

# PTSD and Sexual Orientation: An Examination of Criterion A1 and Non-Criterion A1 Events

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This large-scale cross-sectional study compared posttraumatic stress disorder (PTSD) prevalence among White, Black, and Latino lesbian, gay and bisexual individuals (LGBs;  $n = 382$ ) and compared them with heterosexual individuals ( $n = 126$ ). Building on previous research, we relaxed the criteria of the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994), allowing non-Criterion A1 events such as ending a relationship, unemployment, homelessness, and separation from parents to qualify, and we assessed differences in PTSD prevalence between standard *DSM-IV* criteria and the relaxed criteria. Findings revealed that participants reporting a non-Criterion A1 event were more likely than those reporting a Criterion A1 event to have symptoms diagnosable as PTSD. There was no significant difference in either *DSM-IV* or relaxed Criterion A1 PTSD prevalence between lesbian and gay, and heterosexual individuals or between bisexual and heterosexual individuals. Compared with White LGBs, Black and Latino LGBs had higher prevalence of PTSD with the relaxed Criterion A1 definition, but this was statistically significant only for Latinos.

*Keywords:* Criterion A1, PTSD, gay, lesbian, bisexual

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Since posttraumatic stress disorder (PTSD) was first included in the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; *DSM-III*; American Psychiatric Association, 1980), scientists have debated the types of events that should qualify as precipitants for the disorder (McNally, 2003; Weathers & Keane, 2007). On the one hand, there is concern that defining a traumatic event only as one that is catastrophic or involves a threat to life or physical integrity fails to capture the range of potentially traumatic events (Avina & Donohue, 2002; Carlson & Dalenberg, 2000). On the other hand, there is concern that expanding the definition of trauma would dilute the conceptualization of PTSD as related to catastrophic or extraordinary events (Kilpatrick et al., 1998; McNally, 2003; Weathers & Keane, 2007).

Currently, Criterion A1 of the fourth edition of the *DSM* (*DSM-IV*; American Psychiatric Association, 1994) classifies traumatic

events as those involving “actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others” (p. 527). For an event to be considered traumatic, individuals must also meet Criterion A2, which states that “the person’s response involved intense fear, helplessness, or horror” (American Psychiatric Association, 1994, pp. 427–428). In addition to the traumatic event, individuals must also present with two reexperiencing symptoms (Criterion B), three avoidance symptoms (Criterion C), and two symptoms of increased arousal (Criterion D). The symptoms must be present for a least 1 month (Criterion E) and cause significant distress or impairment (Criterion F). Symptoms resulting from events that do not meet Criterion A1 are categorized as an adjustment disorder, even when individuals meet Criteria B-F for PTSD (Van Hooff, McFarlane, Baur, Abraham, & Barnes, 2009).

Criterion A1 originates from the conceptualization of PTSD as an expectable response after exposure to exceptional events involving threat to life or physical integrity (Spitzer, First, & Wakefield, 2007). However, there is no evidence to explain why exposure to events other than those involving actual or threatened death or serious injury should be excluded from the *DSM* definition of PTSD when such events can lead to the same clinical presentation (Carlson & Dalenberg, 2000). In a population-based sample of individuals living in the Netherlands, Mol et al. (2005) found that PTSD symptom scores were higher for respondents who experienced nontraumatic life events such as marital discord, chronic illness, and unemployment than for those who experienced Criterion A1 events. Van Hooff et al. (2009) found strong associations between certain nontraumatic events (e.g., relationship problems,

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miscarriage, and bullying) and PTSD among a sample of Australian adults. Moreover, Gold, Marx, Soler-Baillo, and Sloan (2005) found among undergraduate students that exposure to non-Criterion A1 events (e.g., not unexpected death/serious illness of a close person, family and intimate relationship problems, and non-life-threatening medical problems) was related to greater PTSD symptom severity and overall distress compared with exposure to Criterion A1 events.

Long et al. (2008) investigated associations between precipitating events and PTSD while controlling for previous trauma history, which allowed them to determine whether associations between non-Criterion A1 events and PTSD might be explained by exposure to previous Criterion A1 events. They found that non-Criterion A1 events were more likely than Criterion A1 events to be associated with PTSD and greater symptom frequency. However, the frequency of PTSD symptoms was moderated by the way in which measures were presented to respondents. PTSD symptoms were higher when non-Criterion A1 measures were presented before Criterion A1 measures.

Scholars have also argued that exposure to nonviolent racism-related events, which would not qualify as Criterion A1 events, can be traumatic because they can be experienced as a threat to one's security and emotional well-being (Bryant-Davis & Ocampo, 2005; Helms, Nicolas, & Green, 2010; Loo et al., 2001; Waller, 2003). As a result, these events can produce cognitive, emotional, and physiological changes such as difficulty concentrating or remembering, difficulty connecting with others, and somatic problems (Bryant-Davis & Ocampo, 2005). Drawing from Root's (1992) theory of insidious trauma, Brown (2003) asserts that, because of their marginalized status, lesbian, gay, and bisexual individuals (LGBs) also face repeated exposure to stress, and such exposure can in turn heighten their vulnerability to PTSD. Thus, by ignoring the effects of non-Criterion A1 events, researchers and clinicians might overlook undiagnosed PTSD-like disorders. Such events, especially those stemming from stigma and prejudice, are likely to be overrepresented in sexual and racial/ethnic minority populations (Meyer, Schwartz, & Frost, 2008).

### PTSD Prevalence Among Sexual Minorities

Minority stress theory is based on the premise that, similar to other minority groups, LGBs face chronic social stress because of a negative social environment that endorses homophobia and heterosexism. In turn, this excess exposure to stress leads to an excess prevalence of psychiatric disorders among LGBs compared with heterosexual individuals (Meyer, 2003). Population-based studies have supported minority stress theory-based hypotheses; numerous studies have now shown that LGBs have a higher prevalence of mood, anxiety, and substance abuse disorders than heterosexual individuals (see the meta-analyses of King et al., 2008, & Meyer, 2003; see also Cochran & Mays, 2000; Cochran, Sullivan, & Mays, 2003; Gilman et al., 2001; Sandfort, de Graaf, Bijl, & Schnabel, 2001).

The minority stress framework is a general theory of stress and illness (Meyer, Schwartz, & Frost, 2008) and, thus, also predicts that LGBs and racial/ethnic minorities would have an elevated prevalence of PTSD compared with their respective counterparts. That is because minority stress theory predicts that socially disadvantaged populations such as sexual and racial/ethnic minorities

are exposed to excess stress, including traumatic life events that may precipitate PTSD. However, support for minority stress hypotheses related to PTSD is mixed. To date, only two population-based studies have compared the prevalence of *DSM*-diagnosed PTSD between LGBs and heterosexual individuals, and the results are inconclusive. One study (Roberts, Austin, Corliss, Vandermorris, & Koenen, 2010) found that LGBs and heterosexually identified individuals reporting a same-sex partner over their lifetime had a higher prevalence of PTSD than individuals identifying as heterosexual with no same-sex partners. The second study (Gilman et al., 2001) found that 12-month prevalence and lifetime prevalence of PTSD were higher among women (but not among men) who had same-sex sexual partners, compared with those who had opposite-sex sexual partners.

### Racial/Ethnic Minority LGBs and PTSD

Roberts et al. (2010) and Gilman et al. (2010) did not examine racial/ethnic variability. This is an important limitation because LGB populations are diverse with respect to race or ethnicity; sociocultural variability can affect the way in which individuals respond to traumatic stressors; thus, it can affect PTSD outcomes (Triffleman & Pole, 2010). Racial/ethnic sexual minorities may be exposed to unique stressors (but also may have unique strengths and resources) related to their racial/ethnic identity. Minority stress theory predicts that Black and Latino LGBs would encounter greater stress, including traumatic events, and therefore they would be more likely to be diagnosed with PTSD than White LGBs (Meyer, 2003; Meyer, Schwartz, & Frost, 2008). Unfortunately, there is scant research that assesses the stress and health implications of minority stress at the intersection of racial/ethnic and sexual minority (i.e., LGB) status.

There is evidence that non-White LGBs have greater exposure to stress, including major life events, than White LGBs (Balsam, Lehavot, Beadnell, & Circo, 2010; Meyer, Schwartz & Frost, 2008). However, when it comes to racial/ethnic minorities and mental health outcomes, other evidence seems to refute minority stress theory. Counter to minority stress theory predictions, Meyer, Dietrich, and Schwartz (2008) found that Black and Latino LGBs did not have higher lifetime prevalence of anxiety, mood, or substance abuse disorders than White LGBs. In fact, Black LGBs had fewer psychiatric disorders than either White or Latino LGBs. However, in the same sample, Black and especially Latino LGBs reported more suicide attempts than White LGBs (O'Donnell, Meyer, & Schwartz, 2011). The failure to find higher prevalence of disorders among Black and Latino LGBs is contradictory to minority stress theory, but it should not be surprising in light of similar findings from studies that compared prevalence of psychiatric disorders among racially and ethnically diverse samples of the U.S. population (Kessler, Michelson, & Williams, 1999; Williams et al., 2007). In combination, this evidence suggests that the relationship between minority stress and mental health outcomes among people of color may be more complex and that additional factors may affect the relationship.

### The Present Study

The present study had three aims. The first aim was to assess the effect of relaxing Criterion A1 on PTSD prevalence in these

populations. We relaxed *DSM-IV* criteria to allow non-Criterion A1 events to qualify, and we assessed differences in prevalence depending on the use of *DSM-IV* or relaxed Criterion A1. We hypothesized that, regardless of sexual orientation, exposure to non-Criterion A1 events would be associated with PTSD Criteria B-F. The second aim was to compare the prevalence of PTSD between LGBs and heterosexual individuals, and the third was to compare this prevalence among White, Black, and Latino LGBs. On the basis of minority stress theory, we hypothesized that the prevalence of PTSD (defined as either *DSM-IV* or relaxed Criterion A1) would be higher among LGBs, compared with heterosexual individuals. Minority stress theory, and concurring evidence on the higher prevalence of major stressful events among racial/ethnic minorities who are LGBs, led us to hypothesize that, among LGBs, PTSD would be higher among Black and Latino individuals compared with White individuals.

## Method

### Participants

The present study used data from Project Stride a large-scale epidemiological study that investigated associations between stress, identity, and mental health among LGBs and heterosexual individuals living in New York City (Meyer, Frost, Narvaez, & Dietrich, 2006). Participants were recruited from business establishments (e.g., bars, coffee shops, and fitness centers), social groups, and public spaces (e.g., parks and city streets) between February 2004 and January 2005. Outreach workers visited a total of 274 venues across 32 different zip codes. Recruitment was conducted in two stages. In the first stage, 25 racially/ethnically diverse (i.e., Latino, Black, and White) outreach workers approached potential study respondents in the various recruitment venues. Recruiters explained the study's purpose and asked potential respondents to complete a brief screening form that would determine study eligibility. Trained interviewers contacted eligible respondents to arrange an in-person interview. (A full description of the interview eligibility criteria is available in the supplemental material online.)

After recruitment, respondents were selected from eligible screened individuals with representative case quota sampling that corresponded to variation in gender (male or female), sexual orientation (LGB or heterosexual), race/ethnicity (White, Black, or Latino), and age group (18–30 or 31–59). This sampling approach yielded a diverse sample of 524 respondents who were from 128 different New York City zip codes, with no more than 3.8% of the sample living in any one zip code. Cooperation rate was 79%, and the response rate was 60% (American Association for Public Opinion Research, 2005 [formulas COOP2 and RR2, respectively]). There were no major differences in cooperation and response rates with respect to gender, race, and sexual orientation ( $\chi^2$ s  $\leq$  0.78,  $ps \geq$  .38).

Respondents engaged in a comprehensive in-person interview that used computer-assisted and paper-and-pencil instruments. They were compensated \$80 for initial interviews, which lasted an average of 3.82 hr ( $SD = 55$  min), and \$60 for follow-up interviews, which lasted an average of 1.91 hr ( $SD = 30$  min). However, respondents were assessed for PTSD once—either at baseline or follow-up.

### Demographics

The sample for the present study consisted of 382 self-identified LGB and 126 heterosexual respondents ( $N = 508$ ; of the total 524 respondents, 16 were not assessed for PTSD). Participants' mean age was 32 ( $SD = 9$ ). By design, there were equal numbers of men and women and equal numbers of White heterosexual (25%), White LGB (25%), Black LGB (25%), and Latino LGB (25%) respondents. The majority of respondents (81%) had more than a high school education, but 19% had a high school diploma or less. Most of the respondents (84%) were employed, although 16% were unemployed. Slightly more than half (53%) had negative net worth (i.e., they would owe money if they converted all their assets to cash and paid all their debts).

### Measures

**Stressful life events.** The Life Events Questionnaire (LEQ; Meyer et al., 2006) is a semistructured interview designed by Project Stride to elicit information about 47 stressful events experienced throughout the life span, including recent life events (Kman, Palmetto, & Frost, 2006). (A full description of the types of events assessed by the LEQ is available in the supplemental material online.) The event had to be a major or acute life event; daily hassles and chronic strain were not considered major events. Interviewers asked respondents whether they had experienced each one of the 47 events. We carefully probed affirmative responses to formulate a brief event narrative. Subsequently, event descriptions were extracted from the interviews and rated by two independent raters. The rating system was based on a strategy used by Dohrenwend, Raphael, Schwartz, Stueve, and Skodol (1993). It was designed to arrive at a more objective description of events than measurements that rely solely on respondents' subjective assessments. The rating system accounts for intracategory variability—that is, “the fact that a variety of types of experience are encompassed by each particular event category” (Dohrenwend, 2006, p. 478). In other words, traditional checklist approaches used to describe stressful events are too general, because the actual experience leading to a response can vary greatly (Dohrenwend, 2006).

The raters assessed whether each event posed a “life threat” or a “threat to physical integrity” on a scale ranging from 0 (*no chance of threat*) to 5 (*threat is certain and great*). These ratings consider the extent to which the event posed a life threat and a threat to physical integrity, but they do not account for the actual result of the event (Kman et al., 2006). We computed the average score of the two raters to determine a final rating. Stressful events that received ratings between 3 and 5 for threat to life and physical integrity were coded as life threatening and were thus considered Criterion A1 events. Events that received ratings below 3 were coded as non-life-threatening and were thus considered non-Criterion A1 events. Ratings between 3 and 5 were chosen to categorize stressful events as life threatening because they suggest that the probability of serious threat is 50% or higher, as opposed to ratings below 3, which were used to classify events having “no chance of threat” to “possible threat.” Certain events (e.g., seeing an injured or dead body, childhood sexual abuse, life-threatening illness of a significant other) that were rated as non-life-threatening events qualified as potentially traumatic according to the *DSM-IV*. For consistency with the *DSM-IV*, they were considered Criterion A1 events.

The consistency of the ratings by the two raters was used to determine interrater reliability. Of all the possible Project STRIDE event ratings ( $N = 77,085$ ), only 2% were discrepant between the two raters, indicating a high degree of reliability. Discrepancies of 1.5 for ratings of life threat and threat to physical integrity were resolved at weekly rater meetings attended by at least three raters (Meyer et al., 2006).

**PTSD.** We assessed PTSD using a modified version of the computer-assisted World Mental Health Composite International Diagnostic Interview (WMH-CIDI; Kessler & Ustun, 2004). The WMH-CIDI is a highly standardized lay-administered interview used to assess current and lifetime psychiatric diagnoses among community and epidemiological samples on the basis of *DSM-IV* criteria. Masked clinical reinterviews with the Structured Clinical Interview for *DSM-IV* (SCID; First, Spitzer, Gibbon, & Williams, 2002) found good concordance between the WMH-CIDI and SCID diagnoses among a probability sample of National Comorbidity Survey Replication participants (Kessler et al., 2004).

Interviewers began the WMH-CIDI for PTSD by asking respondents whether they had experienced upsetting memories or dreams, felt emotionally distant from other people, and had trouble sleeping or concentrating after any of the 47 stressful experiences elicited by the LEQ. The list of stressful events from the WMH-CIDI was not used because it addressed only extreme or life-threatening events. An affirmative response prompted interviewers to ask which *one* experience caused the most severe problems. This was considered the respondent's qualifying event. Respondents reporting more than one experience were asked to choose the event that caused the most distress.

The respondent's qualifying event was used to diagnose *DSM-IV* and/or relaxed Criterion A1 PTSD. All qualifying events were used to assess for relaxed Criterion A1 PTSD, whereas only events that met Criterion A1 were used to assess for *DSM-IV* PTSD. In both cases, respondents had to meet Criterion A2 by endorsing one or more of the following: feeling terrified or very frightened, feeling helpless, or feeling shocked or horrified at the time of the qualifying event. Respondents were then required to link symptoms associated with Criteria B-F to the qualifying event and to report moderate, severe, or very severe levels of distress associated with the event.

## Data Analysis

All PTSD analyses were conducted with standard *DSM-IV* Criterion A1 and relaxed Criterion A1 definitions. Prevalence estimates and standard errors were calculated by subgroup for heterosexual individuals and LGBs; among LGBs, they were calculated for Blacks, Latinos, and Whites. Adjusted logistic regression models tested differences in prevalence of PTSD by sexual orientation and race/ethnicity. For sexual orientation, the models controlled for race/ethnicity, negative net worth, education, and unemployment status; for race/ethnicity, the models controlled for negative net worth, education, and unemployment status. We calculated odds ratios using 95% confidence intervals. For all analyses, a criterion of  $\alpha = 0.05$  was used for two-tailed statistical significance.

## Results

Of the 508 respondents, 280 (55%) had a qualifying event; that is, an event that was used to diagnose PTSD. More respondents reported a non-Criterion A1 qualifying event (69.3%) than a Criterion A1 qualifying event (30.7%). The majority of respondents (94.3%) with a qualifying event met Criterion A2; that is, they reported feeling terrified, helpless, or shocked or horrified at the time of the event.

Table 1 presents the prevalence of events associated with relaxed Criterion A1 PTSD. Criterion A1 events most likely to be associated with *DSM-IV* PTSD included the unexpected death of a loved one (10.2%), childhood sexual abuse (9.4%), adult physical assault (5.5%), terrorist attack (3.1%), life-threatening illness of a significant other (3.1%), attempted rape (2.3%), childhood physical abuse (1.6%), and seeing an injured or dead body (1.6%). Noncriterion A1 events most likely to be associated with relaxed Criterion A1 PTSD included ending a relationship/marriage

Table 1  
*Prevalence of Non-Criterion A1 and Criterion A1 Events (n = 128) Associated With Relaxed Criterion A1 PTSD (Regardless of Sexual Orientation)*

Event	%
Non-Criterion A1 events	
Adult physical assault (non-life-threatening) <sup>a</sup>	7.8
Abortion/abortion (SO)	2.3
Homelessness	0.8
Childhood physical abuse (non-life-threatening)	7.8
Ending relationship/marriage	12.5
Harassment	0.8
Mental illness (SO)	0.8
Not unexpected death of a loved one	7.8
Other non-life-threatening childhood event	1.6
Other non-life-threatening crimes	0.8
Other non-life-threatening event	2.3
Other non-life-threatening event (SO)	2.3
Other non-life-threatening health problems	0.8
Physical illness (non-life-threatening)	1.6
Separation from parents	3.1
Theft or burglary (non-life-threatening)	0.8
Unemployment	3.9
Unintended pregnancy	0.8
Criterion A1 events	
Adult physical assault <sup>a</sup>	5.5
Attempted rape	2.3
Childhood physical abuse	1.6
Childhood sexual abuse	9.4
Life-threatening illness	0.8
Life-threatening illness (SO)	3.1
Rape	0.8
Seeing an injured or dead body	1.6
Serious accident	0.8
Theft or burglary	0.8
Terrorist attack	3.1
Unexpected death of a loved one	10.2
Victim of serious crime (SO)	0.8
War-zone event	0.8

*Note.* PTSD = posttraumatic stress disorder; SO = event experienced by significant other.

<sup>a</sup> Includes domestic violence.



(12.5%), expected death of a loved one (7.8%), non-life-threatening adult physical assault (7.8%), non-life-threatening childhood physical abuse (7.8%), unemployment (3.9%), separation from parents (3.1%), and abortion (2.3%).

Table 2 presents the unadjusted regression coefficients (and standard errors) of lifetime PTSD prevalence with the *DSM-IV* and relaxed Criterion A1 definitions for LGBs compared with heterosexual individuals and, separately, among LGBs by race/ethnicity (White, Black, and Latino) and gender (women and men). As shown, the use of relaxed Criterion A1 is associated with higher prevalence of PTSD in all groups; about twice as many respondents qualify for a PTSD diagnosis with the relaxed Criterion A1 definition, compared with the current *DSM-IV* definition. Of the 128 respondents diagnosed with relaxed Criterion A1 PTSD, 75 (59%) had qualifying events that did not meet Criterion A1. The remaining 53 (41%) respondents experienced events that did meet Criterion A1.

Table 2 also presents the adjusted odds ratios and 95% confidence intervals for PTSD prevalence with the *DSM-IV* or relaxed Criterion A1 for LGBs compared with heterosexual individuals and, among LGBs, for Blacks and Latinos compared with Whites, and for women compared with men. The table shows that, compared with heterosexual individuals, lesbians and gay men had a slightly higher lifetime prevalence of PTSD and bisexual individuals had a much higher prevalence than either lesbians and gay men or heterosexual individuals, but these differences were not significant at the tested alpha level of .05. This pattern was observed for either definition of Criterion A1, with the prevalence much higher with the relaxed Criterion A1 definitions (21.4% for heterosexual individuals, 25.6% for lesbian and gay individuals, and 30.4% for bisexual individuals) than using the *DSM-IV* definition (7.9% for heterosexual individuals, 9.9% for lesbian and gay individuals, and 17.4% for bisexual individuals).

Among LGB participants, Blacks and Latinos had a higher prevalence of both *DSM-IV* and relaxed Criterion A1 PTSD,

compared with Whites, with Latinos having a higher prevalence than Blacks. However, the only significant difference was between Latino and White LGBs in the test with the relaxed Criterion A1 PTSD (odds ratio = 1.91; 95% confidence interval = 1.06, 3.42). Also, among LGB respondents, there were no differences between men and women in PTSD prevalence with either the *DSM-IV* or the relaxed Criterion A1 definition.

## Discussion

### *DSM-IV* Versus Relaxed Criterion A1 Events

Consistent with expectations, exposure to non-Criterion A1 events was associated with relaxed Criterion A1 PTSD and, hence, a higher prevalence of PTSD compared with standard *DSM-IV* PTSD. It should be noted that we categorized certain cases of non-life-threatening childhood physical abuse and non-life-threatening adult physical assault as non-Criterion A1 events because the close probing of these events suggested that the probability of serious threats to life or physical integrity was low. However, such events might be considered potentially traumatic by the *DSM-IV*. As noted by Dohrenwend (2006), automatically categorizing such events as life threatening or extreme can be inaccurate. We opted for a more careful analysis of the events based on close probing by an interviewer and assessment of the narratives by two independent reviewers. We trust that our categorization better reflects the true event characteristics compared with automatically designating them as life threatening. Nonetheless, even if non-life-threatening childhood physical abuse and non-life-threatening physical assault were considered Criterion A1 events, the remaining non-Criterion A1 events would still account for 55 (43%) of the events associated with relaxed Criterion A1 PTSD. This suggests strong associations between the non-Criterion A1 events and the diagnostic Criteria B–F for *DSM-IV* PTSD.

Table 2

*Lifetime Prevalence of PTSD With DSM-IV or Relaxed Criterion A1: Sexual Orientation, Racial/Ethnic, and Gender Differences*

Variable	<i>DSM-IV</i> Criterion A1		Relaxed Criterion A1	
	% (SE)	AOR [95% CI]	% (SE)	AOR [95% CI]
Sexual orientation <sup>a</sup> (N = 508)				
Heterosexual (Ref)	7.9 (2.4)	1.00	21.4 (2.3)	1.00
Lesbian and Gay	9.9 (1.7)	0.86 [0.33, 2.21]	25.6 (2.3)	0.97 [0.52, 1.78]
Bisexual	17.4 (4.6)	1.50 [0.49, 4.62]	30.4 (3.7)	1.12 [0.51, 2.49]
Race/ethnicity <sup>b</sup> (n = 382)				
White LGBs (Ref)	7.1 (2.3)	1.00	20.6 (3.6)	1.00
Black LGBs	10.9 (2.8)	1.56 [0.64, 3.85]	24.2 (3.8)	1.17 [0.64, 2.16]
Latino LGBs	15.6 (3.2)	2.31 [0.98, 5.41]	34.4 (4.2)	1.91 <sup>*</sup> [1.06, 3.42]
Gender <sup>b</sup> (n = 382)				
Gay/bisexual men (Ref)	11.5 (2.3)	1.00	25.0 (3.1)	1.00
Lesbian/bisexual women	11.1 (2.3)	.957 [0.51, 1.81]	27.9 (3.3)	1.15 [0.73, 1.83]

Note. PTSD = posttraumatic stress disorder; *DSM-IV* = fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*; AOR = adjusted odds ratio; CI = confidence interval; LGBs = lesbian, gay and bisexual individuals.

<sup>a</sup> Adjusted for education, negative net worth, unemployment status, and race/ethnicity. <sup>b</sup> Adjusted for education, negative net worth, and unemployment status.

\*  $p < .05$ .

Our findings show that using the *DSM-IV* definition leads researchers and clinicians to overlook many individuals with PTSD-like disorders. Relaxing Criterion A1 in future versions of *DSM* would help to identify individuals presenting with symptoms diagnosable as PTSD after exposure to acute stressors that do not pose a threat to life or physical integrity. In the present study, respondents developed PTSD-like disorders after exposure to non-Criterion A1 events such as ending a relationship/marriage, the expected death of a loved one, unemployment, separation from parents, and abortion.

Some researchers have raised concerns that relaxing Criterion A1 would not only lead to inflated PTSD prevalence but also trivialize the suffering of those diagnosed with PTSD after exposure to life-threatening, catastrophic, or extreme events (Kilpatrick et al., 1998; McNally, 2003; Weathers & Keane, 2007). There is also concern that broadening Criterion A1 would lead to an increase in lawsuits and compensation requests (Kilpatrick, Resnick, & Acierno, 2009). However, such concerns should not preclude researchers from taking a closer look at the evidence demonstrating associations between non-Criterion A1 events and Criteria B–F for PTSD.

### Minority Stress and PTSD Among LGB Populations

We found that bisexual individuals had a higher prevalence of PTSD than lesbian and gay, and heterosexual individuals. Although the difference in prevalence between bisexual and heterosexual individuals was quite large (17% and 8%, respectively, for *DSM-IV* PTSD), it was not statistically significant. Similarly, the difference between White LGBs and Black and Latino LGBs was considerable (for *DSM-IV* PTSD, odds ratios = 1.6 for Black LGBs and 2.3 for Latino LGBs), but it was not statistically significant. Thus, although we recognize a strong effect that supports minority stress predictions, on both counts we must conclude that minority stress theory hypotheses are only marginally supported.

It is unclear why LGB individuals, who experience more negative life events than heterosexual individuals, would not have a higher prevalence of PTSD; this is contrary to minority stress theory predictions. Our inconclusive findings add to and reflect the current picture in the literature regarding sexual orientation and PTSD, where one study found differences in PTSD prevalence only for women but not men (Gilman et al., 2010), whereas another study found that LGBs were at higher risk for PTSD than heterosexual individuals (Roberts et al., 2010). Although the preponderance of evidence suggests that LGBs do have a higher prevalence of PTSD than heterosexual individuals, future studies must provide more conclusive evidence on this question.

Our finding of a large effect for the difference between bisexual and heterosexual individuals, compared with the difference between gay men and lesbians and heterosexuals, is consistent with those of other recent studies that have suggested that bisexual individuals may be more vulnerable to mental distress than gay men and lesbians (Dodge & Sandfort, 2007; Warner et al., 2004). This suggests that future studies should provide data on bisexual individuals separately from gay men and lesbians (Rodriguez Rust, 2009), or else researchers may risk masking important distinct patterns of disorders. Of course, our study and previous studies

may suffer from insufficient sample size to study disorders such as PTSD with sufficient subgroup distinctions.

This is notably the first study to examine racial/ethnic variability in LGBs related to PTSD. Although only Latino LGBs had a significantly higher prevalence of PTSD than White LGBs when the relaxed Criterion A1 definition was used, prevalence was also higher for Latino LGBs with the *DSM-IV* Criterion A1 definition and for Black LGBs with either definition, when compared with White LGBs. This again provides some (but inconclusive) support to minority stress theory. Evidence from the general (non-LGB) population suggests that Blacks are more likely than Whites to be exposed to traumatic events (Breslau, Davis, & Andreski, 1995; Breslau et al., 1998). However, such evidence does not necessarily mean that Blacks are more likely than Whites to develop PTSD. A systematic review by Pole, Gone, and Kulkarni (2008) showed that estimates of PTSD prevalence among Black individuals varied, but most studies did not report differences between White and Black Americans. In contrast, the review found that, similar to our finding in the present LGB sample, Latinos had a higher prevalence of PTSD than Whites.

It remains unexplained why Blacks in the U.S. do not have a higher prevalence of mental disorders, including PTSD, in both the general and LGB population. Although many Black individuals experience traumatic events, they may have learned to adapt by remaining strongly rooted in family and community networks that exist independent of European American influence (Allen, 1996). It is also possible that Black individuals, particularly women, cope with traumatic events differently than White and Latino individuals. Because Black individuals experience excess exposure to stress, they may already view their environment as unpredictable and uncontrollable; thus, experiencing a traumatic event may not affect their sense of control (Hood & Carter, 2008). However, some Black women cope with traumatic events in ways that do not outwardly convey their levels of psychological distress. Harrington, Crowther, and Shipherd (2010) found that Black women who internalized the image of the “strong Black woman” used binge eating to cope with negative affect related to traumatic experiences. Moreover, although Black LGBs did not have a higher prevalence of *DSM-IV* or relaxed Criterion A1 PTSD in the present study, Szymanski and Gupta (2009) found that contending with a double minority status affected the psychological well-being of Black LGB and questioning persons; that is, the interaction of internalized homophobia and internalized racism predicted negative self-esteem, whereas internalized homophobia predicted psychological distress.

### Limitations

It is important to acknowledge the study’s limitations. First, as with most studies on PTSD, data about stressful life events are based on respondents’ retrospective accounts. Such accounts may be distorted because present memories of traumatic events may, at times, be inconsistent with earlier memories for the same event (Southwick, Morgan, Nicolaou, & Charney, 1997). In addition, the way in which individuals recall trauma is influenced by their current clinical state (McNally, 2003). However, the use of interviewer probes, event narratives, and an independent rating system helped control bias in the present study.

Second, the present study did not control for the presence of Criterion A1 events among participants endorsing a non-Criterion A1 event as their most stressful. Thus, it was not possible to know whether those who met Criteria B–F actually manifested such symptoms after experiencing a Criterion A1 event and simply failed to link these symptoms to that event. However, before participants could be assessed for PTSD Criteria B–F, they had to respond affirmatively to a screening question that asked whether the event caused upsetting memories or dreams, emotional distance from other people, trouble sleeping or concentrating, or feelings of hypervigilance. This helped to reduce the possibility that PTSD symptoms were related to a Criterion A1 event.

Third, the study's findings might have also been affected by selection bias, as this is a nonprobability sample, but this is hard to assess. If respondents were attracted to the study because they had more mental health problems than the general population, this could have led to overrepresentation of people with PTSD; if respondents who were attracted to the study were healthier than average, this could have resulted in an underrepresentation of people with PTSD. In general, the researchers made various efforts to reduce bias. For example, they did not recruit respondents from venues where people with mental health problems may have been overrepresented, such as mental health clinics and 12-step programs.

### Conclusion

Findings from this study, along with previous research (e.g., Gold et al., 2005; Mol et al., 2005; Van Hooff et al., 2009), suggest that exposure to high magnitude events, regardless of whether they meet Criterion A1, is associated with PTSD Criteria B–F. Furthermore, the way in which some individuals perceive these high-magnitude events may be more important than whether they involve threat to life or physical integrity (Carlson & Dalenber, 2000). It is interesting that the work group for the fifth edition of the *DSM* has proposed accounting for the presence of PTSD symptoms after non-Criterion A1 events with the addition of a new adjustment disorder specifier: “with PTSD-like symptoms” (American Psychiatric Association, 2010). This specifier would be used when PTSD symptoms are present but Criterion A1 is not met.

However, adding this specifier leaves some unresolved conceptual issues. It does not explain why symptoms that are supposed to be unique to life-threatening or exceptional events also emerge after non-life-threatening events. Rather than include this specifier, the work group should consider the recommendation of Brewin, Lanius, Novac, Schnyder, and Galea (2009) to eliminate Criterion A and diagnose PTSD on the basis of the presence or absence of Criteria B–F. This would allow researchers and clinicians to focus on the symptoms precipitated by the event rather than on whether the event meets Criterion A1 (Brewin et al., 2009).

The present findings suggest that ending a relationship, the non-Criterion A1 event most likely to be associated with relaxed Criterion A1 PTSD, might share many of the same psychological consequences as experiencing the death of a loved one. Indeed, Boelen and Reijntjes (2009) found that relationship dissolution was associated with complicated grief, depression, and anxiety in a small sample of college students and that their cognitions were similar to those who experienced trauma and loss. Future studies

should reexamine associations between non-Criterion A1 events and Criteria B–F. For example, researchers should investigate the psychological implications of ending an intimate relationship. Such research has the potential to provide further support for reconceptualizing Criterion A1 in the fifth edition of the *DSM*. This, in turn, can affect the assessment and treatment of individuals presenting with PTSD-like disorders after exposure to non-Criterion A1 events.

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