Gay male sexual assault survivors: The relations among internalized homophobia, experiential avoidance, and psychological symptom severity

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Abstract

This study explored the relations among internalized homophobia (IH), experiential avoidance, and psychological symptom severity in a community sample of 74 gay male sexual assault survivors. Results indicated that IH is associated with both depressive and posttraumatic stress disorder (PTSD) symptom severity. IH accounted for more variance than assault severity in predicting both PTSD and depression symptom severity. IH and experiential avoidance similarly predicted PTSD symptom severity. In comparison with IH, however, experiential avoidance is a stronger predictor of depression symptom severity. Results also showed that experiential avoidance partially mediated the relation between IH and both depressive and PTSD symptom severity. The implications of these findings are discussed and suggestions for future research are provided.

Keywords: Experiential avoidance; Gay; Internalized homophobia; Sexual assault; Posttraumatic stress; Depression

Introduction

Epidemiological studies have suggested that at least 30% of gay men experience childhood, adolescent, and/or adult sexual assault (Balsam, Rothblum, & Beauchaine, 2005; Doll et al., 1992; Heidt, Marx, & Gold, 2005). These rates are somewhat comparable to those of heterosexual women, with research suggesting that their sexual assault rates range from 14% to 59% (Browne, 1993; Elliott, Mok, & Briere, 2004). As in the general population, studies of the psychological impact of sexual assault on sexual minorities have indicated that it is associated with, among other things, depression, chemical dependency, and posttraumatic stress disorder (PTSD) symptomatology (Garnets, Herek, & Levy, 1990; Heidt, Marx, & Gold, 2005; Hughes, Johnson, & Wilsnack, 2001; Otis & Skinner, 1996). To this point, however, researchers have neglected to examine sociocultural factors that may influence the development or severity of symptomatology associated with sexual assault and the recovery of lesbian, gay, bisexual, and transgendered (LGBT) sexual assault survivors.

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One such culturally relevant factor for LGBT individuals is internalized homophobia (IH), which has been defined as “a set of negative attitudes and affects toward homosexuality in other persons and toward homosexual features in oneself” (Shidlo, 1994, p. 178). IH stems from the acceptance of negative stereotypes and myths about homosexuality that permeate mainstream culture (Shidlo, 1994). Among gay men and lesbians, IH has been associated with depression (Herek, Cogan, Gillis, & Glunt, 1997; Igartua, Gill, & Montoro, 2003; Shidlo, 1994), somatic symptoms (Shidlo, 1987), unstable self-concept (Shidlo, 1987), demoralization (Herek et al., 1997), and low self-esteem (Herek et al., 1997). Because some of the widespread myths about homosexuality are also related to sexual assault, IH may be particularly relevant to LGBT survivors. Specifically, these myths include the notion that sexual assault causes homosexuality (Balsam, 2003; Butke, 1991) and that LGBT individuals deserve to be sexually assaulted because they are immoral and deviant (Arey, 1995; Garnets et al., 1990). However, to this point, no one has investigated the relation between IH and psychological symptomatology among LGBT sexual assault survivors.

This study tested the hypothesis that IH is significantly correlated with symptoms of depression and PTSD among gay men who have been sexually abused or assaulted. PTSD and depression were chosen because they are the most common two sexual assault sequelae (Resick, 2001). This investigation also compared IH with two other variables in its ability to predict symptom severity. These two variables, assault severity (Halligan, Michael, Clark, & Ehlers, 2003; Kilpatrick et al., 1987) and experiential avoidance (Marx & Sloan, 2002, 2005; Polusny, Rosenthal, Aban, & Follette, 2004) have already been identified as predictors of symptomatology among sexual assault and other trauma survivors from the general population. Experiential avoidance has been previously defined as the unwillingness to remain in contact with aversive bodily sensations, emotions, thoughts, memories, and behavioral predispositions and includes taking steps to alter the form or frequency of those events and the contexts that occasion them (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). We hypothesized that all three variables would predict symptom severity among gay male survivors.

In addition to comparing these variables against one another, we also hypothesized that experiential avoidance would mediate the relation between IH and psychological symptomatology among LGBT sexual assault survivors. In fact, research has already associated IH with behaviors and problems theoretically associated with experiential avoidance, such as with attempting to “pass” as heterosexual (Nungesser, 1983), social isolation from other LGBT individuals, groups, and organizations (Herek et al., 1997; Nungesser, 1983; Szymanski Chung, & Balsam 2001), lower levels of sexual orientation disclosure (Herek et al., 1997; McGregor et al., 2001; Szymanski et al., 2001), and sexual dysfunction (Rosser, Metz, Bockting, & Buroker, 1997). The IH-related sexual assault myths described previously may cause LGBT sexual assault survivors to averesely associate their sexual assault histories with their sexual orientations or same-sex attractions. As a result of these associations, survivors with IH may attempt to avoid their unwanted same-sex thoughts, attractions, and arousal in addition to their thoughts, feelings, and memories regarding their histories of sexual trauma. In turn, such rigid and unworkable avoidance may promote the development and maintenance of assault-related psychopathology.

Method

Participants

Three-hundred forty two adults who identified as sexual minorities were recruited from community organizations (n = 41) and events (n = 301) and asked to complete measures assessing IH, psychopathology, and life experiences. These data have been used in one other study that examined patterns of sexual trauma.

1The terms “homophobia” and “internalized homophobia” have received criticism because these concepts are not “phobias” in the clinical sense (Kitzinger, 1987; Shields & Harriman, 1984). More specifically, it has been noted that homophobic attitudes and behaviors do not necessarily come from a defensive, self-protective state but rather the absorption of societal attitudes (Herek, 1984). As such, these terms are misleading in that they encourage a focus on the individual rather than cultural norms (Herek, 1984). Although these criticisms are well founded, the term “internalized homophobia” continues to predominante in the research and clinical literature (Szymanski & Chung, 2003). As such, this terminology will be used throughout this paper in order to be consistent with the extant literature on this topic.

2Two studies have attempted to provide empirical support for the notion that sexual assault causes homosexuality (Cameron & Cameron, 1995; Gundlach, 1977). Both of these studies are methodologically flawed in that they use correlational data to imply causation.
found in LGBT populations (see Heidt et al., 2005). The previous study found that nearly 63% of participants endorsed experiencing either childhood sexual abuse (CSA) or adult sexual assault (ASA) and that nearly 40% acknowledged experiencing both CSA and ASA and that sexual assault was associated with psychological distress and symptomatology (Heidt et al., 2005). For this study, those who identified as gay men and endorsed one or more episodes of child or adult sexual assault were included. Lesbian, bisexual, and transgendered individuals were excluded due to difficulties in measuring their IH. At the time of this study, there was only one IH measure that had been developed for lesbians and its psychometric properties have not been fully established (Szymanski & Chung, 2001). In addition, no IH measures have been developed for bisexual or transgendered individuals. Because extant IH measures, which have been normed on gay men, include language such as “I am glad to be gay,” and test stereotypes specific to gay men, it was suspected that these measures would not validly assess IH in individuals with other identifications (Dillon, 2001). In the end, 9 transgendered, 68 bisexual, 123 lesbian, and 26 individuals who failed to identify a sexual orientation were also excluded. The final sample included 74 gay male sexual assault survivors.

The age of the final sample ranged from 18 to 65 (M = 34.71, SD = 12.53). The ethnic composition was 65.7% Caucasian, 10% African-American, 11.4% Hispanic, 5.4% Asian, 1.4% Native American, and 5.4% Other. Within this sample, 33 individuals (44.6%) reported experiencing both CSA and ASA, 24 individuals endorsed CSA only (32.4%), and 17 (23%) endorsed ASA only. Participants received $10 in return for their participation. Recruitment and testing were in accordance with the American Psychological Association’s ethical guidelines regarding the use of human participants. The Institutional Review Board for a university in the Northeastern United States approved the protocol and informed consent form.

Measures

The following instruments were administered in an order that placed the more sensitive questionnaires (i.e., trauma history) at the end of the packet.

Sexual trauma measures

The Life Experiences Questionnaire—Modified (LEQ; Long, 1999) is a 62-item self-report measure about lifetime experiences that includes questions regarding childhood sexual experiences. The LEQ includes items designed to assess various aspects of CSA experiences, including the nature and severity of abuse, duration of abuse, relationship to perpetrator, and whether or not disclosure occurred. It asks individuals to mark ‘Yes’ or ‘No’ to a number of experiences that range in severity from non-contact exposure to completed intercourse. The LEQ does not provide an overall score, but rather furnishes information regarding specific aspects of childhood sexual abuse. Messman-Moore and Long (2000) have shown that the LEQ displays adequate internal consistency (Cronbach α = .89) and 2-week test–retest reliability (k = .39 for severity of force; k = 1.0 for abuse duration). High interclass correlations have been reported for age of onset of abuse (.99) and age of perpetrator (.96).

The LEQ was modified for use in the current study such that the term “intercourse” was specified to include oral–genital contact and both anal and vaginal penetration by a body part or object. This clarification was necessary because the definition of “intercourse” may be less clear when asking about same-sex sexual activity, as a mainstream definition of this term is often limited to penile–vaginal penetration only. This measure was used to assess the history and severity of CSA in participants. For the purposes of this investigation, CSA was defined as non-contact abuse (e.g., an adult masturbating in front of the child), contact abuse (e.g., non-penetrative genital contact), and/or attempted or completed penetration prior to the age of 18, that was either perpetrated by a relative, by someone more than 5 years older than the survivor, or by someone less than 5 years older but who used threat or force to commit the abuse. Based upon responses to the LEQ, CSA severity was assessed by assigning survivors 1 point for non-contact abuse, 2 points for contact abuse, 3 points for attempted penetration, and 4 points for completed penetration based upon the most severe abuse episode reported. This model of defining CSA (e.g. Feiring, Taska, & Lewis, 1996) and quantifying its severity (Kendler et al., 2000) is consistent with the CSA literature.
The Sexual Experiences Scale—Modified (SES–Adult Version; Koss, Gidycz, & Wisniewski, 1987), a 10-item (yes or no) self-report measure, is the most commonly used measure of ASA. Questions ask about various degrees of unwanted sexual experiences, including sex play, sexual coercion, attempted rape, and rape occurring after the age of 18. In an examination of the reliability and validity of the SES, Koss and Gidycz (1985) demonstrated moderately strong internal consistency (Cronbach alpha) of .74 (women) and .89 (men) and strong 1 week test–retest reliability of .93. Further, the correlation between self-reported trauma severity (non-victimized, sexually coerced, sexually abused, and sexually assaulted) and severity reported during a face-to-face interview format was .73 (Koss & Gidycz, 1985). The SES’s definition of “penetration” was also explicaded on this form to include oral–genital contact or penetration by any body part or object for the same reasons described for the LEQ.

In the current study, the SES was used to determine the presence and severity of unwanted adult sexual experiences reported by each participant. For the purposes of this investigation, adult sexual assault was defined as having non-consensual genital contact, coerced sex, non-consensual attempted penetration, and/or non-consensual completed penetration. Adult sexual assault severity was determined by assigning, based upon the most severe ASA episode reported, 1 point for unwanted and forced sexual contact (e.g., fondling), 2 points for sexual coercion (giving into unwanted sexual intercourse due to being overwhelmed by continual arguments and pressure), 3 points for attempted rape (e.g. use of physical force, such as arm twisting, to attempt penetration, but intercourse does not happen), and 4 points for rape (e.g., unwanted penetration due to physical force). The severity scores for survivors of both CSA and ASA were combined for participants that experienced both because research suggests that the effects of trauma are cumulative and that multiple assaults, as opposed to single ones, are associated with more severe sequelae (Follette, Polusney, Bechtle, & Naugle, 1996; Nishith, Mechanic, & Resick, 2000). This method of defining (e.g., Soler-Baillo, Marx, & Sloan, 2005) and quantifying ASA severity (Testa, VanZile-Tamsen, Livingston, & Koss, 2004) is consistent with the trauma literature.

Independent variable measures

The Revised Nungesser Homosexuality Attitudes Inventory (RNHAI; Shidlo, 1994) is a 38-item self-report measure designed to assess IH in gay men. Shidlo (1994) revised some of the wording from the original NHAI to improve the grammatical structure, content validity, and discriminant validity of the instrument. It is considered to be one of the most comprehensive and empirically validated IH measures for men (Mayfield, 2001). The items on this measure include both moderate (e.g., “I wouldn’t mind if my boss knew that I was gay”) and extreme homophobic content (e.g., “There have been times when I’ve felt so rotten about being gay that I wanted to be dead”) and use a 5-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It is comprised of three subscales that reflect the three underlying factors thought to comprise internalized homophobia–Self (attitudes toward the fact of one’s own homosexuality), Other (attitudes toward homosexuality in general and toward other gay persons), and Disclosure (reaction toward other’s knowing about one’s homosexuality). This tripartite conceptualization allows for differentiation between global attitudes toward homosexuality and attitudes toward one’s own homosexuality. The measure is balanced for responding with half of the items requiring reverse scoring. Total scores are divided by the number of items. Overall scores range from 1 to 5, with 5 representing severe IH.

The RNHAI has been found to have excellent internal consistency, with alphas ranging from .90 (Shidlo, 1994) to .92 (Dube, 2000). Concurrent validity has been demonstrated via a strong positive correlation ($r = .68$) between the RNHAI and the AIDS-related Homonegativity (ARIH) scale (Shidlo, 1994). In terms of construct validity, the RNHAI has been negatively correlated with self-esteem ($r = -.56$), self-confidence ($r = -.42$), and overall social support ($r = -.25$) and positively correlated with psychological distress ($r = .43$) (Shidlo, 1994). The NHAI has been used in numerous studies examining the relation of IH to psychological well-being, including its relation to self-esteem (Alexander, 1986) and self-blame with respect to HIV (Nicholson & Long, 1990). The RNHAI overall score was used in this study to measure IH in gay male participants.

The Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004) is a 9-item, self-report measure of experiential avoidance. On the AAQ, respondents rate the degree to which each statement applies to them using a Likert-type scale ranging from 1 (never true) to 7 (always true). The measure is balanced for
responding with half of the items requiring reverse scoring. The nine items offer key aspects of the experiential avoidance construct, including inaction, literalness of thought, controlling private events, and escape or avoidance of negatively evaluated content (Hayes et al., 2004). Respondents evaluate statements such as, “When depressed or anxious, I am unable to take care of my responsibilities,” “I’m not afraid of my feelings,” and “Anxiety is bad.” The possible range of scores on the AAQ is 9 to 63, with higher scores indicating greater experiential avoidance (Hayes et al., 2004). Because the AAQ is a relatively new measure, not much has been published at this point in time with respect to norms or how to interpret the scores. However, the authors of this measure have found that the mean AAQ score for a combined group of clinical samples was 42 and the mean score for a combined group of nonclinical samples was 38 (Hayes et al., 2004).

The AAQ has been found to correlate moderately to highly with measures of general psychopathology, depression, anxiety, social phobia, anxiety sensitivity, and PTSD symptomatology (Hayes et al., 2004). Given that the AAQ has a small number of items, its internal consistency (Cronbach’s α) of .70 (Hayes et al., 2004) is considered adequate (Nunally, 1978). It has demonstrated convergent validity (r = 0.44–0.50) with another measure of avoidant coping, the White Bear Suppression Inventory (Wegner, 1994). It has been used to assess experiential avoidance among sexual assault survivors in several other studies (e.g., Marx & Sloan, 2002, 2005; Polusny et al., 2004). The AAQ was used in this study as a measure of experiential avoidance in participants, so that it could be compared with IH in its ability to predict symptom severity of sexual assault survivors. It was also used to assess whether IH was related to experiential avoidance in this population.

**Dependent variable measures**

The *Beck Depression Inventory II* (BDI-II; Beck, Steer, & Brown, 1996) is the most frequently used self-report measure of depression (Beck et al., 1996). It is a 21-item self-report scale that assesses the behavioral, affective, cognitive, and psychological components of depression. Each item is rated on a 4-point scale and its overall score is a measure of severity of depression. Scores of 5–9 are not indicative of depression, 10–18 suggest mild to moderate levels, 19–29 suggest moderate to severe depression, and 30–63 suggest severe depression (Beck et al., 1996). The authors also propose that scores below 4 suggest denial of symptoms, or faking good, and scores above 40 may indicate exaggeration. The BDI-II has an internal consistency coefficient of .91, retest-reliability coefficient of .93, and demonstrates convergent validity with the Hamilton Psychiatric Rating Scale for Depression (r = .71) (Beck et al., 1996). It consistently significantly correlates (r’s ranging from .60 to .90) with clinical ratings of depression (Shaver & Brennan, 1991) and has been used previously in research with sexual minorities (e.g., Lee, Cohen, Hadley, & Goodwin, 1999) and sexual assault survivors (e.g., Alvarez-Conrad, Zoellner, & Foa, 2001). The BDI-II was used in this study as a measure of depressive symptom severity.

The *Posttraumatic Stress Diagnostic Scale* (PDS; Foa, Cashman, Jaycox, & Perry, 1997) is a 49-item, self-report questionnaire that assesses the presence and severity of PTSD symptoms, according to the criteria specified in the American Psychiatric Association’s fourth edition of the Diagnostic and Statistical Manual of Mental Disorders. Strong internal consistency has been demonstrated for the PDS, with a coefficient α of .92 for the total PDS severity score (utilized in diagnosing PTSD) (Foa et al., 1997). Strong 2-week test–retest reliability has been shown for both PTSD diagnoses obtained via the PDS (.74) as well as symptom severity (Foa et al., 1997). The validity of the PDS’s PTSD diagnosis has been examined by comparison with the SCID-PTSD module (Spitzer, Williams, Gibbon, & First, 1990) and has been shown to be adequate (kappa of .65, with 82% agreement between the two measures) (Foa, et al., 1997). The PDS has been used in various studies as a measure of PTSD symptomatology among sexual assault survivors (e.g., Halligan et al., 2003) and two other studies with sexual minorities (e.g., Dillon, 2001). Overall PDS scores between 0 and 10 indicate mild symptomatology, 11–20 suggest moderate severity, 21–35 indicate moderate to severe severity, and scores of 36 and above are in the severe range (Foa, 19955). This study used the PDS overall score as a measure PTSD symptom severity.

**Procedure**

Participants were recruited from LGBT organization meetings (e.g., meetings at a community LGBT center, an LGBT student organization at a small, private liberal arts college, and an LGBT student organization at
a large, public university) and LGBT community events (two gay pride festivals in two cities in the Northeastern United States). Coordinators of both the meetings and events were contacted and provided with information about the purpose of the study and its procedures. They were informed that the experimenter was examining stressful life events and emotion in the LGBT communities, including past and present sexual experiences. They were given copies of all of the questionnaires, the planned procedures, confidentiality policies, and consent forms. If coordinators chose to participate, they signed a letter confirming that they had granted the experimenter permission to invite members of their group or event to take part in the study. The coordinators decided on the appropriate time and place for data collection.

When participants were recruited during LGBT organization meetings, graduate student research assistants made announcements either immediately before or after the meeting inviting those present to participate in a psychological study about LGBT individuals. They explained that the research included questions about life experiences, including those that were sexual in nature, and emotional reactions. Individuals who expressed interest were invited to remain after the meeting to complete the questionnaires. They were encouraged to sit far enough apart to allow for privacy.

When participants were recruited during community events, two trained graduate research assistants sat at a booth with a sign inviting them to participate in research. Those that approached the booth were told that the study was about stressful life events, including past and present sexual experiences, and emotional reactions within the LGBT communities. To prevent having too many individuals complete the measures at any given time, all willing individuals were asked to schedule an appointment throughout the day when they could complete the questionnaires. During their scheduled appointments, small groups (no larger than 10) of individuals completed the questionnaires at a table with chairs spread far enough apart to allow for privacy. The research assistants remained in the vicinity in order to answer any questions.

Whether they were recruited from LGBT organizations or the community events, all individuals were informed that participation involved spending about an hour completing a battery of questionnaires and that they would receive $10 compensation. All participants signed informed consent forms that included information on the purposes of the study and confidentiality of their responses before completing the questionnaires. No participant declined to participate after reading the informed consent, nor did any participant terminate prior to completing the packet.

Upon completing the questionnaires, participants were provided with a debriefing form that stated the purpose of the study and referrals to LGBT-friendly psychological service agencies. Further, the form encouraged participants to discuss strong reactions or discomfort resulting from filling out the questionnaires with the experimenters if they felt comfortable doing so. Phone numbers and e-mail addresses for the experimenters were provided in case participants felt more comfortable communicating about their experiences at a later time or were interested in learning about the results of the study.

Results

Preliminary analyses of the sample

Participants recruited from community events were compared to those recruited from LGBT organizations. No significant differences between these groups were found for sexual trauma category $\chi^2 = (2, N = 74) = 3.18, p > .05$, or ethnicity $\chi^2 = (3, N = 70) = 1.08, p > .05$. The organization recruitment group, however, was significantly younger ($M = 23.86, SD = 2.26$) than the community recruitment group ($M = 35.97, SD = 1.5$), $F (1, 71) = 6.39, p < .05$. This is to be expected given that recruitment occurred at university-based LGBT.

When exploring the demographic characteristics of the sample based upon type of sexual trauma, i.e. those who survived ASA only, CSA only, and those who experienced both CSA and ASA, no significant differences were found between trauma groups based on age, $F (2, 68) = 1.35, p > .05$, or ethnicity $\chi^2 = (6, N = 65) = 10.55, p > .05$. Sexual trauma categories did differ, however, in assault severity, $F (2, 71) =$. In order to have adequate cell sizes for the chi-square test based on ethnicity, participants who identified as Asian, Hispanic, Native American, and Other were combined into one group. This combination may have obscured important group differences.
99.71, \( p < .001 \), PTSD symptom severity, \( F(2, 69) = 3.94, p < .05 \) and experiential avoidance, \( F(2, 69) = 5.21, p < .01 \). As such, pairwise post-hoc comparisons were computed using Tukey’s HSD for these variables. Means and standard deviations for all variables are presented in Table 1.

With respect to assault severity, the group that experienced both CSA and ASA scored significantly higher than the ASA-only group, \( F(1, 48) = 123.78, p < .001 \), and the CSA-only group, \( F(1, 48) = 149.62, p < .001 \). This was expected given the way the severity scores were computed: CSA and CSA severity scores were added together for those that had experienced both forms of sexual aggression. However, the CSA-only and the ASA-only groups did not differ significantly from one another in assault severity. The most commonly reported CSA severity level was full penetration for both the CSA-only group (\( n = 13, 54\% \)) and the group that reported both CSA and ASA (\( n = 29, 88\% \)). The most frequently reported ASA severity level was full, completed rape for both the ASA-only group (\( n = 8, 47\% \)) and the group that experienced both CSA and ASA (\( n = 20, 61\% \)). All assault severity frequencies are presented in Tables 2 and 3.

The group that had experienced both CSA and ASA endorsed significantly greater PTSD symptom severity than the ASA only group, \( F(1, 46) = 8.02, p < .05 \). According to scoring guidelines for the PDS (Foa, 1995), both the CSA-only group and the combined CSA and ASA group’s mean scores fall in the moderate range for PTSD symptom severity. The ASA-only group’s mean score, however, is suggestive of low symptom severity (see Table 1). PDS scores ranged from 0 to 47, which represents severe PTSD (Foa, 1995).

With respect to experiential avoidance, the group that had experienced both CSA and ASA scored significantly higher than the CSA only group, \( F(1, 53) = 9.199, p < .05 \). Despite these differences, all three groups endorsed low levels of experiential avoidance compared with other samples in the literature (e.g., Hayes et al., 2004; see Table 1).

Results revealed no significant group differences with respect to depressive symptoms, \( F(2, 67) = .71, p = .50 \), or internalized homophobia, \( F(2, 65) = 1.95, p = .15 \), across the trauma groups. Mean depression score was in the high end of the “not depressed” range, according to the authors of the BDI-II (Beck et al., 1996). Scores ranged from 0, which suggests “faking good” to 48, which indicates either severe depression or exaggerated reporting (Beck et al., 1996). The mean IH score for the sample, with scores ranging from 1.3 to

### Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>CSA-only (( n = 24 ))</th>
<th>ASA-only (( n = 17 ))</th>
<th>CSA &amp; ASA (( n = 33 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI-II</td>
<td>10.61 (9.74)</td>
<td>12.92 (9.59)</td>
<td>14.28 (12.98)</td>
</tr>
<tr>
<td>PDS</td>
<td>10.83 (14.12)</td>
<td>8.39 (8.21)</td>
<td>17.64 (11.9)</td>
</tr>
<tr>
<td>AAQ</td>
<td>29.75 (8.19)</td>
<td>34.34 (6.03)</td>
<td>36.45 (8.07)</td>
</tr>
<tr>
<td>RNHAI</td>
<td>2.24 (.12)</td>
<td>2.33 (.09)</td>
<td>2.50 (.11)</td>
</tr>
<tr>
<td>Assault severity</td>
<td>2.92 (1.32)</td>
<td>3.12 (1.11)</td>
<td>7.06 (1.22)**</td>
</tr>
</tbody>
</table>

Note: Values enclosed in parentheses represent standard errors. BDI-II = Beck Depression Inventory, second edition; PDS = Posttraumatic Stress Diagnostic Scale; AAQ = Acceptance and Action Questionnaire; RNHAI = Revised Nungesser Homosexuality Attitudes Inventory; CSA-only = childhood sexual abuse only; ASA-only = adult sexual assault only; CSA & ASA = both childhood and adult sexual assault. Means with the same subscripts differ; * \( p < .01 \); ** \( p < .001 \).

### Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>CSA-only (( n = 24 ))</th>
<th>CSA &amp; ASA (( n = 33 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-contact CSA</td>
<td>2 (8)</td>
<td>2 (6)</td>
</tr>
<tr>
<td>Contact CSA</td>
<td>9 (38)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>CSA attempted penetration</td>
<td>0 (0)</td>
<td>2 (6)</td>
</tr>
<tr>
<td>CSA penetration</td>
<td>13 (54)</td>
<td>29 (88)</td>
</tr>
</tbody>
</table>

Note: Values enclosed in parentheses represent percentages of individuals within the trauma category that endorsed this severity level. CSA-only = childhood sexual abuse only; CSA & ASA = both childhood sexual abuse and adult sexual assault.
3.61, was indicative of low to moderate IH. This sample’s mean IH score is slightly higher than that of other studies that have used this measure with community gay male samples [See Biss & Horne (2005) $M = 1.56$, $SD = .31$; Nicely (2005) $M = 1.70$, $SD = .48$; Shidlo (1994) $M = 1.59–2.06$, $SD = .38–40$].

**Correlates of IH**

Two-tailed Pearson correlations were calculated for all dependent and independent variables because they were normally distributed. Results are listed in Table 4. In order to test the hypothesis that IH severity is related to psychological symptomatology, correlations between IH and experiential avoidance, PTSD and depressive symptom severity were computed. As shown in Table 4, IH was moderately correlated with PTSD and depressive symptom severity and experiential avoidance. Experiential avoidance was highly correlated with both PTSD and depression symptom severity. Of all the variables, assault severity was only correlated with PTSD symptom severity.

**Regression results comparing variables at predicting symptom severity**

In order to compare the effects of IH against other predictors of trauma-related psychopathology, two standard multiple regression analyses were performed. Dependent variables in the regression analyses were depressive symptom severity and PTSD symptom severity (BDI-II and PDS total scores, respectively). Independent variables were IH (as measured by the overall score on the NHAI), experiential avoidance (AAQ total scores), and the assault severity composite score. Standard regression results are listed in Table 5.

For PTSD severity, $\beta = .25, p = .04$, and experiential avoidance, $\beta = .24, p = .05$ had similar predictive abilities. Assault severity did not significantly predict PTSD. These three factors accounted for 18% of the variance in PTSD symptom severity (adjusted $R^2 = .18$). For severity of depression, IH remained a significant predictor, $\beta = .24, p = .05$, but was not as strong as experiential avoidance, $\beta = .38, p < .01$. Similar

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**Note:** Values enclosed in parentheses represent percentages of individuals within the trauma category that endorsed this severity level. ASA-only = adult sexual assault only; CSA & ASA = both childhood sexual abuse and adult sexual assault.

**Table 3**

ASA severity of most extreme episode by sexual trauma category

<table>
<thead>
<tr>
<th>Variable</th>
<th>ASA-only (n = 17)</th>
<th>CSA &amp; ASA (n = 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact ASA</td>
<td>3 (18)</td>
<td>4 (12)</td>
</tr>
<tr>
<td>Sexual coersion</td>
<td>0 (0)</td>
<td>2 (6)</td>
</tr>
<tr>
<td>Attempted rape</td>
<td>6 (35)</td>
<td>7 (21)</td>
</tr>
<tr>
<td>Rape</td>
<td>8 (47)</td>
<td>20 (61)</td>
</tr>
</tbody>
</table>

**Note:** Values enclosed in parentheses represent percentages of individuals within the trauma category that endorsed this severity level. ASA-only = adult sexual assault only; CSA & ASA = both childhood sexual abuse and adult sexual assault.

**Table 4**

Psychological outcome correlations for gay male sexual assault survivors

<table>
<thead>
<tr>
<th>Variable</th>
<th>BDI-II</th>
<th>PDS</th>
<th>AAQ</th>
<th>RNHAI</th>
<th>Aslt severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI-II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS</td>
<td>.597*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAQ</td>
<td>.491*</td>
<td>.385*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNHAI</td>
<td>.422*</td>
<td>.425*</td>
<td>.469*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aslt severity</td>
<td>.147</td>
<td>.248**</td>
<td>.197</td>
<td>.159</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Values represent two-tailed Pearson correlations. BDI-II = Beck Depression Inventory, second edition; PDS = Posttraumatic Stress Diagnostic Scale; AAQ = Acceptance and Action Questionnaire; RNHAI = Revised Nungesser Homosexuality Attitudes Inventory. Aslt Severity = sexual assault/abuse severity; $^*p < .001$; $^{**}p < .05$.  

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4Beta weights are standardized
to the PTSD findings, assault severity was not a significant predictor. All three variables accounted for 25% of depressive symptom severity (adjusted $R^2 = .25$).

**Mediation analyses**

To test the hypothesis that experiential avoidance mediates the relation between IH and both depressive and PTSD symptom severity, Baron and Kenny’s criteria for mediation were followed (Baron & Kenny, 1986; Kenny, Kashy, & Bolger, 1998). Regression analysis indicated IH significantly predicted experiential avoidance. In addition, IH predicted both PTSD and depression symptom severity. The proposed mediator, experiential avoidance, predicted both dependent variables. Multiple linear regression analyses indicated that the relation between IH and both dependent variables was weaker, yet still significant, when experiential avoidance was included. Finally, the Sobel (1982) test statistic indicated that experiential avoidance partially mediated both PTSD ($Z = 1.95, p = .05$) and depressive symptom severity ($Z = 2.60, p < .01$). Mediation results are presented in Table 6.

**Discussion**

The findings of the current study enhance our understanding of the experiences and reactions of gay male sexual assault survivors. IH appears to be associated with psychological symptomatology and was consistently a stronger predictor of outcome than assault severity. Among gay male survivors, preliminary support was found for a relation between IH and both PTSD and depressive symptom severity, the most common two sequelae to sexual assault (Resick, 2001). This suggests that IH may be an important construct to consider in treating gay male sexual assault survivors.

Experiential avoidance was found to partially mediate the relation between IH and both PTSD and depression symptom severity. It is possible that IH predisposes gay men to experiential avoidance in that it causes them to suppress or avoid unwanted same-sex thoughts, attractions, or arousal. For the gay male sexual assault survivor population, this avoidance may extend to sexual trauma-related thoughts, memories, and affect, especially in situations where the perpetrator of the assault was also gay. Because avoidance of traumatic memories and its associated affect have been related to psychological symptom severity among trauma survivors (Marx & Sloan, 2002, 2005; Polusny et al., 2004), it is possible that IH and experiential avoidance together contribute to the poor recovery of gay male sexual assault survivors.

In considering the influence of both IH and experiential avoidance, however, it is important to note the cross-sectional nature of this study, one of its major limitations. This methodology precludes us from examining the causal chain of events among sexual assault, IH, and psychopathology, leaving open the possibility that IH is a byproduct of rather than a contributor to sexual assault sequelae. For example, gay men who develop depression after a sexual assault may be at risk for IH based upon attitudes and thinking.

Table 5
Regression results comparing variables at predicting severity of depression and PTSD

<table>
<thead>
<tr>
<th>Variable</th>
<th>PDS</th>
<th></th>
<th></th>
<th>BDI-II</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>SE($B$)</td>
<td>$\beta$</td>
<td>$T$</td>
<td>$B$</td>
<td>SE($B$)</td>
</tr>
<tr>
<td>Assault Severity</td>
<td>.67</td>
<td>.13</td>
<td>.13</td>
<td>1.18</td>
<td>.04</td>
<td>.51</td>
</tr>
<tr>
<td>AAQ</td>
<td>.37</td>
<td>.24</td>
<td>.24</td>
<td>1.98$^*$</td>
<td>.52</td>
<td>.17</td>
</tr>
<tr>
<td>RNHAI</td>
<td>5.50</td>
<td>2.68</td>
<td>.25</td>
<td>2.07$^*$</td>
<td>4.70</td>
<td>2.35</td>
</tr>
</tbody>
</table>

*Note: BDI-II = Beck Depression Inventory, second edition; PDS = Posttraumatic Stress Diagnostic Scale; IV = independent variable; AAQ = Acceptance and Action Questionnaire; RNHAI = Revised Nungesser Homosexuality Attitudes Inventory; PTSD = posttraumatic stress disorder; $B =$ unstandardized beta weights; $\beta =$ standardized beta weights; SE = standard error; $^p < .05; ^{**}p < .01$. 

In considering the influence of both IH and experiential avoidance, however, it is important to note the cross-sectional nature of this study, one of its major limitations. This methodology precludes us from examining the causal chain of events among sexual assault, IH, and psychopathology, leaving open the possibility that IH is a byproduct of rather than a contributor to sexual assault sequelae. For example, gay men who develop depression after a sexual assault may be at risk for IH based upon attitudes and thinking.
patterns that have been linked to depression, such as perfectionism and extreme concern with evaluation by others (Alloy et al., 2000). Similarly, it is entirely possible that experiential avoidance predisposes gay male survivors to IH rather than the reverse. Gay men who are prone to experiential avoidance may suppress their same-sex attractions, given that they are frowned upon by mainstream society (Shidlo, 1994). This may then contribute to their IH, as they are not allowing themselves to be exposed to alternative views of homosexuality. Future research should explore these hypotheses using a prospective design.

Another limitation of this study is its reliance on retrospective self-reports, which introduces the possibility of various types of response and memory biases, particularly for CSA. The lack of corroboration for these events weakens our ability to make strong claims about the relation between IH and sexual aggression history. On a similar note, it is possible that IH predisposes one to psychopathology, memory bias, and feeling traumatized in general, rather than in a relation that is specific to PTSD, depression, and sexual assault. Future research should control for more factors in examining these different relations.

Our recruitment technique represents another drawback of this study. By recruiting from LGBT events and organizations, only individuals who were comfortable with disclosing their sexual orientations in public were included. The results, therefore, may not apply to everyone who identifies as gay or lesbian or those who engage in same-sex sexual activity regardless of identification. This is especially relevant given that the focus of this study was internalized homophobia. One could certainly argue that those with the highest levels of IH were very unlikely to be included in this sample. In addition, by recruiting at LGBT organizations, we may have created demand characteristics that artificially deflated IH scores. At the same time, it is important to note that our internalized homophobia scores were slightly higher than those in the extant IH research among community gay men. Future research, however, should use alternative recruitment techniques in the exploration of IH.

As the first and only study to explore the relation between IH and sexual assault sequelae, several important areas of research remain untapped. First and foremost, these findings need replication and more rigorous examination in order to establish the robustness and directionality of the relations among IH, experiential avoidance, and symptom severity among gay male sexual assault survivors. In addition, the scope of this research should be expanded to include other sexual minorities, namely lesbian, bisexual and transgendered survivors, who were not included in the present study.

### Table 6
AAQ mediation results

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$B$</th>
<th>SE($B$)</th>
<th>$\beta$</th>
<th>$T$</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV = AAQ</td>
<td>.47</td>
<td>.22</td>
<td>6.66</td>
<td>1.5</td>
<td>.47</td>
<td>4.44***</td>
</tr>
<tr>
<td>RNHAI</td>
<td>.43</td>
<td>.18</td>
<td>9.30</td>
<td>2.37</td>
<td>.43</td>
<td>3.93***</td>
</tr>
<tr>
<td>DV = PDS</td>
<td>.42</td>
<td>.18</td>
<td>8.10</td>
<td>2.09</td>
<td>.42</td>
<td>3.87***</td>
</tr>
<tr>
<td>RNHAI</td>
<td>.39</td>
<td>.15</td>
<td>.58</td>
<td>.17</td>
<td>.39</td>
<td>3.46***</td>
</tr>
<tr>
<td>DV = BDI-II</td>
<td>.49</td>
<td>.24</td>
<td>.68</td>
<td>.15</td>
<td>.49</td>
<td>4.61***</td>
</tr>
<tr>
<td>RNHAI</td>
<td>.45</td>
<td>.18</td>
<td>.40</td>
<td>.19</td>
<td>.27</td>
<td>2.17*</td>
</tr>
<tr>
<td>DV = PDS</td>
<td>.53</td>
<td>.29</td>
<td>5.71</td>
<td>2.67</td>
<td>.26</td>
<td>2.15*</td>
</tr>
<tr>
<td>AAQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNHAI</td>
<td>.53</td>
<td></td>
<td>.53</td>
<td>.16</td>
<td>.38</td>
<td>3.19**</td>
</tr>
</tbody>
</table>

Note: BDI-II = Beck Depression Inventory, second edition; PDS = Posttraumatic Stress Diagnostic Scale; AAQ = Acceptance and Action Questionnaire; RNHAI = Revised Nungesser Homosexuality Attitudes Inventory; $B$ = unstandardized beta weights; $\beta$ = standardized beta weights; SE = standard error; *$p \leq .05$; **$p < .01$; ***$p \leq .001$. 

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Although experiential avoidance was explored as a potential mechanism by which IH influences gay male survivors’ psychological symptomatology, other mechanisms also merit investigation. Due to the nature of the homophobic myths that permeate mainstream society, IH may be associated with pathogenic ways of thinking about their sexual assault experiences. The myths that sexual assault causes homosexuality (Balsam, 2003; Butke, 1991) and that LGBT individuals deserve to be sexually assaulted because they are immoral and deviant (Arey, 1995; Garnets et al., 1990) may cause individuals to react to their sexual assault histories with shame, self-blame, and guilt, all of which have been found to predict poor recovery in heterosexual sexual assault survivors (Andrews, Brewin, Rose, & Kirk, 2000; Frazier, 1990; Kubany et al., 1995; Meyer & Taylor, 1986). Along these lines, researchers have found a relationship between IH and both shame (Allen & Oleson, 1999; Downey & Friedman, 1995) and guilt (Downey & Friedman, 1995; Meyer, 1995) among LGBT individuals. Additionally, Dillon (2001) found a relationship between IH and self-blame among gay men who had experienced trauma. Future research should investigate the relations among IH, specific sexual assault myths, self-blame, shame, and guilt, and sexual assault sequelae.

It would also be interesting to explore the impact of the contextual factors of the sexual assault on the relation between IH and symptomatology. Perhaps the relation between IH and psychopathology differs among those who are sexually assaulted as hate crimes, those who experience date rapes, and those who survived CSA. Another contextual issue that was overlooked was the influence of the sexual perpetrator’s gender and sexual orientation on the relation between IH and symptom severity. It is possible that being sexually assaulted by another sexual minority would be more relevant to the relation between IH and psychopathology than being assaulted by someone who is heterosexual. Further exploration of this area of research should pay more attention to sexual assault context.

Although this study has several limitations, we were successful at recruiting and investigating an important and understudied population, namely gay male sexual assault survivors. This is especially important in light of the fact that LGB individuals utilize psychotherapy services at higher rates than the general population (Cochran, Sullivan, & Mayus, 2003), nearly all therapists report providing services to at least one LGB client (Murphy, Rawlings, & Howe, 2002), and at least 30% of gay men report experiencing CSA, ASA, or both (Balsam et al., 2005; Doll et al., 1992; Heidt, et al., 2005). If the relations among IH, experiential avoidance, and posttraumatic sequelae continue to receive support, it may become important to integrate the assessment and treatment of IH and/or experiential avoidance into empirically supported trauma-focused treatments as well as other secondary prevention efforts. Given that LGBT individuals continue to face significant societal stigmatization (Meyer, 1995), it is important that both the research and clinical communities improve upon our abilities to identify IH, understand its influence on psychological adjustment, and effectively address this issue.

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References


