Patterns of Intimate Partner Violence Victimization and Perpetration Among Sexual Minority Women: A Latent Class Analysis Violence Against Women 2019, Vol. 25(5) 572–592 © The Author(s) 2018 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/1077801218794307 journals.sagepub.com/home/vaw



Megan E. Sutter¹, Annie E. Rabinovitch¹, Michael A. Trujillo¹, Paul B. Perrin¹, Lisa D. Goldberg¹, Bethany M. Coston¹, and Jenna M. Calton²

Abstract

This study explored patterns of intimate partner violence (IPV) victimization and perpetration in 150 sexual minority women (SMW): 25.3% had been sexually victimized, 34% physically victimized, 76% psychologically victimized, and 29.3% suffered an IPV-related injury. A latent class analysis found four behavioral patterns: (1) minor-only psychological perpetration and victimization; (2) no IPV; (3) minor–severe psychological, physical assault, and injury victimization, and minor-only psychological, physical, and injury victimization; and minor-only psychological, physical, and injury victimization and perpetration. Individuals who experienced and/or perpetrated all types experienced the greatest heterosexism at work, school, and in other contexts.

Keywords

intimate partner violence, sexual minority women, heterosexism

Historically, research has focused on intimate partner violence (IPV) in heterosexual relationships (Coker, Smith, McKeown, & King, 2000; Fortunata & Kohn, 2003); however, a body of research exploring IPV among sexual minorities has burgeoned in

Corresponding Author:

¹Virginia Commonwealth University, Richmond, USA ²George Mason University, Fairfax, VA, USA

Paul B. Perrin, Associate Professor, Department of Psychology, Virginia Commonwealth University, 800 West Franklin St., Room 201, P.O. Box 842018, Richmond, VA 23284-2018, USA. Email: pperrin@vcu.edu

recent years (Badenes-Ribera, Frias-Navarro, Bonilla-Campos, Pons-Salvador, & Monterde-i-Bort, 2015; Carvalho, Lewis, Derlega, Winstead, & Viggiano, 2011; Lewis, Milletich, Kelley, & Woody, 2012). Research has indicated that sexual minority individuals report a significantly greater prevalence of IPV compared with heterosexuals, particularly among sexual minority women (SMW; e.g., Walters, Chen, & Breiding, 2013). These elevated rates of IPV have been attributed to minority stress or chronic stress due to stigmatization based on sexual identity (e.g., Carvalho et al., 2011). Although few studies have connected increased experiences of heterosexism and IPV among SMW (Badenes-Ribera et al., 2015; Balsam & Szymanski, 2005; Lewis et al., 2012), none have identified patterns of victimization and perpetration, nor have any examined the associations between different forms of IPV and heterosexism among SMW. To better understand the implications of minority stressors on IPV among SMW, it is critical to identify patterns of IPV victimization and perpetration to provide better prevention and treatment recommendations for researchers, mental health professionals, and policy makers. The present study aimed to identify the patterns of IPV perpetration and victimization and the respective associations between heterosexism and IPV classifications.

Background

In comparing prevalence rates of IPV between heterosexuals and sexual minorities, the data are mixed, with early studies documenting comparable or lower rates of IPV among sexual minorities (Brand & Kidd, 1986; Tjaden & Thoennes, 2000) and later studies indicating that rates of IPV may be higher among sexual minorities relative to heterosexuals (Balsam, Rothblum, & Beauchaine, 2005; Walters et al., 2013). Among nationally representative probability samples estimating adult IPV among sexual minorities, the 2010 National Intimate Partner and Sexual Violence Survey (NISVS) is arguably the most reliable due to its more recent collection, broader definition of intimate relationships, capture of cohabitating and noncohabitating relationships, and assessment of physical and sexual assault, psychological abuse, control violence, and intimate stalking. Without controlling for any other variables, 35% of heterosexual women in their sample, 44% of lesbian women, and 61% of bisexual women experienced rape, physical violence, and/or stalking victimization by an intimate partner, while 29% of heterosexual men, 26% of gay men, and 37% of bisexual men did (Walters et al., 2013). For psychological aggression victimization, 48% of heterosexual women, 76% of bisexual women, 63% of lesbian women, 50% of heterosexual men, 53% of bisexual men, and 60% of gay men experienced expressive aggression or coercive control by an intimate partner (Walters et al., 2013). These rates indicate that sexual minority individuals, particularly lesbian and bisexual women, may be at higher risk of experiencing IPV and sustaining IPV-related injuries than heterosexual individuals.

It is important to consider that sexual minority individuals may be at an increased risk for IPV, given that they also experience heterosexist discrimination and violence (Badgett & Frank, 2007; Balsam & Szymanski, 2005; Russell, Franz, & Driscoll, 2001). Balsam (2001) theorizes that this maltreatment of lesbian, gay, and bisexual

(LGB) people is due to heterosexism, an institutionally reinforced, society-wide preference for heterosexual people over LGB people. The result of this is minority stress, or chronic stress related to LGB stigmatization in society (Herek, 2004; Meyer, 1995), including internalized heterosexism (i.e., the incorporation of negative societal beliefs regarding same-sex attraction into one's self-concept; Szymanski, Kashubeck-West, & Meyer, 2008), victimization (Herek, 2009), and discrimination (Mays & Cochran, 2001) due to their marginalized social status (Meyer, 2003).

Minority stressors have been tied to an array of psychosocial issues for this population, most prominently, depression and anxiety (Cochran, Sullivan, & Mays, 2003; Mays & Cochran, 2001), substance abuse (Hughes, Szalacha, & McNair, 2010), and suicidality (Fergusson, Horwood, Ridder, & Beautrais, 2005; King et al., 2008). Although IPV among sexual minorities represents a relatively new area of research, extant studies in this domain have documented associations between minority stressors and IPV (Balsam & Szymanski, 2005; Bartholomew, Regan, White, & Oram, 2008; Brooks, 1981; Carvalho et al., 2011; Lewis et al., 2012). For instance, Carvalho and colleagues (2011) examined relationships between types of internalized minority stressors, such as stigma-consciousness, internalized heterosexism, and degree of "outness" regarding one's sexual orientation and IPV among sexual minorities. Findings indicated that stigma consciousness predicted both IPV victimization and perpetration, and degree of outness significantly predicted IPV victimization.

While some research on IPV among sexual minorities has included samples of both men and women (e.g., Carvalho et al., 2011), other research has focused solely on SMW (Badenes-Ribera et al., 2015; Balsam & Szymanski, 2005; Lewis et al., 2012), a group that may represent an especially vulnerable subpopulation of sexual minorities, because they hold multiple minority identities, contending with experiences of both sexism and heterosexism (Lehavot & Simoni, 2011). Balsam and Szymanski (2005) examined associations between IPV and internalized heterosexism as well as discrimination in SMW. Results indicated that among SMW, internalized heterosexism significantly predicted IPV victimization, and lifetime experiences of discrimination were a significant predictor of both IPV victimization and perpetration. Discrimination therefore may represent an understudied and potent predictor of overall IPV among SMW.

The existing research on relationships between minority stressors and IPV among SMW has several gaps. First, the bulk of literature in this area has explored associations between internal minority stressors (e.g., stigma consciousness, internalized heterosexism) among SMW. A recent systematic review of original studies of IPV in same-sex relationships and sexual minority stressors (Longobardi & Badenes-Ribera, 2017) identified one study that focused solely on SMW external minority stress and IPV (Balsam & Szymanski, 2005). This study found that discrimination predicted IPV victimization and perpetration and identified significant overlap (31%) between victims and perpetrators of IPV. However, a secondary analysis of a population-based Canadian sample did not identify a statistically significant difference between rates of IPV among SMW who reported past discrimination (43.9%) versus not (32.6%; Barrett & St. Pierre, 2013). These studies are limited to the lack of examination of

different types of discrimination experiences. Balsam and Szymanski (2005) coded discrimination experiences categorically, as occurring over a participant's lifetime or in the past year, and Barrett and St. Pierre (2013) were limited to a single yes/no question of discrimination based on sexual orientation. Furthermore, Balsam and Szymanski (2005) only captured IPV perpetration and victimization within a female partnership. Prior research on IPV among SMW has been conducted with predominately White samples, while research among heterosexuals has highlighted racial/ethnic differences in IPV (Cunradi, Caetano, & Schafer, 2002), and it is possible that these differences exist for SMW as well.

Moreover, there is a lack of research exploring the bidirectional nature of IPV perpetration and victimization among SMW, although the extant literature among other lesbian, gay, bisexual, transgender, and queer (LGBTQ) and heterosexual populations has shown a bidirectional relationship (e.g., Bartholomew, Regan, Oram, & White, 2008; Johnson, 2006). Two thirds of lesbian women in one study reported both vicimization and perpetration in a former lesbian relationship (Lie & Gentlewarrier, 1991), and Carvalho and colleagues (2011) found that among gay and lesbian individuals, the majority of perpetrators of IPV, broadly defined, were also victims. Indeed, the motivation for enacting violence is improtant to consider, such as self-defense versus desire to exert power over one's partner (i.e., coercive control; Renzetti, 1992). For bidirectional IPV, there are several subtypes that may be particularly relevant to SMW. Langhinrichsen-Rohling (2010) suggested a dyadic dyregulation type, such that bidrectional IPV occurs due to the partners' inability to regulate emotions and behavior, in which partners are not able to help one another stop the cycle of negative reciprocity within violent relationships. Moreover, a dyadic couple violence type suggests that aggressive retaliation is perceived to be warranted when emotional abuse and/or physical violence is perceived. Although this feminist typology begins to address the fact that men are also vicitims of IPV, a limitation of traditional perspectives, it negates discussion of same-sex relationships in their theoretical conceptualization of dydactic IPV. Nevertheless, the dyadic dyregulation type can be useful to explain bidirectional IPV in the context of the psychological mediation model of sexual minority stress (Hatzenbuehler, 2009). Experiences of heterosexism and subsequent internalized stigma may exacerbate maladaptive coping skills, such as emotional dysregulation, and may result in mental health problems and/or coping with substance use or abuse, which, in turn, may perpetuate personal violence (Balsam & Szymanski, 2005; Bartholomew, Regan, Oram, & White, 2008; Bartholomew, Regan, White, & Oram, 2008; Brooks, 1981; Carvalho et al., 2011).

The current study seeks to fill many of these gaps in the literature on IPV among SMW in three important ways. The purpose of this study is to identify categories (i.e., classes) of IPV perpetration and victimization among SMW, capturing the bidirectional nature of IPV, and then to examine the extent to which these different classes of IPV are associated with various types of heterosexist discrimination (e.g., work/ school, harassment/rejection, other). Several indices of IPV will be examined in SMW, including victimization and perpetration of psychological, physical, sexual, and injury-inflicting IPV. The sample is comprised of a diverse group of SMW in regard to

race/ethnicity as well as sexual orientation (i.e., including lesbian, bisexual, and queeridentified women) and therefore transcends the limitations of previous literature that has used fairly homogeneous SMW samples.

Method

Participants

Participants (N = 150) were cisgender women who identified as lesbian, bisexual, queer, or an "other" nonheterosexual orientation who were recruited in a national survey of SMW in the United States. They were non-Latino White/European American (29.3%), non-Latino Black/African American (26.0%), Asian/Asian American/Pacific Islander (16.7%), Latino/Hispanic (11.3%), American Indian/Native American (2.7%), Multiracial/Multiethnic (12.7%), and Other (1.3%). Women were required to be 18 years of age or older to be included in the study, and the final sample ranged in age from 18-66 years (M = 31.9; Mdn = 28, SD = 11.95). To assess sexual orientation, participants were asked the question, "Which sexual orientation best describes you?" and were provided with the following response options: Heterosexual AND Transgender, Intersex, or other Gender Identity; Heterosexual; Bisexual; Gay/lesbian; Queer; and Other. Participants who selected "Other" were asked to further specify their sexual orientation via typed response. The authors also included a separate question about gender identity, "What gender label best describes you (select one)?" Response options included Man, Woman, Transman, Transwoman, Intersex, and Other, again with a write-in option. Participants who identified as transgender (regardless of whether they identified as a sexual minority or heterosexual) were not included in the current sample. Participants included in the sample identified as gay or lesbian (38.7%), bisexual (32.7%), and queer or other (28.6%; e.g., pansexual). In terms of education level, women in the study had earned a degree from a 4-year (30.0%) or 2-year (9.3%) college, a graduate degree (30%), a high school diploma or general education diploma (6%), or had attended some college (24.7%). The majority of participants reported an income of \$60,000-199,999 (41.3%); 29.3% reported \$30,000-59,999, 14.7% reported \$15,000-29,999, 11.3% reported \$7,000-14,999, and 3.3% reported \$200,000 or more.

Participants provided consent prior to participation in the institutional review board–approved study. Following completion of the survey, participants were compensated with a \$15 Amazon.com electronic gift card. Participants provided an email address at the end of the survey, and a financial administrator who did not have access to any participant data sent the gift card to the provided email address within approximately 7 days of survey completion.

Procedure

Participants were recruited for a confidential, online survey through several Internet forums and groups. LGBTQ organizations and online LGBTQ social and community

groups were contacted via email with information regarding recruitment for the study. Participants interested in the study were screened by the study coordinator through an email asking how they met criteria for the study, and those who did not respond, provided nonsensical answers, did not meet the inclusion criteria, or appeared to be a computer program were not eligible for the study. The study coordinator provided a link to access the online survey via email, as well a unique code, to those deemed eligible after the screening process.

Throughout data collection, an automatic deletion process was used to safeguard against the high likelihood of obtaining false responses when conducting online research involving participant incentives. Responses were automatically deleted from the survey if there was any indication of false responding (e.g., completion time of less than 20 min or greater than 24 hr), for implausible response patterns (e.g., selecting the first response for every single item on a scale), or if participants did not respond correctly to at least four of six randomly inserted accuracy checks (e.g., "Please select *strongly agree* for this item"). Deletions were completed weekly prior to participant compensation to limit the chances that false participants would be compensated with state funds, as mandated by the host university's information security officer. The number of deleted responses was not recorded and is therefore unknown. The data software used for this study required complete responses for participants to complete the survey, and therefore no data points are missing.

Measures

Participants completed questionnaires assessing experiences with IPV, heterosexism, and demographic information.

Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS). The HHRDS consists of 14 items mapping onto three subscales that assess the frequency of harassment/rejection, work/school, and other heterosexism within the past year. The harassment/rejection subscale taps constructs such as rejection from friends, family members, verbal insults, and harassment due to sexual minority status. The work/ school subscale assesses heterosexist experiences at work or school such as unfair treatment by an employer, boss, or supervisor or in school by a teacher or professor due to sexual minority status. The other heterosexism subscale assesses unfair treatment by individuals in helping professions (e.g., doctors, nurses, psychiatrists, therapists), in service jobs (e.g., waiters, bank tellers), and by strangers due to one's sexual minority status. Participants provide responses to items based on a 6-point Likert-type scale from 1 (the event has never happened to you) to 6 (the event occurred almost all of the time [more than 70% of the time]). To be inclusive, the term "because you are a lesbian" in the items was changed to "because you are an LGBTQ individual." This scale has demonstrated strong internal consistency ($\alpha =$.90) and subscales have demonstrated acceptable internal consistency: harassment/ rejection ($\alpha = .89$), work/school ($\alpha = .84$), other ($\alpha = .78$) in early research with lesbians (Szymanski, 2006).

Revised Conflict Tactics Scale, Short-Form (CTS2S). The CTS2S contains 20 items assessing one's experiences with IPV across two categories (10 items assess perpetration and 10 assess victimization; Straus & Douglas, 2004). Respondents indicate how often they or their partner engaged in various behaviors (e.g., "I pushed, shoved, or slapped my partner"). Four types of IPV victimization and perpetration are examined: Physical Assault, Injury, Psychological Aggression, Sexual Coercion). Each type of IPV is assessed by two items that differ in severity of violence: minor (e.g., "I insisted on sex when my partner did not want to or insisted on sex without a condom (but did not use physical force)") and severe ("I used force (like hitting, holding down, or using a weapon) to make my partner have sex"). Responses from 1 (once in the past year) to 6 (more than 20 times in the past year) indicate frequency of the abuse within the past year, while a response of 7 (not in the past year, but it did happen before) suggests lifetime prevalence, and a response of 8 (this has never happened) indicates the absence of abuse. Responses of 1 to 7 were recoded as 1 (*lifetime prevalence*), while 8 was recoded as 0 (absence). Scores were then summed for each type of IPV within each category, resulting in eight scores of either 0 (no IPV), 1 (minor-only IPV), or 2 (severe IPV) per individual. A score of 1 is an endorsement of having experienced one of the items for that category (designated "minor-only") and a score of 2 is an endorsement of both items for that category (designated "severe"). Internal consistency has been deemed inappropriate for this measure due to the fact that the instrument is not intended to yield a total score, and internal consistency has not been calculated for subscale scores because each consists of only two items (Straus & Douglas, 2004). The scale authors report instead concurrent validity with the full CTS2 scale indexing having been the target of IPV: Physical Assault (r = .69); Injury (r = .94); Sexual Coercion (r = .67); and Psychological Aggression (r = .69).

Data Analyses

Descriptive statistics were calculated regarding the proportion of participants who both experienced victimization and perpetration of the four types of IPV. Then, an overall correlation matrix was run among all eight indices of IPV victimization and perpetration, as well as the three indices of heterosexism.

Latent Gold 5.1 was used to classify participants based on the IPV perpetration and victimization characteristics described above. To identify the underlying class structure among IPV perpetration and victimization, a latent class analysis was conducted to identify the least number of classes that effectively describes the association among observed variables. A successive model-building technique was used in which the number of classes increased from the null, 1-class model until an adequate model fit was achieved. The Bayesian information criterion (BIC), the Akaike information criterion (AIC), and consistent AIC (CAIC) were used to assess model fit to determine a suitable number of latent classes. The bivariate residuals were also examined to test independence of indicators. Parsimony and interpretability were also guiding principles. Finally, a multivariate analysis of variance (MANOVA) was run to determine whether participants in each of the classes from the latent class analysis differed in

their levels of the three types of reported heterosexism. For all analyses, the alpha level was set at .05.

Results

Descriptives and Correlation Matrix

With respect to lifetime IPV, 25.3% of participants reported having been sexually victimized, 34% physically victimized, 76% psychologically victimized, and 29.3% reported suffering an injury as a result of IPV. In terms of perpetration, 10.7% of SMW reported being perpetrators of sexual abuse, 26.7% physical abuse, 72% psychological abuse, and 21.3% having injured a partner as a result of IPV. In the correlation matrix (Table 1), all forms of IPV were significantly correlated with all other forms of IPV at a medium-size effect or larger (all rs > .35). Similarly, all three indices of heterosexism were correlated with each other at a large-size effect (all rs > .66). When looking across indices of IPV and heterosexism, the vast majority of correlations were statistically significant, with the exception of harassment/rejection heterosexism with psychological perpetration, sexual perpetration, injury perpetration, and psychological victimization.

Latent Class Analysis

Eight consecutive latent class models were estimated to identify the underlying class structure within the sample. Four latent classes were identified as the best fitting model. The BIC improved from the 1-class to 4-class models and reduced substantially with more complex models (Table 2). The AIC improved from the 1-class model to the 5-class model before worsening in successive models. The CAIC improved from the 1-class model to the 3-class model and slightly increased with the 4-class model. Thus, models three to five were examined for classification errors, class size, bivariate residuals, parsimony, and interpretability. Due to the negligible improvement from the 4-class to 5-class model, and the low class size of the 3-class model, the 4-class model was selected as the final model. The bivariate residuals for the 4-class model were low (<2.0), classification error was low (<2.0%), and the entropy R^2 was .96.

The response probabilities for each of the eight IPV variables are detailed in Table 3. The following classes were identified:

- 1. *Class 1* (minor-only psychological victimization–perpetration; 36.9%) is characterized by minor-only psychological perpetration and victimization, such as swearing or yelling at one another.
- 2. *Class 2* (no IPV; 26.2%) is characterized by a lack of IPV perpetration or victimization.
- 3. *Class 3* (minor–severe victimization–perpetration; 26.0%) is characterized by minor-only perpetration to minor–severe victimization: specifically characterized by equal probability of minor-only to severe psychological and physical

| Variable | _ | 2 | m | 4 | ъ | 9 | 7 | 80 | 6 | 0 |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| I. Sexual victimization | I | | | | | | | | | |
| 2. Sexual perpetration | .609** | | | | | | | | | |
| 3. Psychological victimization | .541** | .348** | | | | | | | | |
| 4. Psychological perpetration | .409** | .428** | .755** | | | | | | | |
| 5. Physical victimization | .616** | .551** | .664** | .532** | | | | | | |
| 6. Physical perpetration | .539** | .640** | .555** | .645** | .757** | | | | | |
| 7. Injury victimization | .705** | .668** | .573** | .520** | .814** | .684** | | | | |
| 8. Injury perpetration | .530** | .80I** | .418** | .514** | .615** | .758** | .766** | I | | |
| 9. Heterosexism harassment/rejection | .309** | .048 | .138 | .148 | .237** | .246** | .275** | .097 | | |
| 10. Heterosexism work/school | .403** | .254** | .313** | .253** | .406** | .365** | .403** | .284** | .675** | |
| II. Heterosexism other | .381** | .240** | .305** | .302** | .320** | .349** | .392** | .289** | .756** | .660** |

Note. IPV = intimate partner violence. ***p < .01, two-tailed.

| Classes | Parameters | AIC | BIC | CAIC | Entropy R ² | Classification errors |
|---------|------------|---------|---------|---------|------------------------|--------------------------|
| I | 16 | 1,916.3 | 1,964.5 | 1,980.5 | 1.00 | 0.00 |
| 2 | 33 | 1,480.0 | 1,579.3 | 1,612.3 | .94 | 0.01 |
| 3 | 50 | 1,368.4 | 1,519.0 | 1,569.0 | .95 | 0.01 |
| 4 | 67 | 1,316.0 | 1,517.7 | 1,584.7 | .96 | 0.02 |
| 5 | 84 | 1,298.7 | 1,551.6 | 1,635.6 | .97 | 0.01 |
| 6 | 101 | 1,307.8 | 1,611.9 | 1,712.9 | .96 | 0.02 |
| 7 | 118 | 1,318.0 | 1,673.3 | 1,791.3 | .98 | 0.01 |
| 8 | 135 | 1,329.9 | 1,736.4 | 1,871.4 | .98 | 0.01 |

Table 2. Model Fit Information for Latent Class Analyses With 1-8 Latent Classes.

Note. Bold font indicates selected model. AIC = Akaike information criterion; BIC = Bayesian information criterion; CAIC = consistent AIC.

victimization, minor-only physical injury victimization, a low probability of minor-severe sexual victimization, minor to severe psychological perpetration, minor-only physical perpetration, and to a lesser extent minor-only physical injury perpetration.

4. *Class 4* (severe victimization-perpetration; 10.8%) is characterized by severe psychological, sexual, physical, and injury victimization and perpetration.

MANOVA

A MANOVA was run to determine whether participants in each of the four classes from the latent class analysis differed in their levels of the three types of reported heterosexism. The Box's M test for homogeneity of the variance–covariance matrices across design cells was nonsignificant, Box-M = 24.86, F(18, 17095.95) = 1.32, p =.166, providing multivariate support for the homogeneity of variance assumption. Two of the three Levene's tests were significant (harassment/rejection and work/school heterosexism), providing only partial univariate support for the homogeneity of variance assumption. Taken together, these findings suggest that Pillai's trace be used as a more conservative estimate of the *F*-statistic.

The MANOVA revealed a statistically significant medium-sized multivariate effect for IPV class, Pillai's Trace = .230, F(9, 438) = 4.05, p < .001, $\eta^2 = .077$. As a result, post hoc univariate analyses of variance (ANOVAs) were run to identify the location of the significant differences between participants in the four IPV classes on the three forms of heterosexism (Table 4). Participants in Class 4 had higher levels of harassment/rejection than participants in Class 1. Participants in Class 4 reported higher work/school heterosexism than all other classes, and participants in Class 3 reported higher work/school heterosexism than participants in Class 1. Finally, participants in Class 4 reported higher levels of other heterosexism than participants in all other class.

| Class number | | I | 2 | 3 | 4 |
|----------------------------------|----------|---|--------|--|--|
| Class label | | Minor-only psychological victimization– perpetration | No IPV | Minor–severe victimization– perpetration | Severe victimization- perpetration |
| Latent class me probabilities | mbership | .37 | .26 | .26 | .11 |
| Indicator | Loading | | | Parameters | |
| Sexual Vic | .56 | | | | |
| 0 | | .91 | .87 | .65 | .13 |
| I | | .07 | .13 | .15 | .00 |
| 2 | | .02 | .00 | .20 | .86 |
| Psych Vic | .75 | | | | |
| 0 | | .02 | .88 | .00 | .00 |
| I | | .91 | .09 | .51 | .13 |
| 2 | | .07 | .03 | .49 | .87 |
| Physical Vic | .81 | | | | |
| 0 | | 1.00 | .99 | .12 | .01 |
| I | | .00 | .01 | .48 | .06 |
| 2 | | .00 | .00 | .41 | .93 |
| Injury Vic | .73 | | | | |
| 0 | | 1.00 | .97 | .32 | .01 |
| I | | .00 | .03 | .56 | .06 |
| 2 | | .00 | .00 | .13 | .93 |
| Sexual Perp | .78 | | | | |
| 0 | | .98 | 1.00 | .95 | .20 |
| I | | .02 | .00 | .03 | .00 |
| 2 | | .00 | .00 | .03 | .80 |
| Psych Perp | .79 | | | | |
| 0 | | .00 | .94 | .12 | .00 |
| I | | .91 | .06 | .62 | .01 |
| 2 | | .09 | .00 | .26 | .99 |
| Physical Perp | .75 | | | | |
| 0 | | .96 | 1.00 | .44 | .01 |
| I | | .04 | .00 | .43 | .01 |
| 2 | | .00 | .00 | .13 | .98 |
| Injury Perp | .78 | | | | |
| 0 | | 1.00 | .94 | .62 | .08 |
| I | | .00 | .06 | .38 | .00 |
| 2 | | .00 | .00 | .00 | .92 |

 Table 3. Probabilities for Model of Four IPV Perpetration and Victimization Latent Classes.

Note. IPV = Intimate partner violence; Perp = Perpetration; Vic = Victimization.

| Class number | I | 2 | 3 | 4 |
|----------------------|---|-------------------------|--|--|
| Class label | Minor-only psychological victimization– perpetration | No IPV | Minor–severe victimization– perpetration | Severe victimization– perpetration |
| Harassment/rejection | 2.23 (.81) | 2.30 (.87) | 2.55 (1.24) | 2.87 (.91) |
| Work/school | 1.55 (.65) _{ab} | 1.58 (.69) | 1.91 (1.05) _{ad} | 2.66 (.88) _{bcd} |
| Other heterosexism | 2.00 (.90) | 1.78 (.89) _b | 2.11 (1.10) _c | 3.19 (1.10) _{abc} |

Table 4. Means and (Standard Deviations) of Heterosexism by IPV Class.

Note. Means sharing the same subscript within a row were significantly different at p < .05. IPV = intimate partner violence.

A post hoc power analysis for global effects was conducted to determine the achieved power of the MANOVA *F*-test with a sample size of 150, four groups, and three response variables, and with an alpha level of .05 using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009), which achieved power of .97 for small-size effects.

Discussion

The goal of the present study was to explore patterns of IPV victimization and perpetration among SMW, as well as the connections between those patterns and past experiences of heterosexism. A latent class analysis found that four distinct behavioral patterns emerged, providing support for a bidirectional relationship between victimization and perpetration across multiple types of IPV among SMW. Individuals who perpetrate a given type of violence were also likely to be a victim of the same type of violence. Significant differences emerged among classes on levels of experience with heterosexism, such that individuals who both experienced and/or perpetrated all types of violence (class 4) experienced the greatest levels of heterosexism at work, school, and in other contexts. The present latent class analysis helps to better understand the patterns of IPV victimization and perpetration with regard to type and severity among SMW and the contributing role of heterosexism to these patterns of IPV.

IPV Classes

As with much of the prior research (Badenes-Ribera et al., 2015), our study identified the presence of IPV among SMW. Four classes emerged in the latent class analysis. Only 26% of the sample had little to no probability of any form of IPV victimization and perpetration (class 2), which is likely due to the inclusion of psychological IPV as an indicator—the primary reported type of IPV in the present sample as well as other national samples of IPV (Messinger, 2011; Walters et al., 2013). While motivation for IPV was not assessed in the present study (e.g., coercive control, retaliation), it is notable that all classes were bidirectional such that they included both IPV victimization

and perpetration. The most prevalent class was minor-only psychological victimization-perpetration (37%), followed by minor-severe victimization/minor-only perpetration (26%), and severe victimization-perpetration (11%). The current pattern of results highlights that violence manifests itself among SMW not solely based on its presence or absence, but also upon extent, with the presence of minor forms of violence as the most common. While this is encouraging, it must be contextualized by the fact that SMW have reported higher prevalence of psychological, physical, and sexual IPV compared with heterosexual women (Badenes-Ribera et al., 2015; Walters et al., 2013). Indeed, the current rates in this sample (25% sexual; 34% physical; 29% physical injury; 76% psychological IPV victimization) are in line with the population-based prevalence rates among SMW (22% rape; 40-57% physical, 63-76% psychological IPV victimization; Walters et al., 2013), although direct comparison is difficult due to use of different measures.

A pattern emerged that classes are also reflective of the types of violence reported by SMW. The largest class (Class 1) was defined by minor-only psychological violence, followed by Class 3 which was primarily characterized by psychological and physical violence with some sexual violence, and finally Class 4 characterized by all forms of violence. Prior work has generally found similar results of psychological victimization identified as the most prevalent form of abuse among lesbian women (Badenes-Ribera et al., 2015) and that SMW are more likely to report psychological victimization and perpetration compared with physical and sexual aggression (Lewis et al., 2012; Matte & Lafontaine, 2011). This is in line with the current results detecting psychological violence as the largest and most probable class in part due to the greater prevalence rates for this type of violence.

When psychological violence has been examined with other types of violence, results similarly show a significant association with physical violence victimization and perpetration among SMW (Matte & Lafontaine, 2011), which bolsters the identification of some classes characterized by both psychological and physical violence (e.g., Classes 3 and 4 in the current study). Experiences of sexual IPV did not group as strongly with Class 3, which was characterized by minor-severe physical/psychological victimization and minor-only physical/psychological perpetration. Rather, sexual violence was found to be most probable when all forms of violence are considered in Class 4. A prior latent class analysis identified 3 classes of physical, sexual, and stalking IPV victimization, ranging from more minor physical victimization to systematic abuse across physical and sexual victimization among a national probability sample of men and women (Carbone-López, Kruttschnitt, & Macmillan, 2006), though their sample reported a lower overall probability of membership of the most severe class (4%) when compared with the current study (11%), likely due to the exclusion of psychological IPV and perpetration. This mirrors other work that has identified a small proportion of women who experience multiple forms of violence (Miller, 2006).

In addition to type and extent of IPV as important characteristics, study results further suggested that psychological, physical, and sexual IPV are bidirectional among SMW. In fact, all classes identified were bidirectional in nature. Classes 3 and 4 (minor–severe perpetration–victimization) may reflect forms of dyadic couple violence or dyadic domination (Langhinrichsen-Rohling, 2010). Given that Class 3 was defined by more severe experiences of victimization versus perpetration, this group may reflect the dyadic couple violence type, which is characterized by aggressive retaliation that is motivated in reaction to perceived emotional or physical abuse. Messinger (2014) has argued that there is debate about the intent of IPV perpetration, for example, with a victim using violence in self-defense, but conclusive supporting evidence is still lacking as to the intention of this bidirectionality. Class 4 may reflect the dyadic domination type, which is classified by both partners exerting power over the other (Langhinrichsen-Rohling, 2010). Research with LGBTQ individuals (Bartholomew, Regan, Oram, & White, 2008; Carvalho et al., 2011; Edwards & Sylaska, 2013; Matte & Lafontaine, 2011; Renner & Whitney, 2010) and the literature more broadly (Johnson, 2006; Langhinrichsen-Rohling, 2010) illustrate similar findings that IPV is bidirectional, wherein respondents indicate both perpetration and victimization. In an effort to be inclusive of the range of gender identities of SMW and their partners, information about the gender of the partner was not asked as a gender binary (e.g., partner is same- or opposite-gender), which would not have fully reflected the diverse relationships of SMW. This is an area ripe for future work, as little is known about the mechanisms that drive IPV in bisexual and queer women.

Class Differences in Heterosexism

The current findings indicate that for SMW, experiences of heterosexism at work, school, and in other contexts may be especially important for understanding potential mechanisms driving violence in intimate relationships. These results add to the prior literature (Balsam & Szymanski, 2005; Lewis et al., 2012) that has identified an association between minority stress and IPV among SMW and also extends this work in a number of ways. Specifically, this study found that in addition to internal minority stressors, heterosexism experienced at work, school, and in other contexts (e.g., unfair treatment by strangers, and people in helping and service professions; external minority stressors) may be especially important in understanding IPV. One reason for this may stem from the pervasiveness of heterosexism and sexism in these contexts and the inability of SMW to escape it. While SMW may be able to avoid experiences of harassment and rejection by friends and family members by circumventing individuals, it may be substantially more challenging to do so in work, school, and other contexts given the institutional nature of heterosexism and sexism in society. This is manifested in the general lack of federal protections for sexual minority people in various domains including school and the workplace (Pizer, Mallory, Sears, & Hunter, 2012), as well as the presence of religious freedom laws across multiple states that allow private citizens and public officials professing a sincere religious belief to refuse service to individuals that go against such beliefs, namely, sexual minority individuals.

More pervasive experiences of heterosexism, by extension, may also help explain the systematic differences among the four latent classes. Broadly speaking, individuals who reported the greatest levels of heterosexism were also more likely to report the most violence both in type and extent. Individuals in this group were subjected to greater levels of work, school, and other heterosexism when compared with all other classes, and also reported greater harassment and rejection compared with the class characterized solely by psychological violence. SMW who reported minor up to major violence (Class 3) also evidenced higher levels of work and school harassment compared with individuals reporting psychological violence.

These results are generally supported by prior work that has identified lifetime antigay discrimination as a significant predictor of lifetime IPV perpetration and victimization and internalized heterosexism as a unique predictor of IPV perpetration (Balsam & Szymanski, 2005). For instance, some perpetrators may engage in violence in an attempt to cope with minority stress (Balsam & Szymanski, 2005; Bartholomew, Regan, White, & Oram, 2008; Brooks, 1981; Carvalho et al., 2011). It is possible that experiencing a loss of power or control at work or school may result in an individual's attempts to gain power and control in other contexts, such as romantic relationships. This may reflect Langhinrichsen-Rohling's (2010) dyadic-dysregulation IPV-type, where partners lack the ability to regulate their emotions and behavior, which may be attributed to minority stress (Hatzenbuehler, 2009). Meanwhile, other research indicates that victims with high degrees of internalized heterosexism may perceive themselves to be "defective" and deserving of abuse (Balsam & Szymanski, 2005). While the current study is unable to determine directionality of the relationship between heterosexist experiences and IPV, these results help illuminate the nuanced relationship between heterosexism and IPV among SMW. The pervasiveness by which heterosexism operates in the workplace, school, and other environments indicates that, in light of the current results and prior research, heterosexist events in these contexts may be especially important for understanding factors that may contribute to IPV among SMW. Policies that protect against heterosexism at work, school, and in other contexts may have a direct impact on IPV among SMW, though future work is necessary to substantiate these claims.

Limitations and Future Directions

Several limitations should be considered in the interpretation of the current results. First, sexual minority–specific IPV was not assessed in the current study. While there are similarities between heterosexual and sexual minority IPV, there are unique forms of abuse experienced by sexual minorities in same-gender couples, including homophobic control which includes threatening to reveal the sexual orientation of the partner to family, friends, employers; reinforcing internalized heterosexism by telling the partner that they deserve the abuse for being a sexual minority woman; and forcing the partner to show real and sexual affection in public (Badenes-Ribera et al., 2015; Balsam & Szymanski, 2005). This form of violence can result in a variety of negative consequences for the victim including loss of employment, housing, or children (West, 2002). Therefore, future studies should be mindful of including sexual minority–specific violence when examining IPV among sexual minority populations.

In addition, the current sample was limited by its sociodemographic makeup. The sample was well-educated, of higher socioeconomic status, and consisted of only cisgender women. SMW are more likely to face academic challenges and to have worse educational outcomes than their heterosexual counterparts, with bisexual women being particularly at risk (Mollborn & Everett, 2015). The generally high educational attainment of the current sample may not generalize to the broader community of SMW; however, this may be offset by the diversity in race/ethnicity and sexual orientations (i.e., inclusion of queer women). Future studies should aim to replicate this diversity but also aim to target SMW from a broader range of socioeconomic statuses. Transgender and gender-nonconforming individuals may experience even greater risk of IPV than cisgender sexual minority individuals (Langenderfer-Magruder, Whitfield, Walls, Kattari, & Ramos, 2016). This is particularly alarming because transgender and gender-nonconforming individuals are more likely to report inequitable treatment among domestic violence programs, particularly transgender people of color and those with disabilities (Seelman, 2015). Due to the unique needs of this population, future studies should ensure that IPV and transgender and gender-nonconforming-specific correlates are assessed. Furthermore, state/geographic location was not considered during data collection, so differences in heterosexism by region (e.g., regions with non-discrimination policies) were not assessed, although this is an important area for future study.

The sociodemographic attributes of the sample may result from the sampling methods used for this study (i.e., traditionally LGB-centric online groups and forums), where a very particular subset of the population may choose to openly engage in these types of communities (typically politically active, "out" individuals; see Greenwood et al., 2002) and this may limit generalizability. Conversely, other venues that scholars of opposite-sex IPV also utilize such as hospitals and shelters pose their own limitations, as a very particular kind of individual will have access to or confidence in seeking care services (e.g., those with health insurance or who are not hindered by the fear of retaliation, revictimization, or outing; see K. L. Anderson, 2005). Therefore, online sampling may have circumvented some of these issues.

In addition, the inference of directionality of the association between heterosexism and IPV perpetration and/or victimization was limited by the cross-sectional study design. Due to the strong correlations between perpetration and victimization, it remains unclear whether the differences between heterosexism among IPV classes are primarily driven through the experience of victimization, perpetration, or both. Without temporal precedence, it is impossible to know the order of events between heterosexism, victimization, and perpetration. It is imperative to the understanding of these associations that data are collected longitudinally to determine directionality, as well as the temporal correlates of the events (e.g., IPV motive).

With regard to sample size, the sample was limited to 150 SMW. Although for parameters outlined in the results of the post hoc power analysis, the MANOVA was adequately powered, a larger sample size would be ideal for the latent class analysis. For the latent class analysis, because there are eight indicators and larger factor loadings (majority > .73), the model is more likely to converge (Gagné & Hancock, 2006),

so there is less concern about the sample being smaller than 200, as some recommend (e.g., J. C. Anderson & Gerbing, 1984). Nevertheless, future studies should collect larger samples to enhance reliability and generalizability of findings.

Finally, the current study examined SMW as a collective group and did not take into account any potential differences in IPV among SMW. Some research has reported that the prevalence of IPV may be higher among bisexual individuals and that IPV may be more likely to be perpetrated by an opposite-gender partner (Goldberg & Meyer, 2013; Lewis et al., 2012), suggesting that IPV may operate differently within this population. Further work in this area should examine IPV separately among bisexual women to more fully understand the nature of IPV among women from diverse sexual orientations. In particular, the identification of bidirectional IPV of various types among the present sample emphasizes a need for studies to consider both victimization and perpetration, all forms of IPV (e.g., psychological), as well as gender and sexual identity.

Conclusion

IPV is an experience that too many SMW encounter and that can have profound, lasting negative consequences. The current study sought to fill multiple gaps in the literature on IPV among SMW. Findings revealed four distinct patterns of violence against SMW categorized by presence, type, and extent of violence with particular classes around little to no IPV, psychological violence, psychological and physical violence, and all forms of violence. The results suggest that IPV is bidirectional, with SMW reporting both perpetration and victimization. In addition, SMW who experience the greatest levels of heterosexism were also more likely to report the most types and greatest extent of violence, with heterosexism at work, school, and other environments being particularly problematic and vital for our understanding of the mechanisms by which IPV may operate among SMW. The findings suggest that adoption of policies that protect against anti-LGB discrimination and interventions with SMW that target processing heterosexist experiences may be vital in preventing and coping with violence among SMW.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The survey software for this study was funded by award number UL1TR000058 from the National Center for Research Resources.

References

Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika*, 49, 155-173.

- Anderson, K. L. (2005). Theorizing gender in intimate partner violence research. *Sex Roles*, *52*, 853-865.
- Badenes-Ribera, L., Frias-Navarro, D., Bonilla-Campos, A., Pons-Salvador, G., & Monterde-i-Bort, H. (2015). Intimate partner violence in self-identified lesbians: A meta-analysis of its prevalence. *Sexuality Research and Social Policy*, 12, 47-59.
- Badgett, M. V. L., & Frank, J. (Eds.). (2007). Sexual orientation discrimination: An international perspective. London, England: Routledge.
- Balsam, K. F. (2001). Nowhere to hide: Lesbian battering, homophobia, and minority stress. Women & Therapy, 23, 25-37.
- 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.
- Balsam, K. F., & Szymanski, D. M. (2005). Relationship quality and domestic violence in women's same-sex relationships: The role of minority stress. *Psychology of Women Quarterly*, 29, 258-269.
- Barrett, B. J., & St. Pierre, M. (2013). Intimate partner violence reported by lesbian-, gay-, and bisexual-identified individuals living in Canada: An exploration of within-group variations. *Journal of Gay & Lesbian Social Services*, 25, 1-23.
- Bartholomew, K., Regan, K. V., Oram, D., & White, M. A. (2008). Correlates of partner abuse in male same-sex relationships. *Violence & Victims*, 23, 344-360.
- Bartholomew, K., Regan, K. V., White, M. A., & Oram, D. (2008). Patterns of abuse in male same-sex relationships. *Violence & Victims*, 23, 617-636.
- Brand, P. A., & Kidd, A. H. (1986). Frequency of physical aggression in heterosexual and female homosexual dyads. *Psychological Reports*, 59, 1307-1313.
- Brooks, V. R. (1981). Minority stress and lesbian women. Lexington, MA: D.C. Heath.
- Carbone-López, K., Kruttschnitt, C., & Macmillan, R. (2006). Patterns of intimate partner violence and their associations with physical health, psychological distress, and substance use. *Public Health Reports*, 121, 382-392.
- Carvalho, A. F., Lewis, R. J., Derlega, V. J., Winstead, B. A., & Viggiano, C. (2011). Internalized sexual minority stressors and same-sex intimate partner violence. *Journal of Family Violence*, 26, 501-509.
- Cochran, S. D., Sullivan, J. G., & Mays, V. M. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, 71, 53-61.
- Coker, A. L., Smith, P. H., McKeown, R. E., & King, M. J. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *American Journal of Public Health*, 90, 553-559.
- Cunradi, C. B., Caetano, R., & Schafer, J. (2002). Socioeconomic predictors of intimate partner violence among white, black, and Hispanic couples in the United States. *Journal of Family Violence*, 17, 377-389.
- Edwards, K. M., & Sylaska, K. M. (2013). The perpetration of intimate partner violence among LGBTQ college youth: The role of minority stress. *Journal of Youth and Adolescence*, *42*, 1721-1731.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.

- Fergusson, D. M., Horwood, L. J., Ridder, E. M., & Beautrais, A. L. (2005). Suicidal behaviour in adolescence and subsequent mental health outcomes in young adulthood. *Psychological Medicine*, 35, 983-993.
- Fortunata, B., & Kohn, C. S. (2003). Demographic, psychosocial, and personality characteristics of lesbian batterers. *Violence & Victims*, 18, 557-568.
- Gagné, P., & Hancock, G. R. (2006). Measurement model quality, sample size, and solution propriety in confirmatory factor models. *Multivariate Behavioral Research*, 41, 65-83.
- Goldberg, N. G., & Meyer, I. H. (2013). Sexual orientation disparities in history of intimate partner violence: Results from the California Health Interview Survey. *Journal of Interpersonal Violence*, 28, 1109-1118.
- Greenwood, G. L., Relf, M. V., Huang, B., Pollack, L. M., Canchola, J. A., & Catania, J. A. (2002). Battering victimization among a probability-based sample of men who have sex with men. *American Journal of Public Health*, 92, 1964-1969.
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin*, 135, 707-730.
- Herek, G. M. (2004). Beyond "homophobia": Thinking about sexual prejudice and stigma in the twenty-first century. *Sexuality Research and Social Policy*, 1, 6-24.
- Herek, G. M. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*, 24, 54-74.
- Hughes, T., Szalacha, L. A., & McNair, R. (2010). Substance abuse and mental health disparities: Comparisons across sexual identity groups in a national sample of young Australian women. *Social Science & Medicine*, 71, 824-831.
- Johnson, M. P. (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. Violence Against Women, 12, 1003-1018.
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8, Article 70. doi:10.1186/1471-244X-8-70
- Langenderfer-Magruder, L., Whitfield, D., Walls, N., Kattari, S., & Ramos, D. (2016). Experiences of intimate partner violence and subsequent police reporting among lesbian, gay, bisexual, transgender, and queer adults in Colorado. *Journal of Interpersonal Violence*, 31, 855-871.
- Langhinrichsen-Rohling, J. (2010). Controversies involving gender and intimate partner violence in the United States. Sex Roles, 62, 179-193.
- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of Consulting and Clinical Psychology*, 79, 159-170.
- Lewis, R. J., Milletich, R. J., Kelley, M. L., & Woody, A. (2012). Minority stress, substance use, and intimate partner violence among sexual minority women. *Aggression and Violent Behavior*, 17, 247-256.
- Lie, G. Y., & Gentlewarrier, S. (1991). Intimate violence in lesbian relationships: Discussion of survey findings and practice implications. *Journal of Social Service Research*, 15, 41-59.
- Longobardi, C., & Badenes-Ribera, L. (2017). Intimate partner violence in same-sex relationships and the role of sexual minority stressors: A systematic review of the past 10 years. *Journal of Child and Family Studies*, 26, 2039-2049.
- Matte, M., & Lafontaine, M. F. (2011). Validation of a measure of psychological aggression in same-sex couples: Descriptive data on perpetration and victimization and their association with physical violence. *Journal of GLBT Family Studies*, 7, 226-244.

- 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.
- Messinger, A. M. (2011). Invisible victims: Same-sex IPV in the National Violence Against Women Survey. *Journal of Interpersonal Violence*, 26, 2228-2243.
- Messinger, A. M. (2014). Marking 35 years of research on same-sex intimate partner violence: Lessons and new directions. In D. Peterson & V. R. Panfil (Eds.), *Handbook of LGBT communities, crime, and justice* (pp. 65-85). New York, NY: Springer Science+Business Media.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, *36*, 38-56.
- 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.
- Miller, J. (2006). A specification of the types of intimate partner violence experienced by women in the general population. *Violence Against Women*, *12*, 1105-1131.
- Mollborn, S., & Everett, B. (2015). Understanding the educational attainment of sexual minority women and men. *Research in Social Stratification and Mobility*, *41*, 40-55.
- Pizer, J., Mallory, C., Sears, B., & Hunter, N. (2012). Evidence of persistent and pervasive workplace discrimination against LGBT people: The need for federal legislation prohibiting discrimination and providing for equal employment benefits. *Loyola of Los Angeles Law Review*, 45, 715-779.
- Renner, L. M., & Whitney, S. D. (2010). Examining symmetry in intimate partner violence among young adults using socio-demographic characteristics. *Journal of Family Violence*, 25, 91-106.
- Renzetti, C. M. (1992). Violent betrayal: Partner abuse in lesbian relationships. Newbury Park, CA: Sage.
- Russell, S. T., Franz, B. T., & Driscoll, A. K. (2001). Same-sex romantic attraction and experiences of violence in adolescence. *American Journal of Public Health*, 91, 903-906.
- Seelman, K. (2015). Unequal treatment of transgender individuals in domestic violence and rape crisis programs. *Journal of Social Service Research*, *41*, 307-325.
- Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence & Victims*, 19, 507-520.
- Szymanski, D. M. (2006). Does internalized heterosexism moderate the link between heterosexist events and lesbians' psychological distress? *Sex Roles*, *54*, 227-234.
- Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008). Internalized heterosexism: Measurement, psychosocial correlates, and research directions. *The Counseling Psychologist*, 36, 525-574.
- Tjaden, P., & Thoennes, N. (2000). Prevalence and consequences of male-to-female and femaleto-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women*, 6, 142-161.
- Walters, M. L., Chen, J., & Breiding, M. J. (2013). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Findings on victimization by sexual orientation. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- West, C. M. (2002). Lesbian intimate partner violence: Prevalence and dynamics. *Journal of Lesbian Studies*, 6, 121-127.

Author Biographies

Megan E. Sutter, PhD, is a postdoctoral research fellow in Behavioral Oncology at Moffitt Cancer Center in Tampa, Florida. She received her doctorate in Health Psychology from Virginia Commonwealth University where she studied the behavioral health effects of stigma. Driven by community-based participatory research methodology and intersectionality theory, she is interested in developing multilevel interventions to address health disparities among medically underserved populations.

Annie E. Rabinovitch, MS, is a sixth-year doctoral student in the Clinical Psychology program at Virginia Commonwealth University. Her research interests focus broadly on minority mental health and in particular the impact of psychosocial stressors on mental health outcomes among marginalized populations. She is currently completing a predoctoral residency at Kennedy Krieger Institute/Johns Hopkins University Medical Center in Baltimore, Maryland.

Michael A. Trujillo, PhD, is a post-doctoral fellow in Health Psychology at the University of California, San Francisco. He is interested in the effects of stigma-related stressors on health outcomes and the culturally adaptive coping strategies that mitigate this distress in diverse populations.

Paul B. Perrin, PhD, is an associate professor and the director of the Health Psychology Doctoral Program at Virginia Commonwealth University. He received his PhD in Counseling Psychology from the University of Florida, and his research area is social justice in health.

Lisa D. Goldberg, MS, received her Bachelor of Arts in Psychology from Brandeis University. After graduation, she worked for 2 years as a full-time research assistant for Bradley Hospital/ Brown University. She subsequently worked for 2 years as a Resiliency Services Coordinator with FOCUS (Families OverComing Under Stress), a military resilience training program. She earned her Master of Science in Psychology from Virginia Commonwealth University in 2014. She is currently completing her clinical psychology internship at the Malcolm Grow Medical Clinics & Surgery Center at Joint Base Andrews, after which she will work as an Air Force psychologist.

Bethany M. Coston, PhD, assistant professor of Health and Queer Studies at Virginia Commonwealth University, is a sociologically trained activist scholar who has spent time in the midwest and on the east coast educating, protesting, and participating in research on the making of sexual identities, violence, health and wellness and community-based organizing. Bethany spends most of their time with grassroots organizations/groups that work to end LGBTQ+ intimate partner violence and make victims'/survivors' lives better in the process. Bethany is a former predoctoral population health fellow with the National LGBT Health Education Center at Fenway Health and currently a Robert Wood Johnson Foundation New Connections scholar.

Jenna M. Calton, PhD, completed undergraduate degrees in psychology and women's studies at the University of Florida. She earned her PhD in clinical psychology from George Mason University. She is currently a postdoctoral fellow at the Tree House Child Advocacy Center of Montgomery County, Maryland, where she delivers evidence-based trauma-focused treatment to children and adolescents who have experienced trauma. Her research interests include intimate partner violence (IPV) prevention and intervention efforts, IPV survivors' perceptions of procedural and distributive justice, and barriers to help-seeking for survivors of IPV.