

Sexual Violence, Institutional Betrayal, and Psychological Outcomes for LGB College Students

Carly P. Smith

Penn State University College of Medicine

Sarah A. Cunningham

and Jennifer J. Freyd

University of Oregon

Individuals who identify as lesbian, gay, or bisexual (LGB) are at an elevated risk of experiencing potentially traumatic events compared with the general population, particularly sexual abuse and assault (Brown & Pantalone, 2011; Rothman, Exner, & Baughman, 2011). Considering this trauma, in addition to the stress of discrimination (e.g., Marshal et al., 2015), it is perhaps unsurprising that LGB people typically report more mental health problems than heterosexual people (Mayer et al., 2008). Research further shows that institutional betrayal, or institutional failure to prevent or respond appropriately to sexual assault, may exacerbate negative outcomes for assault survivors (Smith & Freyd, 2013). The aim of this study was to determine whether LGB individuals experience higher rates of institutional betrayal compared with heterosexuals and whether this added harm may be disproportionate to individuals who are sexual minorities. In a self-report survey study of 299 undergraduates (90.3% heterosexual, 9.7% LGB-identified), LGB participants reported significantly higher rates of sexual harassment and sexual assault than heterosexual participants. LGB respondents also reported significantly higher rates of institutional betrayal, even when controlling for incidences of sexual harassment and assault. Finally, LGB participants exhibited significantly more negative psychological outcomes, including posttraumatic stress symptoms, depression, and lower collective self-esteem, related to their sexual identities. These results support prior research suggesting that LGB individuals experience more traumas and show the importance of sexual identity as a risk factor for institutional betrayal.

Keywords: elevated risk, sexual trauma, institutional betrayal, college students

Despite recent social and political reforms, identifying as a sexual minority (i.e., one whose sexual identity, orientation, or behavior differs from the surrounding majority) in the United States remains associated with a host of risk factors. Overall, lesbian, gay, bisexual (LGB), and transgender (LGBT) individuals are victimized more frequently on an individual, community, and national level (Meyer, Schwartz, & Frost, 2008). They face microaggressions from individuals as well as

institutionalized discrimination (Brown & Pantalone, 2011). These experiences start early in life; LGBT adolescents are at a higher risk than heterosexual teenagers of experiencing bullying, especially physical violence (Robinson & Espelage, 2013).

The cumulative toll of the stress of living in a discriminatory environment, captured by the term *minority stress*, has been studied for some time in LGBT samples (e.g., Meyer, 1995, 2003). In addition to being affected by stressors such as witnessing or experiencing discrimination based on LGB status, LGB individuals are at risk for internalizing some of these messages about their sexual identity (Meyer, 2003; Peterson & Gerrity, 2006). Minority stress and the resulting internalized homophobia have been associated with decreased individual and collective self-esteem as LGB individuals take on negative views expressed about individuals

Carly P. Smith, Departments of Humanities and Psychiatry, Penn State University College of Medicine; Sarah A. Cunningham and Jennifer J. Freyd, Department of Psychology, University of Oregon.

Correspondence concerning this article should be addressed to Carly P. Smith, 500 University Drive, P.O. Box 850, Hershey, PA 17033. E-mail: csmith34@hmc.psu.edu

with same-sex sexual orientations (Peterson & Gerrity, 2006). The chronic toll of minority stress has also been identified as part of the reason that LGB people tend to report more mental and physical health problems than heterosexual people (Mays & Cochran, 2001; Meyer et al., 2008). The stakes are high: LGB people are much more likely to attempt or commit suicide than heterosexual people, with some estimates putting the rate of suicide attempts at one in four LGB individuals compared with between 4% and 15% of heterosexuals, beginning in adolescence (Remafedi, French, Story, Resnick, & Blum, 1998).

Burden of Unequal Risk

In addition to the diffuse and continuous toll of minority stress, LGB individuals are at heightened risk for experiencing the acute stress of a traumatic event. Over the course of a lifetime and compared with their heterosexual peers, LGB individuals are at a higher risk of experiencing interpersonal trauma, such as violence from family members (e.g., Balsam, Rothblum, & Beauchaine, 2005) as well as sustaining a higher total number of traumatic events (Brown & Pantalone, 2011). Intersecting identities (e.g., female gender and sexual minority status) confer additional risk; some studies have found that as many as 85% of bisexual or lesbian women and 20% of bisexual or gay men report being sexually assaulted at some point during their lives (Rothman et al., 2011). Sexual harassment is a frequent experience in LGB individuals' lives, beginning in grade school and continuing into the workplace in adulthood (McFarland & Dupuis, 2001). Harassment based on actual or perceived LGB status, nonconformity to gender norms, or rejection of heterosexual expectations are all sources of sexual harassment for LGB individuals (Szalacha, 2003). Given the multitude of other stressors that they face, it stands to reason that the psychological impact of sexual assault and harassment would be greater for sexual minority individuals compared with the impact of these same stressors for heterosexual individuals.

Harm of Unequal Response: The Role of Institutions

Although they are faced with an elevated risk of harassment, assault, and intimidation, LGB people are not always afforded equal options for protection or redress (e.g., police responsiveness, Dworkin & Yi, 2003). Research of secondary schools indicates that institutional attitudes of heterosexism (i.e., privileging heterosexual status as normal or desirable) predict homophobic harassment as well as the availability for LGB support services and students' satisfaction with those services (Chesir-Teran & Hughes, 2009). Conversely, schools that have implemented programs such as gay-straight alliances have seen marked reductions in homophobic bullying and increases in students' perceptions of safety, tolerance, and respect toward sexual minority students (Goodenow, Szalacha, & Westheimer, 2006; Szalacha, 2003). This research points to the potentially protective power of institutional culture for LGB students. However, less is understood about the impact of institutional responses to sexual harassment and assault experienced by LGB individuals, particularly in environments in which they might expect to be safe or at least afforded options for support or redress if they do have these experiences. A helpful framework for understanding the potential impact of the violation of these expectations of safety or support is *institutional betrayal* (Smith & Freyd, 2013). Institutional betrayal refers to wrongdoings perpetrated by an institution upon individuals dependent on that institution, including failure to prevent or respond supportively to wrongdoings committed within the context of the institution (Smith & Freyd, 2013).

Although there are a variety of ways in which institutional betrayal may co-occur with sexual harassment or assault (see Smith & Freyd, 2014), some examples include an institution failing to prevent these experiences (e.g., allowing individuals with prior allegations of sexual assault into the institution with no safety checks), creating an environment in which these experiences are minimized (e.g., only characterizing violent rapes perpetrated by strangers as legitimate sexual assault), or punishing individuals who report sexual assault (e.g., taking away privileges or limiting opportunities). In the case of sexual

harassment or assault experienced by LGB individuals, institutional betrayal may *also* occur if they perceive the institutional environment as one in which they are more likely to be victimized because of their LGB status or treated differently when they seek support arising from a lack of understanding of LGB issues or discrimination—both of which are common experiences of LGB individuals (Mayer et al., 2008). Further, institutional betrayal often creates a sense of being a less valued member of an institution related to experiencing or reporting a traumatic event (e.g., a veteran may feel like they are at risk of being rejected by the military if they make a report of sexual assault; Smith & Freyd, 2014). For LGB individuals, institutional betrayal is consistent with the notion of minority stress in that it reifies homophobic or discriminatory attitudes as they pertain to sexual harassment or assault—institutional responses may suggest that the sexual violence occurred *because* the individual is LGB or that their experiences are less valid or in need of support because of their LGB identity (e.g., Mitchell, Ybarra, & Korchmaros, 2014).

Institutional betrayal has been linked with increased anxiety, depression, and dissociation following sexual assault (Smith & Freyd, 2013). It is well established that LGB individuals are at increased risk for sexual violence in general. It stands to reason that they are at increased risk for exposure to institutional betrayal because of their higher exposure to traumatic event alone, but possibly more so because of their minority status and its intersection with sexual violence. Further, LGB individuals may be more vulnerable to the harmful effects of institutional betrayal because of the cumulative toll of minority stress. Taken together, these factors suggest that institutional betrayal has the potential to explain some of the health disparities encountered by LGB individuals.

Hypotheses of Current Study

The present study explored the relationships between LGB status and the following variables: sexual harassment and assault, institutional betrayal related to the assault, and psychological outcomes. We have four main hypotheses: (a) LGB-identified individuals will report more sexual harassment and assault than

heterosexual individuals in accordance with prior studies, (b) LGB individuals will report more negative psychological outcomes across several important domains following both sexual harassment and assault than heterosexual individuals, (c) LGB individuals will report more institutional betrayal than heterosexual individuals even controlling for higher rates of sexual assault and harassment, and (d) institutional betrayal will account for unique variance in the relationship between sexual assault and harassment and negative psychological outcomes for LGB participants.

Method

Participants and Procedure

Participants were undergraduate psychology students at a large public university in the Pacific Northwest. Participants received course credit for completing a series of web-based self-report surveys and had no knowledge of the study topic prior to participating in order to reduce selection bias. The university's Office of Research Compliance approved the study, and participants indicated their informed consent to participate electronically. The sample consisted of 299 undergraduates (59.9% female, 39.8% male, 0.3% transgender-identified). Consistent with prior research estimating the percentage of the general population who identifies as LGB between 3.5% and 10% (Gates & Newport, 2013), 9.7% of participants were LGB-identified ($n = 29$; 13 lesbian, nine gay, seven bisexual). The sample was mostly (69%) Caucasian, with 11.2% Asian American/Pacific Islander, 7.7% Latino/a, 5.2% Black/African American, and 6.9% indicating "other," with no further response or not responding to this question. Ages ranged from 19 to 25 years old.

Measures

Sexual harassment and assault. Experiences of sexual harassment and assault were assessed with the Department of Defense Service Academies Sexual Assault (SASA) survey (Lipari, Shaw, & Rock, 2005). The survey has been previously validated in military and military university samples, but has also been used in studies of civilian college students (Koss & Dinero, 1989; Lipari et al., 2005). The SASA is

designed to identify lifetime experiences of behaviorally specific sexual harassment and sexual assault (i.e., describing events that fit the definition of sexual harassment rather than asking if respondents have been sexually harassed). This includes questions about having experienced sexist behavior (e.g., “Has someone ever referred to people of your gender in insulting or offensive terms?”), having experienced sexual harassment (e.g., “Has someone ever repeatedly told sexual stories or jokes that were offensive to you?”), and having experienced sexual assault (e.g., “Has someone ever had sex with you without your consent or against your will?”). Responses included “yes” or “no” for each question, and responses were added up for a total severity score (scores could range from 0 to 28, with 16 sexual harassment items and 12 sexual assault items).

Institutional betrayal. Institutional betrayal was assessed using a modified version of the Institutional Betrayal Questionnaire (IBQ; Smith & Freyd, 2013). The IBQ is designed to measure institutional betrayal leading up to or after sexual assault, and is given only to participants who endorse at least one item on the SASA (via online survey display logic). Items include seven questions about the role the institution played in the experience, such as “Did an institution play a role by responding inadequately to the experience/s, if reported?” (Smith & Freyd, 2013). Three additional items specifically examining the role of sexual orientation in institutional betrayal were added: “Did an institution play a role by responding differently to the situation based on your sexual orientation?”; “Did an institution play a role by creating an environment in which you felt discriminated against based on your sexual orientation?”; and “Did an institution play a role by expressing a biased or negative attitude toward you and/or the situation based on your sexual orientation?” All participants saw these 10 items, regardless of sexual orientation. Participants were asked to identify the type of institution they were describing in a free response and were provided with examples (e.g., school, church, workplace).

Traumatic symptoms. The PTSD Checklist–Civilian Version (PCL-C) is a 17-item scale used to measure the key symptoms of posttraumatic stress disorder (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). The PCL-C was originally developed for use with former military population,

but has since been validated in many other samples, including college students, for which PCL-C scores correlate with measures of other measures of posttraumatic stress disorder (PTSD) symptoms, anxiety, and social functioning (Conybeare, Behar, Solomon, Newman, & Borkovec, 2012). The scale demonstrated excellent reliability in the current study ($\alpha = .96$). Respondents were asked if they have experienced posttraumatic stress symptoms such as hyper-alertness and nightmares in the past month (e.g., “How much have you been bothered by . . . repeated, disturbing dreams of a stressful experience from the past?”). The response scale ranged from 1 (*not at all*) to 5 (*extremely*). The items were then added up for a total severity score, with possible scores ranging from 17 to 85.

Depression. The Center for Epidemiologic Studies Depression scale (CES-D), originally developed to study depression symptoms in the general population, was used to assess symptoms of depression in participants. The CES-D demonstrated excellent reliability in this study ($\alpha = .92$; Radloff, 1977). The CES-D is a 20-item scale that inquires about depression symptoms within the last week, such as sadness, crying spells, and poor appetite (e.g., “I felt that I could not shake off the blues even with the help of my family or friends”). Scores on the CES-D correlate with other scales measuring symptoms of mood disorders as well as ability to meet life demands (Radloff, 1977). Response options for each item were on a 4-point scale ranging from 0 (*rarely or none of the time*) to 3 (*all of the time*). Higher scores on the scale indicated higher levels of depression, with possible scores ranging from 0 to 60.

Collective self-esteem. Collective self-esteem was measured using an adapted version of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992). The 16-item scale measures questions about group identity and group self-worth, such as “I am a worthy member of the social groups I belong to” (Luhtanen & Crocker, 1992). Previously, researchers succeeded in adapting the scale for specific social groups, such as racial and ethnic groups, and found that each subscale differentially relates to personal self-esteem (Crocker, Luhtanen, Blaine, & Broadnax, 1994). Therefore, the scale was adapted to specifically apply to sexual orientation, for example, “I am a worthy member of the sexual identity group I belong to.” Response options for each item were

on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Scores were averaged within each the four subscales of the measure (four items each), including membership self-esteem, private collective self-esteem, public collective self-esteem, and importance to identity (Luhtanen & Crocker, 1992). Each subscale demonstrated adequate reliability: membership self-esteem, $\alpha = .70$; private collective self-esteem, $\alpha = .73$; public collective self-esteem, $\alpha = .80$; and importance to identity, $\alpha = .70$. Higher scores indicated higher collective self-esteem, with possible scores ranging from 1 to 4.

Data Analysis

As our hypotheses regarding the associations between sexual orientation and sexual harassment and assault, institutional betrayal, and psychological outcomes (i.e., PTSD and depression symptoms, collective and individual self-esteem, and risky sexual behavior) were strongly directional in nature (e.g., LGB status predicting *more* sexual harassment and assault, *more* PTSD and depression symptoms), one-tailed tests were conducted with a corrected alpha of 0.10 (i.e., traditional significance values of $p < .05$ indicate that an acceptable errors may include either negative or positive correlations). Because our hypothesis would not be supported if our results were “significant,” in which LGB status predicts *less* sexual harassment and assault or *less* PTSD and depression symptoms, all 5% of the acceptable error is at one end of the distribution, which is represented in a p value of <0.10 .

Because of the unequal sample sizes in the heterosexual and LGB groups, concerns about inequality of variances arose as a much smaller sample is a less reliable estimate of the population variance; thus, a Levene’s test for equality of variance in the two samples was conducted (Gastwirth, Gel, & Miao, 2009). When Levene’s tests indicated that the assumptions of equality of variance had not been met, corrected t test results (i.e., ones that do not rely on the assumption of equality of variances or homoscedasticity) are reported with adjusted degrees of freedom. Effect sizes were calculated for each of these tests using Cohen’s d , which is less affected by sample size or sample size differences (Slavin & Smith, 2009).

In order to examine the unique effect of sexual orientation in predicting institutional betrayal (i.e.,

controlling first for the effect of sexual harassment and assault), hierarchical multiple regression was used to determine the relationship between sexual orientation and institutional betrayal, while controlling for unwanted sexual experiences. This analysis was chosen because the variables were theoretically predicted to each account for unique variance, given what is known about the relative effects of interpersonal violence and institutional betrayal from prior research (Petrocelli, 2003). Because we added three items to the IBQ that likely pertain only to LGB participants, the relationship between sexual orientation and institutional betrayal was also examined using the institutional betrayal score, with all of the questions specifically related to sexual orientation removed. A multiple regression model with an interaction between institutional betrayal and sexual violence was tested to examine whether institutional betrayal increases the severity of psychological outcomes.

Results

Sexual Harassment and Assault

As hypothesized, LGB participants reported significantly more experiences of sexual harassment than heterosexual participants. Additionally, LGB participants reported significantly more experiences of sexual assault than heterosexual participants (see Table 1).

Psychological Outcomes

Also in keeping with hypothesis, overall PTSD scores on the PCL-C were significantly higher for LGB participants than heterosexual participants (see Table 1). Additionally, LGB status predicted higher PTSD scores over and above unwanted sexual experiences, $F(2, 296) = 13.32, p = .008, \Delta R^2 = .02, p = .02$. Additionally, LGB participants’ depression scores were significantly higher than heterosexual participants’ depression scores. LGB status predicted depression scores above and beyond unwanted sexual experiences, $F(2, 296) = 10.02, p = .005, \Delta R^2 = .02, p = .01$.

Self-Esteem

As hypothesized, LGB participants reported lower self-esteem related to their sexual orientation on three of the four subscales of the

Table 1
Group Differences Between LGB and Heterosexual Participants

Measure	LGB		Heterosexual		<i>t</i>	<i>df</i> ^a	<i>p</i>	<i>d</i>	Effect size
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Sex. harassment ^b	8.12	5.02	5.61	4.20	3.02	297	.002	.59	Medium
Sex. assault ^b	2.41	3.39	1.32	3.39	1.71	29.70	.09	.53	Medium
PCL-C	38.30	16.80	29.00	14.10	2.88	32.38	.001	.65	Medium
CES-D	21.83	12.20	15.30	10.77	3.04	297	.002	.60	Medium
Self-esteem ^c									
Membership	3.92	.87	4.27	.91	1.94	297	.05	.38	Small
Public	3.79	1.22	5.76	1.07	9.24	297	<.001	1.82	Large
Private	4.96	1.25	5.77	1.05	3.92	297	<.001	.77	Medium
Importance	3.89	1.23	3.75	1.28	.61	297	.55	.12	—
IBQ-SO	2.38	2.60	.92	1.78	2.98	297	.004	.53	Medium
IBQ	1.77	2.82	.80	1.90	2.33	31.56	.01	.58	Medium

Note. LGB = lesbian, gay, bisexual; *df* = degrees of freedom; PCL-C = Posttraumatic Checklist–Civilian version; CES-D = Center for Epidemiologic Studies Depression Scale; IBQ-SO = Institutional Betrayal Questionnaire with sexual orientation items; IBQ = Institutional Betrayal Questionnaire without sexual orientation items.

^a Corrected effect size reported where used. ^b Sexual harassment and assault subscales of Department of Defense Service Academies Sexual Assault survey. ^c Subscales of Collective Self-Esteem: Membership, Public Collective, Private Collective, Importance of Sexual Orientation to Identity.

Collective Self-Esteem Scale. This includes significantly lower membership self-esteem, public collective self-esteem, and private collective self-esteem. Importance of sexual orientation to identity did not differ significantly across sexual orientations (see Table 1).

Institutional Betrayal

Consistent with our final hypothesis, LGB respondents reported higher rates of institutional betrayal, even when controlling for increased numbers of unwanted sexual experiences. Institutional betrayal was higher in LGB participants even with the questions specifically pertaining to sexual orientation removed (see Table 1). Of the participants who described what kind of institution had engaged in the betrayal, all of those indicated by the LGB participants were school or university-related and included the university or a school in general (62% of responses best fit into this category), a school organization (23%), or student-related services (15%).

Our fourth hypothesis was not fully supported: A hierarchical multiple regression examining the relationships between sexual assault, institutional betrayal, and PTSD did not find a significant interaction between sexual assault and institutional betrayal, $t(297) =$

-1.37 , $p = .17$. However, in this model, institutional betrayal was a unique predictor of PTSD scores, $t(297) = 2.35$, $p = .05$. Similarly, a hierarchical multiple regression examining the relationships between sexual assault, institutional betrayal, and depression did not find a significant interaction between sexual assault and depression, $t(297) = -1.1$, $p = .27$. Institutional betrayal uniquely predicted depression in this model, $t(297) = 2.11$, $p < .05$. Given that LGB status predicted both increased negative psychological outcomes (depression and PTSD scores) as well as institutional betrayal, we tested a mediational model in which institutional betrayal explained the relationship between LGB status and these negative psychological outcomes (Baron & Kenny, 1986). We found that institutional betrayal partially mediated the relationship between LGB status and both depression and PTSD scores (see Table 2).

Discussion

This study further documented the heightened risk LGB individuals experience in regard to sexual trauma as well as negative psychological outcomes compared with heterosexual in-

Table 2
Mediational Analyses

Regression	Depression (CES-D)				PTSD (PCL-C)			
	<i>B</i>	<i>SE B</i>	β	ΔR^2	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 1				.04**				.04**
LGB status	6.55	2.15	.17**		9.34	2.81	.19**	
Step 2				.02*				.03**
LGB status	5.26	2.19	.14*		7.38	2.85	.15*	
Institutional betrayal	.88	.24	.15**		1.34	.44	.18**	

Note. CES-D = Center for Epidemiologic Studies Depression Scale; PTSD = posttraumatic stress disorder; PCL-C = Posttraumatic Checklist–Civilian version; *SE* = Standard Error; LGB = lesbian, gay, bisexual.
* $p < .05$. ** $p < .01$.

dividuals. The college students in the current study also demonstrated group differences in collective self-esteem that were consistent with a minority stress model. Additionally, the results found that LGB survivors perceive more institutional betrayal than heterosexual survivors, even controlling for heightened risk for sexual trauma. Results are discussed in terms of implications for LGB college students' well-being and institutional betrayal as a potential source for added minority stress.

Institutional Betrayal and LGB College Students

When participants described institutional betrayal in this study, they overwhelmingly (62%) indicated that a school or university was the institution that had been the source of wrongdoing—failing to prevent, or responding inadequately to, reports of sexual violence. LGB participants reported more sexual harassment, more sexual assault, and more institutional betrayal than their heterosexual peers. For LGB participants, institutional betrayal uniquely predicted psychological distress, including post-traumatic stress and depression symptoms. Although there were three items added to the IBQ that specifically assessed LGB students' impression that their sexual orientation was related to institutional responses (e.g., "Did an institution play a role by responding differently to the situation based on your sexual orientation?"), these items alone did not account for the added harm experienced by LGB students following sexual violence. Taken together, these results indicate that institutional betrayal related to sexual violence may represent a source of discrim-

ination against LGB students within their universities. Thus, institutional betrayal related to sexual violence may be investigated as a form of increased environmental threat to sexual minority individuals, consistent with the minority stress framework (Meyer, 2003).

Institutional Betrayal and Minority Stress

The high rates of posttraumatic stress symptoms reported by LGB students following sexual violence is consistent with prior work that linked discrimination (based on race) to post-traumatic symptoms, such as avoidance of reminders of traumatic experiences and physiological hyperarousal (Bryant-Davis & Ocampo, 2005). The risk that LGB students may internalize this discrimination and begin to see their sexual orientation as a source of shame rather than pride was assessed via measures of collective self-esteem. Although this is a cross-sectional study, which limits our ability to draw causal links, LGB students reported lower public collective self-esteem, lower private collective self-esteem, and lower membership self-esteem. This indicates that not only do LGB students feel that others look down on their sexual orientation in comparison with heterosexuality—they are also evaluating their sexual identity group lower than heterosexuals do, which is consistent with research that LGB individuals internalize prejudice against their sexual identity group (e.g., Peterson & Gerrity, 2006). Clinically, these results have implications for LGB students who may seek services at university counseling centers or turn to university services for support. Although all students may face the risk of additional institu-

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

tional betrayal when seeking services from the institution at which they were victimized, LGB students face added risk if they are met with staff who are not educated on the link between sexual orientation and victimization (Dworkin & Yi, 2003; McFarland & Dupuis, 2001). Further, the link between sexual orientation and self-esteem or mental health is deeply colored by societal discrimination (e.g., Meyer, 2003; Peterson & Gerrity, 2006), and university staff who work with LGB students may inadvertently uphold stereotypes or fail to create a truly protective environment for LGB students if services are geared toward heterosexual students alone (Goodenow et al., 2006).

Limitations

An important consideration with regard to these analyses is that this study was based entirely on self-report measures collected at a single time point. There are at least two potential limitations of this method of data collection. First, participants were assured their identities could not be linked to their responses, yet their responses may be prone to social desirability bias, which, in this study, may encompass a willingness to identify as lesbian, gay, or bisexual, even if this description might fit their actual orientation and/or behavior. Notably, this would have introduced error into the between-groups analyses, which would have weakened our results (i.e., students in the heterosexual group who would more accurately be identified as LGB would likely decrease the apparent differences between the two groups). Second, the theoretical framework of both institutional betrayal and minority stress are causal in nature—these sources of chronic stress *cause* psychosocial distress experienced by LGB individuals (Baams, Grossman, & Russell, 2015; Meyer, 2003). Although the current study can contribute to this body of work by introducing a source of minority stress in the form of institutional betrayal, truly causal attributions would require a longitudinal design that assessed psychological health and collective self-esteem before and after experiencing institutional betrayal.

Finally, the sample itself introduced limitations. There were a small number of LGB students compared with the number of heterosexual students. Although this is consistent with demographics on campus, it limits the scope of

statistical modeling. Further, the sample was limited to undergraduates enrolled in a psychology course at a public university in the Pacific Northwest, who are not representative of the general population across many domains, including age, socioeconomic status, and, in the case of the current sample, race. Therefore, the results of the current study may be best understood as reflecting the experiences of a somewhat narrow range of college students.

Additionally, all of the LGB participants who gave information about the institution they were describing on the IBQ indicated a school or an organization that could be related to a school (e.g., a club). Although some responses were vague (e.g., student services), it is possible that all of these participants were referring to the university at which these data were collected. Therefore, it may be that the prevalence and impact of institutional betrayal is unique to this setting. Although the broader body of research related to sexual violence and discrimination among sexual minorities indicates that this is unlikely a problem confined to the university at hand, this work would benefit from added study across multiple sites.

Finally, the current study examined a sample of undergraduates who were grouped based on holding a minority sexual identity and combined across these identities (i.e., LGB together). An increasingly robust literature is focused on understanding the intersection of sexual violence and institutional response on transgender individuals (e.g., Mayer et al., 2008; Robinson & Espelage, 2013). Transgender individuals appeared to be underrepresented in the current sample (i.e., we do not know whether some of the individuals who chose “male” or “female” may have also been transgender). Purposefully sampling participants who identify as transgender is key to understand the experiences of transgender college students who may or may not also hold a minority sexual identity.

Conclusion

The present study underscores the heightened risk faced by LGB individuals for sexual violence *and* unsupportive institutional environments. Both of these present risk to the mental and social well-being of LGB people, but together they present a picture of the world in

which LGB individuals cannot expect the same safety and support as their heterosexual peers. Although institutions such as universities are increasingly making public efforts to protect and support LGB students, there is clearly unmet needs when it comes to sexual violence.

References

- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology, 51*, 688–696. <http://dx.doi.org/10.1037/a0038994>
- Balsam, K. F., Rothblum, E. D., & Beauchaine, T. P. (2005). Victimization over the life span: A comparison of lesbian, gay, bisexual, and heterosexual siblings. *Journal of Consulting and Clinical Psychology, 73*, 477–487. <http://dx.doi.org/10.1037/0022-006X.73.3.477>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Brown, L., & Pantalone, D. (2011). Lesbian, gay, bisexual, and transgender issues in trauma psychology: A topic comes out of the closet. *Traumatology, 17*, 1–3. <http://dx.doi.org/10.1177/1534765611417763>
- Bryant-Davis, T., & Ocampo, C. (2005). Racist-incident-based trauma. *The Counseling Psychologist, 33*, 479–500. <http://dx.doi.org/10.1177/0011000005276465>
- Chesir-Teran, D., & Hughes, D. (2009). Heterosexism in high school and victimization among lesbian, gay, bisexual, and questioning students. *Journal of Youth and Adolescence, 38*, 963–975.
- Conybeare, D., Behar, E., Solomon, A., Newman, M. G., & Borkovec, T. D. (2012). The PTSD Checklist-Civilian Version: Reliability, validity, and factor structure in a nonclinical sample. *Journal of Clinical Psychology, 68*, 699–713. <http://dx.doi.org/10.1002/jclp.21845>
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. *Personality and Social Psychology Bulletin, 20*, 503–513. <http://dx.doi.org/10.1177/0146167294205007>
- Dworkin, S. H., & Yi, H. (2003). LGBT identity, violence, and social justice: The psychological is political. *International Journal for the Advancement of Counselling, 25*, 269–279. <http://dx.doi.org/10.1023/B:ADCO.0000005526.87218.9f>
- Gastwirth, J. L., Gel, Y. R., & Miao, W. (2009). The impact of Levene's test of equality of variances on statistical theory and practice. *Statistical Science, 24*, 343–360. <http://dx.doi.org/10.1214/09-STS301>
- Gates, G. J., & Newport, F. (2013, February 15). LGBT percentage highest in D.C., lowest in North Dakota. *Gallup*. Retrieved from <http://www.gallup.com/poll/160517/lgbt-percentage-highest-lowest-north-dakota.aspx>
- Goodenow, C., Szalacha, L., & Westheimer, K. (2006). School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools, 43*, 573–589. <http://dx.doi.org/10.1002/pits.20173>
- Koss, M. P., & Dinero, T. E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. *Journal of Consulting and Clinical Psychology, 57*, 242–250. <http://dx.doi.org/10.1037/0022-006X.57.2.242>
- Lipari, R. N., Shaw, M. N., & Rock, L. M. (2005). *Measurement of sexual harassment and sexual assault across three U.S. military populations. Conference sponsor*. Singapore: International Military Testing Association.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302–318. <http://dx.doi.org/10.1177/0146167292183006>
- Marshal, M. P., Goldbach, J. T., McCauley, H. L., Shultz, M. L., Dietz, L. J., Montana, G. T., & D'Augelli, A. R. (2015). Gay-related stress and suicide risk: Articulating three mediated pathways that increase risk for suicidality among sexual minority youth. In D. A. Lamis & N. J. Kaslow (Eds.), *Advancing the science of suicidal behavior: Understanding and intervention* (pp. 253–268). Nova Science Publishers: New York, NY.
- Mayer, K. H., Bradford, J. B., Makadon, H. J., Stall, R., Goldhammer, H., & Landers, S. (2008). Sexual and gender minority health: What we know and what needs to be done. *American Journal of Public Health, 98*, 989–995. <http://dx.doi.org/10.2105/AJPH.2007.127811>
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health, 91*, 1869–1876.
- McFarland, W. P., & Depuis, M. (2001). The legal duty to protect gay and lesbian students from violence in school. *Professional School Counseling, 4*, 171–182.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior, 36*, 38–56. <http://dx.doi.org/10.2307/2137286>

- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*, 674–697. <http://dx.doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H., Schwartz, S., & Frost, D. M. (2008). Social patterning of stress and coping: Does disadvantaged social statuses confer more stress and fewer coping resources? *Social Science & Medicine*, *67*, 368–379. <http://dx.doi.org/10.1016/j.socscimed.2008.03.012>
- Mitchell, K. J., Ybarra, M. L., & Korchmaros, J. D. (2014). Sexual harassment among adolescents of different sexual orientations and gender identities. *Child Abuse & Neglect*, *38*, 280–295. <http://dx.doi.org/10.1016/j.chiabu.2013.09.008>
- Peterson, T. L., & Gerrity, D. A. (2006). Internalized homophobia, lesbian identity development, and self-esteem in undergraduate women. *Journal of Homosexuality*, *50*, 49–75. http://dx.doi.org/10.1300/J082v50n04_03
- Petrocelli, J. V. (2003). Hierarchical multiple regression in counseling research: Common problems and possible remedies. *Measurement and Evaluation in Counseling and Development*, *36*, 9–22.
- Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401. <http://dx.doi.org/10.1177/014662167700100306>
- Remafedi, G., French, S., Story, M., Resnick, M. D., & Blum, R. (1998). The relationship between suicide risk and sexual orientation: Results of a population-based study. *American Journal of Public Health*, *88*, 57–60. <http://dx.doi.org/10.2105/AJPH.88.1.57>
- Robinson, J. P., & Espelage, D. L. (2013). Peer victimization and sexual risk differences between lesbian, gay, bisexual, transgender, or questioning and nontransgender heterosexual youths in grades 7–12. *American Journal of Public Health*, *103*, 1810–1819. <http://dx.doi.org/10.2105/AJPH.2013.301387>
- Rothman, E. F., Exner, D., & Baughman, A. L. (2011). The prevalence of sexual assault against people who identify as gay, lesbian, or bisexual in the United States: A systematic review. *Trauma, Violence, & Abuse*, *12*, 55–66. <http://dx.doi.org/10.1177/1524838010390707>
- Ruggiero, K. J., Del Ben, K., Scotti, J. R., & Rabalais, A. E. (2003). Psychometric properties of the PTSD Checklist-Civilian Version. *Journal of Traumatic Stress*, *16*, 495–502. <http://dx.doi.org/10.1023/A:1025714729117>
- Slavin, R., & Smith, D. (2009). The relationship between sample sizes and effect sizes in systematic reviews in education. *Educational Evaluation and Policy Analysis*, *31*, 500–506. <http://dx.doi.org/10.3102/0162373709352369>
- Smith, C. P., & Freyd, J. J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. *Journal of Traumatic Stress*, *26*, 119–124. <http://dx.doi.org/10.1002/jts.21778>
- Smith, C. P., & Freyd, J. J. (2014). Institutional betrayal. *American Psychologist*, *69*, 575–587. <http://dx.doi.org/10.1037/a0037564>
- Szalacha, L. A. (2003). Safer sexual diversity climates: Lessons learned from an evaluation of Massachusetts safe schools program for gay and lesbian students. *American Journal of Education*, *110*, 58–88. <http://dx.doi.org/10.1086/377673>

Received October 15, 2015

Revision received August 19, 2016

Accepted September 26, 2016 ■