research on childhood abuse, this study relies exclusively upon adult retrospective reporting of such experiences and therefore may be subject to recall bias. It is possible that experiences in adulthood such as family reactions to disclosure of sexual orientation may influence recall and interpretation of adverse childhood events, or that adults who develop psychopathology symptoms may be more likely to recall or report past abuse than those who lack such symptoms. Moreover, it is possible that ethnic groups may systematically differ in their reporting style and/or sensitivity to reporting certain stigmatizing information (e.g., sexual abuse) even in a relatively anonymous forum such as the internet. Finally, it is unknown the extent to which the racial/ethnic differences between completers and non-completers may have biased these results, although it is difficult to ascertain whether this might magnify or minimize any race differences that we found.

Given these limitations, the results of our study should be viewed as preliminary and hypothesis-generating and therefore subject to replication. Ideally, in order to replicate these findings with more confidence, we would need a population-based sample with higher

numbers of ethnic minority LGB participants. That being said, accomplishing that is methodologically difficult. Although more population-based studies are now including measures of sexual orientation, these studies typically yield very small percentages of LGB participants (e.g., 2.5% in Corliss et al.'s 2002 analysis of Midlife Development in the U.S. (MIDUS) data; 4.8% in Cochran et al.'s 2007 analysis of National Latino and Asian American Study (NLAAS) data). Even among these LGB participants, only a small subset are ethnic minority (e.g., approximately 11 participants in Corliss et al.'s 2002 analysis of 2917 randomly-sampled adults; 284 participants in Dilley et al.'s (2009) analysis of 79,500 randomly-sampled adults). Additionally, with the exception of the MIDUS, most epidemiologic studies do not include detailed measures of childhood abuse, if these variables are included at all. Clearly, future researchers who want to replicate these findings will need to take these challenges into account in designing their studies. Most importantly, oversampling ethnic minority LGB people will be necessary in order to have adequate statistical power to replicate the findings of our study.

## **Clinical Implications and Conclusions**

The results of this study indicate that 1) African American and Latino LGB people may have elevated risk for childhood physical and sexual abuse compared to their White counterparts, 2) for all LGB people, childhood abuse (particularly emotional abuse) is associated with more current mental health symptoms, and 3) the association between childhood abuse and some mental health outcomes may differ according to race/ethnicity. Overall, these results highlight the importance for clinicians of considering the role that childhood trauma might play in the lives of LGB clients, even when this is not initially one of the presenting concerns. In particular, therapists working with LGB clients should conduct a thorough assessment of the emotional climate of the client's family of origin and the ways in which parents or other caregivers may have been emotionally abusive during the client's formative years. Additionally, clinicians working with parents and families of LGB youth might educate these families about the nature of emotional abuse and its potential long-term impact on their LGB family members. When working with LGB people of color, clinicians should be sensitive to the additional challenges faced by these clients, and the ways in which trauma within the family of origin may be particularly deleterious in adulthood.

## Acknowledgments

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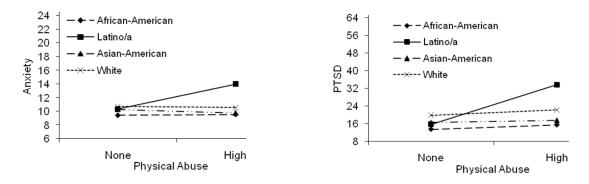
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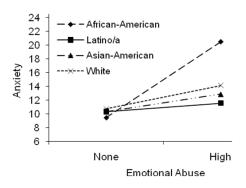
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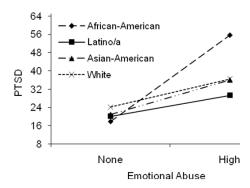
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**Figure 1.**Relationship between physical abuse and outcomes, by race, controlling for age, gender, education, emotional abuse, and sexual abuse.





**Figure 2.** Relationship between emotional abuse and outcomes, by race, controlling for age, gender, education, physical abuse, and sexual abuse.

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Table 1

Race/Ethnicity Differences on Childhood Abuse Variables

	African-American	Latina/o/a	Asian-American	White		
Abuse Type	( <i>N</i> =49)*	(N=52)	( <i>N</i> =45)	(N=523)	Statistic	d
		Sample	Sample proportions (95% CI)			
Emotional	59.2% (45.2, 72.8)	52.9% (38.4, 65.6)	57.8% (43.6, 72.4)	56.8% (52.8, 61.2)	$\chi^2$ (3) = 0.50	us
Physical	$51.1\%_{a}$ (37.0, 65.0)	$56.9\%_{a}$ (43.5, 70.5)	56.9% <sub>a</sub> (43.5, 70.5) 46.7% <sub>ab</sub> (32.4, 61.6)	$32.5\%_{\rm b}$ (28.0, 36.0)	$\chi^2$ (3) = 26.43	≥ .001
Sexual	$52.2\%_{a}$ (39.0, 66.9)		$62.7\%_{a}$ (49.9, 76.1) $29.5\%_{b}$ (16.6, 43.4)	35.5% <sub>b</sub> (30.9, 39.0)	$\chi^2$ (3) = 25.99	≥ .001
		Means (SD) adjust	Means (SD) adjusted for gender, age, and education	ducation $I$		
Emotional	10.50 (0.79)	11.52 (0.76)	12.42 (0.81)	10.72 (0.23)	F(3,654) = 1.67	us
Physical	$8.87_{ab}$ (0.63)	$9.29_a (0.61)$	9.78 <sub>a</sub> (0.65)	$7.67_{\rm b}$ (0.19)	F(3, 654) = 5.44	≥ .001
Sexual	$10.25_{ab}$ (0.83)	10.97 <sub>a</sub> (0.80)	$8.00_{\rm bc}$ (0.85)	$7.96_{\rm c}(0.25)$	F(3, 654) = 6.26	≥ .001

 $abc_{\rm C}$  Means in a row that do not share the same subscripts differ at p < .05

 $\stackrel{*}{N}$  indicates the sample size for the variable with the highest number of responses.

 $^{\it I}$  F tests controlled for gender, age, and education (see text)

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Table 2

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Linear Regression Testing Effects of Race on Perceived Stress and Depression, n = 669

B (95% CI)         S.E.         Standardized $\rho^3$ t $\rho \le$ 4.69 (3.87, 5.51)         0.32          14.79         .001           -0.06 (-0.92, -0.03)         0.01         -0.21         -5.41         .001           e.l2         -0.06 (-0.92, -0.03)         0.01         -0.21         -5.41         .001           ical         0.02 (-0.64, 0.68)         0.26         0.00         0.10         .93           ical         0.28 (-1.24, 1.79)         0.59         0.02         0.47         .64           ana³         0.09 (-1.23, 1.40)         0.51         0.01         0.17         .87           use         0.12 (0.05, 0.20)         0.03         0.03         4.06         .001           e         0.02 (-0.09, 0.13)         0.04         0.03         0.49         .62	•	Perc	eived Sı	Perceived Stress, $R^2 = .128$			Q D	epressi	Depression, $R^2 = .168$		
4.69 (3.87, 5.51)       0.32        14.79       .001         -0.06 (-0.92, -0.03)       0.01       -0.21       -5.41       .001         0.02 (-0.64, 0.68)       0.26       0.00       0.10       .93         -0.37 (66, -0.08)       0.11       -0.14       -3.30       .001         3       0.28 (-1.24, 1.79)       0.59       0.02       0.47       .64         -0.23 (-1.32, 0.85)       0.42       -0.02       -0.55       .58         0.09 (-1.23, 1.40)       0.51       0.01       0.17       .87         0.12 (0.05, 0.20)       0.03       0.20       4.06       .001         0.02 (-0.09, 0.13)       0.04       0.03       0.49       .62	able	B (95% CI)	S.E.	Standardized $eta^3$	4	<i>p</i> ≤	B (95% CI)	S.E.	S.E. Standardized $\beta^3$	t	$\geq d$
-0.06 (-0.92, -0.03)     0.01     -0.21     -5.41     .001       0.02 (-0.64, 0.68)     0.26     0.00     0.10     .93       -0.37 (66, -0.08)     0.11     -0.14     -3.30     .001       3     0.28 (-1.24, 1.79)     0.59     0.02     0.47     .64       -0.23 (-1.32, 0.85)     0.42     -0.02     -0.55     .58       0.09 (-1.23, 1.40)     0.51     0.01     0.17     .87       0.12 (0.05, 0.20)     0.03     0.20     4.06     .001       0.02 (-0.09, 0.13)     0.04     0.03     0.49     .62	cept	4.69 (3.87, 5.51)	0.32	;	14.79	.001	3.91 (2.26, 5.55)	0.64	1	6.11	.001
0.02 (-0.64, 0.68)     0.26     0.00     0.10     .93       -0.37 (66, -0.08)     0.11     -0.14     -3.30     .001       3     0.28 (-1.24, 1.79)     0.59     0.02     0.47     .64       -0.23 (-1.32, 0.85)     0.42     -0.02     -0.55     .58       0.09 (-1.23, 1.40)     0.51     0.01     0.17     .87       0.12 (0.05, 0.20)     0.03     0.20     4.06     .001       0.02 (-0.09, 0.13)     0.04     0.03     0.49     .62	1	-0.06 (-0.92, -0.03)	0.01	-0.21	-5.41	.001	-0.10 (-0.16, -0.03)	0.02	-0.16	-4.00	.001
-0.37 (66, -0.08)     0.11     -0.14     -3.30     .001       3     0.28 (-1.24, 1.79)     0.59     0.02     0.47     .64       -0.23 (-1.32, 0.85)     0.42     -0.02     -0.55     .58       0.09 (-1.23, 1.40)     0.51     0.01     0.17     .87       0.12 (0.05, 0.20)     0.03     0.20     4.06     .001       0.02 (-0.09, 0.13)     0.04     0.03     0.49     .62	$^{ m le}{}^{I}$	0.02 (-0.64, 0.68)	0.26	0.00	0.10	.93	0.15 (-1.08, 1.39)	0.48	0.01	0.32	.75
merican <sup>3</sup> 0.28 (-1.24, 1.79) 0.59 0.02 0.47 .64 -0.23 (-1.32, 0.85) 0.42 -0.02 -0.55 .58 erican <sup>3</sup> 0.09 (-1.23, 1.40) 0.51 0.01 0.17 .87 Abuse 0.12 (0.05, 0.20) 0.03 0.20 4.06 .001 0.01 o.02 (-0.09, 0.13) 0.04 0.03 0.49 .62		-0.37 (66, -0.08)	0.11	-0.14	-3.30	.001	-0.69 (-1.25, -0.12)	0.22	-0.13	-3.12	.01
-0.23 (-1.32, 0.85)       0.42       -0.02       -0.55       .58         erican³       0.09 (-1.23, 1.40)       0.51       0.01       0.17       .87         Abuse       0.12 (0.05, 0.20)       0.03       0.20       4.06       .001         .buse       0.02 (-0.09, 0.13)       0.04       0.03       0.49       .62	an-American <sup>3</sup>	0.28 (-1.24, 1.79)	0.59	0.02	0.47	.64	1.16 (-1.82, 4.14)	1.16	0.04	1.01	.32
an <sup>3</sup> 0.09 (-1.23, 1.40) 0.51 0.01 0.17 .87 use 0.12 (0.05, 0.20) 0.03 0.20 4.06 .001 e 0.02 (-0.09, 0.13) 0.04 0.03 0.49 .62		-0.23 (-1.32, 0.85)	0.42	-0.02	-0.55	.58	-0.69 (-2.78, 1.41)	0.81	-0.03	-0.85	.40
use 0.12 (0.05, 0.20) 0.03 0.20 4.06 .001 e 0.02 (-0.09, 0.13) 0.04 0.03 0.49 .62	1-American <sup>3</sup>	0.09 (-1.23, 1.40)	0.51	0.01	0.17	.87	-1.13 (-3.92, 1.66)	1.08	-0.04	-1.04	.30
e 0.02 (-0.09, 0.13) 0.04 0.03 0.49 .62	ional Abuse	0.12 (0.05, 0.20)	0.03	0.20	4.06	.001	0.40 (0.23, 0.57)	0.07	0.32	6.01	.000
	cal Abuse	0.02 (-0.09, 0.13)	0.04	0.03	0.49	.62	0.09 (-0.13, 0.31)	0.09	90.0	1.02	.31
0.02 0.01 0.01 91	al Abuse	0.00 (-0.06, 0.07)	0.02	0.01	0.11	.91	-0.08 (-0.21, 0.05)	0.05	-0.07	-1.59	Η.

 $^{\it I}$ Reference Group was "male"

<sup>2</sup>Coded as 1 = some or no high school, 2 = high school degree, 3 = some college, 4 = college degree, 5 = some graduate/professional school, 6 = graduate/professional degree

<sup>3</sup>Reference Group was "White"

3 The standardized β coefficients allow reflect how many standard deviations change in the mental health outcome there will be when there is a one standard deviation change in the in the predictor.

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Table 3

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Linear Regression Testing Effects of Race on Anxiety and PTSD Symptoms, n = 669

	Anxie	ety Sym	Anxiety Symptoms, $R^2 = .205$			ISTA	O Symp	PTSD Symptoms, $R^2 = .311$		
Variable	B (95% CI)	S.E.	Standardized $ ho^3$	t	$\geq d$	B (95% CI)	S.E.	Standardized $\beta^3$	t	<i>p</i> ≤
Intercept	9.71 (8.71, 10.72)	0.39	1	24.88	.001	18.40 (15.33, 21.46)	1.19	:	15.46	.00
Age	-0.04 (-0.07, -0.01)	0.01	-0.12	-3.01	.01	-0.14 (-0.24, (-0.03)	0.04	-0.12	-3.27	.001
Female <sup>I</sup>	0.63 (-0.05, 1.31)	0.26	0.09	2.40	.05	1.09 (-1.27, 3.46)	0.92	0.04	1.19	.23
Education Level	-0.38 (-0.67, -0.09)	0.11	-0.13	-3.38	.001	-1.67 (-2.63, -0.72)	0.37	-0.16	-4.51	.001
African-American <sup>2</sup>	-2.72 (-6.73, 1.29)	1.56	-0.20	-1.75	.08	-11.02 (-24.49, 2.45)	5.23	-0.23	-2.11	.05
Latina/o <sup>2</sup>	-0.85 (-3.49, 1.79)	1.03	90.0-	-0.83	4.	-8.33 (-19.68, 3.02)	4.41	-0.18	-1.89	.07
Asian-American <sup>2</sup>	0.55 (-2.27, 3.37)	1.09	0.04	0.50	.62	-2.58 (-14.14, 8.97)	4.49	-0.05	-0.58	.57
Emotional Abuse	0.20 (0.10, 0.29)	0.04	0.30	5.39	.001	0.72 (0.39, 1.04)	0.13	0.31	5.72	.001
Physical Abuse	-0.01 (-0.15, 0.14)	90.0	-0.01	-0.12	90	0.18 (-0.24, 0.60)	0.16	90.0	1.10	.27
Sexual Abuse	0.01 (-0.07, 0.10)	0.03	0.02	0.43	.67	0.26 (0.00, 0.52)	0.10	0.12	2.60	.01
African-American										
X Emotional Abuse	0.45 (0.06, 0.84)	0.15	0.38	294	.01	1.50 (0.32, 2.68)	0.46	0.36	3.28	.001
X Physical Abuse	$0.02 \ (-0.55, 0.58)$	0.22	0.01	0.07	.95	-0.03 (-1.56, 1.49)	0.59	-0.01	90.0-	.95
X Sexual Abuse	-0.17 (-0.41, 0.06)	0.09	-0.16	-1.88	.67	-0.54 (-1.31, 0.23)	0.30	-0.14	-1.82	.07
Latina/o										
X Emotional Abuse	-0.13 (-0.39, 0.14)	0.10	-0.12	-1.23	.22	-0.18 (-1.31, 0.95)	0.44	-0.05	-0.41	.68
X Physical Abuse	0.29 (-0.05, 0.63)	0.13	0.23	2.21	.05	1.19 (-0.20, 2.58)	0.54	0.27	2.21	.05
X Sexual Abuse	-0.08 (-0.27, 0.10)	0.07	-0.08	-1.18	.24	-0.16 (-0.89, 0.57)	0.28	-0.04	-0.58	.56
Asian-American										
X Emotional Abuse	-0.05 (-0.35, 0.25)	0.12	-0.05	-0.45	99.	0.17 (-0.75, 1.10)	0.36	0.05	0.48	.63
X Physical Abuse	-0.03 (-0.34, 0.28)	0.12	-0.02	-0.27	62.	-0.10 (-1.15, 0.94)	0.41	-0.02	-0.26	.80
X Sexual Abuse	-0.11 (-0.29, 0.06)	0.07	-0.07	-1.67	.10	-0.23 (-1.16, 0.70)	0.36	-0.04	-0.65	.52

Reference Group was "male"

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<sup>&</sup>lt;sup>2</sup>Reference Group was "white"

<sup>3</sup> The standardized β coefficients allow reflect how many standard deviations change in the mental health outcome there will be when there is a one standard deviation change in the in the predictor.