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Minority stress, substance use, and intimate partner violence among sexual minority women

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ABSTRACT

Compared to the research literature on intimate partner violence (IPV) in heterosexual relationships, our understanding of IPV among sexual minority women (SMW) lags far behind. This paper reviews the literature regarding the prevalence of IPV among SMW and discusses disparities between SMW and heterosexual women. Methodological issues in this area are also discussed. Moreover, we review associations among substance use, sexual minority stress, and IPV in this population. Finally, potential protective factors, such as social and community support, identity, mastery, and coping, are examined. As researchers and clinicians work to improve the health of SMW it is important to consider the associations among relationship violence, substance use, and minority stress. Moreover, it is essential to understand what factors may promote adjustment among SMW.

Contents

1. Introduction

In 1999, the Institute of Medicine (IOM) issued its first report that specifically addressed sexual minority women's health. This report highlighted the needs of this underserved population and set forth a research agenda to investigate and ultimately address health disparities that result from sexual orientation. The most recent IOM report (2011) on the health of sexual minorities emphasized that sexual minorities continue to experience unique health disparities. In particular, compared to heterosexuals, lesbian, gay, and bisexual (LGB) youth and adults have higher rates of substance use and alcohol consumption and experience more violence and discrimination. In order to obtain a more complete understanding of LGB health, the IOM recommended

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that researchers use "cross-cutting perspectives" that include: 1) minority stress, 2) life course, 3) intersectionality, and 4) social ecology. The report further suggests that additional research is needed in the areas of intimate partner violence (IPV) and substance use among sexual minority women (IOM, 2011).

Consistent with the IOM (2011) recommendations, in the present paper, we use the perspectives of minority stress and social ecology (e.g., social and community support) and consider the relationship between substance use and IPV. First, we review the literature on IPV in women's same-sex relationships. Second, we consider substance use in sexual minority women (SMW) and its relationship to IPV. Third, we examine the relationship between minority stress and both substance use and IPV. Although it is clear that SMW experience unique stressors related to their sexual orientation, the majority of these women do not have significant substance problems (e.g., McCabe, Hughes, Bostwick, West, & Boyd, 2009) or experience violence in their relationships (e.g., Matte & LaFontaine, 2011). Therefore, we also consider how social and community support as well individual resources related to identity, coping and mastery may help SMW deal with minority stress, in turn decreasing negative outcomes. Finally, we present directions for future research.

2. IPV among sexual minority women

Intimate partner violence (IPV) is a term that encompasses any behavior within an intimate relationship that causes physical, psychological, or sexual harm to those in the relationship (Harvey, Garcia-Moreno, & Butchart, 2007; Heise & Garcia-Moreno, 2002). According to the Centers for Disease Control and Prevention (CDC), IPV includes four types of behaviors: physical violence, sexual violence, threats, and emotional abuse (CDC, 2011). Physical violence consists of acts such as hitting, kicking, grabbing, assaulting with a weapon, and other forms of physical force that are intended to inflict physical harm against an intimate partner. Sexual violence includes verbal and physical behaviors that are used to force a partner to take part in a sexual act against their consent. Threats are a form of emotional abuse that include the use of words, gestures, weapons, and other behaviors to communicate the intent to cause harm against an intimate partner. Emotional abuse describes both verbal and nonverbal behaviors that are intended to denigrate, humiliate, intimate, isolate, and control one's partner. For the purposes of this review, the terms IPV, partner abuse, and partner violence will be used interchangeably.

Despite significant changes in scope, focus, and treatment practices for perpetrators and victims of IPV over the past several decades (e.g., see Barner & Carney, 2011 for a review), violence against women remains a significant public health problem in the United States. Data from the Bureau of Justice Statistics estimated that in 2008, females aged 12 and older experienced approximately 552,000 nonfatal violent victimizations (defined as rape or sexual assault, robbery, or aggravated or simple assault) by a current or former spouse, boyfriend, or girlfriend (Bureau of Justice Statistics, 2009). Further, females comprised 70% of the total estimated number of intimate partner homicide victims in 2007. The costs of IPV associated with medical care for treating injuries, mental health services for rehabilitating batterers and victims, and lost time in productivity are approximated to be over $8 billion (CDC, 2011). Clearly, these data indicate that IPV is an irrefutable problem that poses serious health consequences for women. Yet, when examining the extant IPV literature, it becomes clear that the majority of studies have focused on violence that occurs in heterosexual dyads.

2.1. Prevalence of IPV among sexual minority women

Given that IPV is a multifaceted construct, rather than focus on all types of violent behaviors, researchers have focused on specific types of aggression. In particular, given the potential life-threatening consequences, the most widely researched type of IPV is physical aggression. Estimates of physical aggression among women in same-sex relationships echo those reported in heterosexual relationships. Early work by Brand and Kidd (1986) found that the prevalence of physical abuse by an intimate partner was 25% for lesbians and 27% for heterosexual women. Other research using data from the National Violence Against Women Survey (NVAWS) found that men and women with a history of same-sex relationships reported more IPV than those with a history of only heterosexual relationships (Tjaden & Thoennes, 2000; Tjaden, Thoennes, & Allison, 1999). Among the 7178 opposite-sex female cohabitants, 21.7% had experienced lifetime intimate partner violence (operationalized as rape, physical assault, or stalking). Among the 79 women who had lived with a same-sex partner during their lifetime, 39.2% reported lifetime intimate partner violence (Tjaden & Thoennes, 2000). However, closer inspection of these findings revealed that among same-sex cohabiting women who had experienced lifetime partner violence, approximately 30% reported being victimized by a man, compared to 11% who reported being victimized by a woman. It is difficult to interpret these findings as it appears that women with a history of same-sex relationships were more likely to be victimized by a man. Also, the NVAWS did not ask participants to identify as gay, lesbian, bisexual, or heterosexual. Rather, sexual orientation was determined based on whether individuals resided with a same-sex partner. More recent studies have found estimates of physical abuse ranging from 15% to 46% for lesbian and bisexual (LB) women (Burke, Jordan, & Owen, 2002; Eaton et al., 2008; Matte & LaFontaine, 2011; Messinger, 2011; Miller, Greene, Causby, White, & Lockhart, 2001; Telesco, 2003).

A recent paper based on the same NVAWS dataset employed multivariate techniques to control for important demographic variables such as education, income, age, and race/ethnicity. Again, using a nationally representative probability sample, men and women with a history of same-sex relationships were more likely than heterosexuals to experience IPV (Messinger, 2011). Specifically, Messinger examined four types of IPV: verbal aggression (i.e., verbal tactics that humiliate, hurt, or isolate a partner), controlling behaviors (i.e., attempts to control one's partner's behaviors and thoughts), physical aggression (i.e., physical threats, attacks), and sexual aggression (i.e., attempt or completion of sexual penetration by use of force). Although Messinger refers to participants as "GLB," they were categorized as GLB based on whether they had ever been in a cohabitating same-sex relationship. Even with that limitation, individuals with a history of same-sex relationships were approximately twice as likely to report all types of IPV.

2.2. Types of IPV

The extant literature suggests that the types of abuse experienced by SMW are analogous to those of heterosexual women. Specifically, SMW are most likely to report psychological abuse. For example, in a sample of 143 women in same-sex relationships, Matte and LaFontaine (2011) reported that rates of psychological abuse perpetration and victimization were 76.2% and 70.2%, respectively, whereas rates of physical abuse perpetration and victimization were substantially lower at 14.7% and 16.1%, respectively. These results are similar to those reported by Messinger (2011) who found women with a history of same-sex relationships were more likely to report experiencing verbal aggression (69%) or controlling behaviors (77%) as compared to physical (36%) and sexual (11%) aggression.

Similar to heterosexual couples, research has documented the co-occurrence of psychological and physical aggression in sexual minority couples (Burke et al., 2002; Lie & Gentlewarrier, 1991; Lockhart, White, Causby, & Isaac, 1994; Renzetti, 1988; Telesco, 2003). Matte and LaFontaine (2011) found that for SMW, reports of physical aggression perpetration and psychological aggression perpetration were highly correlated ($r = .51$). Likewise, reports of physical aggression victimization and psychological aggression victimization were also correlated

($r = .40$). These results suggest that for both perpetrators and victims, physical aggression is correlated with psychological aggression.

In regards to sexual abuse, the literature is less consistent. For instance, in a recent review of 11 studies, Rothman, Exner, and Baughman (2011) found that rates of intimate partner sexual assaults among LB women ranged from 2% to 45%. However, across studies the median percentage of women who reported sexual assault was approximately 13%. This estimate is consistent with the recent report from Messinger (2011) who found that 11% of same-sex cohabitating women reported sexual IPV.

Although a paucity of research has examined differences in IPV between lesbian and bisexual women, preliminary data suggest differences may exist. For instance, Balsam and Szymanski (2005) found that as compared to lesbians, bisexual women were more likely to report perpetrating LGB-specific tactics of psychological aggression (e.g., "I forced my partner to show physical or sexual affection in public, even though she didn't want to") against their female partners. However, lesbians were more likely to report lifetime psychological aggression against a female partner. Messinger (2011) reported that for women with a history of same-sex relationships, frequencies of IPV victimization were approximately 44%, 56%, 25%, and 4% for verbal, controlling, physical, and sexual IPV, respectively. For bisexual women (i.e., women with a history of both same- and opposite-sex relationships), reported frequencies were substantially higher with rates of IPV victimization of approximately 83%, 91%, 43%, and 16% for verbal, controlling, physical, and sexual IPV, respectively. However, it is important to note that the frequencies at which bisexual women reported experiencing IPV reflect victimization from a same-sex *and* an opposite-sex partner. Consequently, when considering the number of women who reported experiencing IPV from *only* a same-sex partner, the frequencies of IPV victimization are substantially lower with frequencies of approximately 13%, 7%, 6%, and 0% for verbal, controlling, physical, and sexual IPV, respectively. Collectively, these findings provide evidence suggesting that differences may exist in rates of IPV perpetration and victimization between lesbian and bisexual women.

3. Methodological issues in studying IPV among sexual minority women

In general, the extant data suggest that approximately a quarter to one-half of sexual minority relationships are characterized by some form of aggressive behavior (e.g., see Bernhard, 2000; Brand & Kidd, 1986; Burke et al., 2002; Kulkin, Williams, Borne, Bretonne, & Laurendine, 2007; Matte & LaFontaine, 2011; McClennen, 2005; Miller et al., 2001; Stevens, Korchmaros, & Miller, 2010; Telesco, 2003). Yet, for several reasons it has been difficult to determine a population estimate of IPV among SMW. First, similar to heterosexual victims of IPV, same-sex victims of IPV may be reluctant to report an abusive partner out of fear that their aggressive partner may find out and retaliate against them. Second, unlike heterosexual victims of IPV, same-sex victims of IPV may be reluctant to report an abusive partner if they fear discrimination from authorities and others or they believe this process will force them to confront issues related to their sexual orientation. Similarly, research suggests that same-sex victims of IPV also experience barriers (e.g., distrusting law enforcement, lack of confidence in court systems) to reporting IPV to police (Eaton et al., 2008) and/or perceive other professional services, such as attorneys, shelters, and therapeutic services, to be lacking in helpfulness (McClennen, 2005; Walters, 2011). Third, gender role stereotyping may influence the ways in which victims perceive their abusive partners' behaviors. Specifically, recent qualitative studies have found that myths about the lesbian community (e.g., the belief that lesbian women do not oppress each other or beat each other up) often pervade victims' minds and stop them from perceiving their partners' behaviors as abusive (Hassouneh & Glass, 2008; Walters, 2011). Fourth, as an already stigmatized minority, LB women may be reluctant to "air their dirty laundry" for fear that they will foster further stigmatization toward the sexual minority community (Messinger, 2011; West, 2002). Taken together, these reasons likely contribute to sexual minorities underreporting episodes of IPV.

Study methodologies also play a critical role in IPV data among sexual minorities (Murray & Mobley, 2009). One of the most difficult challenges for sexual minority researchers is obtaining a representative sample. Clearly, the type of sample (i.e., clinical vs. community), recruiting method (i.e., networks, music festivals, national surveys), and sample size are likely to influence rates of IPV. In general, smaller samples recruited through social networks demonstrate the highest rates of IPV (Burke & Follingstad, 1999). Given the variability in IPV associated with sampling, it is imperative that researchers are explicit in describing their recruiting methodologies. In addition to recruiting, researchers are also faced with the challenge of operationally defining the population of interest. For example, researchers studying SMW are presented with the challenge of choosing appropriate constructs and determining the best method of categorizing respondents as lesbian or bisexual. Although sexual minorities are typically categorized into specific subgroups (i.e., gay, lesbian, bisexual, transgender) based on self-reported sexual orientation, researchers have argued that sexual orientation is a more complex and multifaceted construct that is seldom fixed over time (Moradi, Mohr, Worthington, & Fassinger, 2009). Specifically, Moradi et al. (2009) describe sexual orientation as a manifestation of sexuality that is expressed through sexual, affectional, and relationship tendencies toward other individuals on the basis of their gender. Thus, rather than simply asking how a person identifies their sexual orientation at a specific point in time, researchers should ask questions that tap into respondents' sexual identities, and also their most recent experiences of sexual attraction and sexual behaviors.

A final methodological limitation for sexual minority researchers examining IPV relates to operationally defining partner violence. Different operational definitions are likely to result in diverse rates of IPV and make comparisons across studies difficult (Hamby, 2005). For example, simply asking a respondent if she has experienced any abuse in the past 12 months is different from asking a respondent to indicate the number of times she has been victimized by specific acts of IPV. The latter approach is likely to obtain better estimates because asking a person if they have been abused requires the respondent to define abuse in their own terms. Also, while sexual minorities tend to experience similar types of IPV as heterosexuals, they also experience unique forms of IPV related to their marginalized status (Burke et al., 2002). Investigators should be aware that most IPV measures were developed and validated using heterosexual samples. Therefore, when assessing IPV with well-established measures developed for heterosexuals (e.g., Conflict Tactics Scales), it may be important to add supplemental questions that assess experiences of IPV related to sexual orientation such as threats of outing or actual outing (e.g., see Balsam & Szymanski, 2005; Burke et al., 2002). Only recently has the CTS2 been validated to measure psychological aggression in same-sex couples (see Matte & LaFontaine, 2011). Moreover, because IPV includes behaviors of physical, emotional, and sexual aggression, it is important to use clear terms to refer to different forms of IPV. In addition, given the unique tactics that sexual minorities may use to intimate their partners (e.g., threatening to "out" them at work, it is imperative that sexual-minority specific tactics are assessed (see Balsam & Szymanski, 2005).

Overall, current data suggest that IPV is a prevalent problem for SMW and differences in rates of IPV may exist among specific subgroups of SMW. However, sampling and methodological issues limit our understanding of the nature and extent of IPV in SMW. We also know little about the antecedents and factors that may contribute to the development of IPV and also serve to maintain IPV among SMW. Identifying and understanding these factors may help facilitate effective prevention and intervention strategies. Extrapolating from the literature on heterosexual women we know that IPV and substance

abuse are related, therefore we will examine this association. In addition, limited research indicates that stress and IPV are related, thus, we also consider this relationship.

4. IPV and substance abuse

Although the relationship between alcohol and drugs (particularly cocaine) and IPV has received widespread attention in heterosexual couples (e.g., Brookoff, O'Brien, Cook, Thompson, & Williams, 1997; Cunradi, 2009; Moore et al., 2008; O'Leary & Schumacher, 2003; Stuart et al., 2008), few studies have examined whether substance use is associated with IPV among SMW. As we hope to demonstrate in this section, the conspicuous absence of research that systematically examines whether substance abuse is related to IPV in SMW is especially surprising given that: 1) LB women report higher levels of partner violence than heterosexual women, 2) LB women report higher alcohol and drug use and abuse than heterosexual women (Gilman et al., 2001; Wilsnack et al., 2008), 3) among heterosexuals, considerable research has demonstrated a strong correlational, longitudinal, and temporal relationship between alcohol use and IPV (e.g., Chermack & Giancola, 1997; Eckhardt, 2007; O'Leary & Schumacher, 2003), and 4) cocaine, marijuana, and opioids are more prevalent among both perpetrators and victims of IPV as compared to non-perpetrators and non-victims (see Stuart et al., 2008).

4.1. Alcohol use in sexual minority women

With respect to alcohol use specifically, using a variety of sampling methods, researchers consistently find that compared to heterosexual women, lesbian, gay, and queer (LBQ) women are more likely to drink alcohol, to drink in larger quantities and more frequently, and to drink to intoxication (Wilsnack et al., 2008). The number of SMW with alcohol problems also exceeds that of heterosexual women. For instance, Meyer, Dietrich, and Schwartz (2008) found that among LBQ women, 26% reported a lifetime alcohol abuse disorder and 11% reported a lifetime alcohol dependence disorder. Using the data from a large national survey, past year prevalence rates for heavy drinking among lesbians and bisexual women were 20% and 25%, and for alcohol dependence 13% and 16%, respectively (McCabe et al., 2009). Lesbians had significantly greater odds than heterosexual women to meet criteria within the past year for alcohol dependence (McCabe et al., 2009). Similarly, the one-year prevalence rate for probable alcohol dependency among in a sample SMW in California was 10% (Cochran & Mays, 2009). SMW also spend more time in heavy drinking contexts such as bars and parties (see Hughes, 2005; Wilsnack et al., 2008) which has been hypothesized to contribute to higher levels of substance use (e.g., McKirnan & Peterson, 1989; Trocki, Drabble, & Midanik, 2005).

In a recent population survey, three aspects of sexual orientation were assessed (i.e., attraction, behavior, and identity) and related to substance abuse and dependence. McCabe et al. (2009) found that "… 13.3% of women who identified as lesbian, 5.1% who reported attraction only to women, and 4.0% who had only female sex partner met criteria for past-year alcohol dependence" (p. 1341). The differences in substance dependence as a function of how sexual orientation is assessed are an important consideration in future research.

4.2. Drug use in sexual minority women

A growing number of community and epidemiological studies indicate that drug use is higher in LB women as opposed to heterosexual women (Cochran & Mays, 2009; Koh, 2000). In a sample of SMW in California ($N = 2011$) one-third of the sample had used marijuana in the past year (Corliss, Grella, Mays, & Cochran, 2006). Although these researchers did not compare rates of marijuana use among SMW to heterosexual women, they estimated the rate to be approximately five times higher. Results of the Corliss et al. study are similar to Trocki, Drabble, and Midanik (2009) who found bisexual women, lesbians, and women who self-identified as heterosexual women but had same-sex partners also used marijuana at significantly higher rates than exclusively heterosexual women. Specifically, bisexual women, heterosexual women with same-sex partners, and lesbian women were 11, four, and six times more likely to use marijuana as compared to exclusively heterosexual women.

Using data from the National Comorbidity Survey, Gilman et al. (2001) found the likelihood of reporting drug abuse was over four times higher for SMW. Results of the Gilman et al. study largely parallel findings of the National Household Survey of Drug Abuse (Cochran & Mays, 2000) and a population-based study from the Netherlands (Sandfort, de Graaf, Bijl, & Schnabel, 2001) both of which found substance use disorders were more common among women with same-sex partners. In a survey of women from dance clubs in New York City during 2005 ($N = 1104$), LB women reported significantly higher lifetime rates of ecstasy, cocaine, methamphetamine, and LSD use as compared to heterosexual women (Parsons, Kelley, & Wells, 2005). Similarly, women with same-gender experiences were more likely to have used cocaine and hallucinogens and to report problem drug use compared to other women (Cochran, Ackerman, Mays, & Ross, 2004). Finally, using a large, national, probability sample, McCabe et al. (2009) found that lesbians were more likely than heterosexuals to have used marijuana and other drugs within the past year and to meet criteria for drug dependence.

Although the magnitude and gravity of alcohol abuse problems among LB women is of serious concern, equally distressing is that alcohol use and disparities begin at an early age and continue throughout the lifespan. A recent meta-analysis found that the odds of substance use for young SMW were, on average, 400% higher than for heterosexual youth (Marshal et al., 2008). A recent review of LGB adolescents' health concluded, "compelling evidence indicates that LGB adolescents have an increased risk of various health-related risk behaviors and negative health outcomes compared with non-LGB adolescents" (Coker, Austin, & Schuster, 2010, p. 472). Coker et al. (2010) report that LGB youth are at increased risk for substance use and violence and victimization and note the relationship between minority and family stressors and negative health outcomes.

4.3. Substance use and IPV

Although the relationship between substance use and IPV has been well-documented for heterosexuals (e.g., O'Leary & Schumacher, 2003; Quigley & Leonard, 2000), much less is known about this connection among SMW. In a survey of 284 lesbian women attending a women's music festival, respondents who reported verbal aggression in their relationships indicated significantly higher levels of partner alcohol/drug use and self alcohol/drug use than women who did not report verbal aggression in their relationships (Lockhart et al., 1994). In a preliminary study, with a small sample of women who were in a relationship with another woman during the past five years, Eaton et al. (2008) reported a non-significant trend for lesbian women with a history of IPV to be more likely to have Alcohol Use Disorders Identification Test (AUDIT) scores of 7 or higher as compared to lesbian women without a history of IPV. Similarly, in a study of women who had sex with other women, Glass et al. (2008) found an increase in physical violence was associated with a partner or ex-partner who misused alcohol. Thus, higher rates of alcohol misuse may be associated with increased rates of IPV. Among a sample of 104 lesbians, Schilit, Lie, and Montagne (1990) indicated that 37% of their respondents were in abusive relationships. Importantly, 64% of both batterers and victims reported using alcohol or drugs prior to or during the incidents of battering. Moreover, the relationship between substance use and IPV among urban SMW attending a community event was established by Bimbi, Palmadessa, and Parsons (2008). SMW who experienced physical and nonphysical IPV were more likely

to report recreational drug use and more likely to use alcohol. Women who experienced physical IPV were more likely to abuse cocaine. Although this literature is far smaller than that in heterosexuals, results of these studies suggest that alcohol and drug use are more prevalent among LB women and that alcohol use or misuse may be expected to increase risk for IPV. Literature on heterosexuals has found that problematic use of alcohol that may not have reached dependency or alcoholism is a risk factor for IPV in these couples (Caetano, Schafer, & Cunradi, 2001). Therefore, it is important to recognize that different levels of alcohol use may be associated with various levels of risk for IPV.

It is also important to recognize that in a study of heterosexual couples, Cunradi, Caetano, Clark, and Schafer (1999) found couples in which the female partner had alcohol-related problems were six times more likely to report episodes of female-to-male IPV as compared to couples in which the female did not have an alcohol disorder (Cunradi et al., 1999). Likewise, in a sample of 126 women entering substance abuse treatment, more than half had perpetrated violence against their partners in the year prior to treatment entry (Chermack, Walton, Fuller, & Blow, 2001). In addition, Smith, Homish, Leonard, and Cornelius (2011) found an interaction between alcohol use disorders and gender, such that for both perpetration and victimization, the effect of having a current alcohol use disorder was stronger for women than men. Also, female perpetrated IPV has been found to occur two times more frequently in relationships in which non-alcohol-abusing women have an alcohol-misusing partner (Caetano et al., 2001). Whether these same patterns hold for SMW is simply not known.

Although SMW engage in greater illegal drug use than heterosexual women, when considering whether drug use is related to IPV, it is critical to examine the specific class of drug. Different types of drugs have different physiological and behavioral effects, which are likely to result in varying levels of IPV. Therefore, the effects of specific drugs or classes drugs must be examined in relation to IPV (see Smith et al., 2011, for a discussion). Nevertheless, given that SMW appear to engage in higher levels of cocaine and methamphetamine use (e.g., Cochran et al., 2004; Parsons et al., 2005), higher levels of IPV may be expected. For instance, in a laboratory study, individuals who ingested a low dose of cocaine displayed higher levels of physical aggression than participants in a placebo condition (Licata, Taylor, & Berman, 1993). Using data from the National Family Violence Survey and the National Survey of Families and Households, O'Leary and Schumacher (2003) found the odds of severe male-to-female physical aggression were higher on days of cocaine use. Although no single theory accounts for all drug use, the strong association between cocaine use and intimate partner violence supports the psychopharmacologic effects of cocaine. Because cocaine is a powerful CNS stimulant that causes hyperarousal symptoms (e.g., a tendency to become irritable or angry, exaggerated startle responses, sleep disturbance), cocaine use may have a pharmacological effect or aggression-promoting effect that increases violence (Parrott, Drobes, Saladin, Coffey, & Dansky, 2003). It is also possible that illegal drug use may reduce behavioral disinhibition so that physical aggression is more likely to occur (Hoaken & Stewart, 2003), or that greater impulsivity, which may be higher among cocaine-dependent individuals as opposed to alcohol abusers, may, in turn, relate to higher levels of partner physical and emotional abuse (Parrott et al., 2003).

However, for women in particular, substance use may be a coping response for those involved in IPV (Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997). Related to this point, Allan and Cooke (1985) found that, compared to men, women are more likely to drink in response to current life stressors and life events, such as marital discord, divorce, and children leaving the home. Given the association between stress and substance use, and the association between substance use and IPV among heterosexual women, it is reasonable to infer a connection among stress, substance use, and IPV among SMW as well. Furthermore, as members of a stigmatized group, SMW experience unique stressors related to their marginalized status. This unique stress, known as minority stress, may also be related to substance use and IPV among SMW.

5. Minority stress, substance use, and IPV

The relationship between alcohol use and IPV may be illuminated by considering the notion of minority stress. Sexual minority stress is a multifaceted construct that includes experiences specifically related to one's sexual minority status such as: identity concealment and confusion; experienced and anticipated rejection, victimization and discrimination; and internalized homophobia/sexual self-stigma (the internalization of society's negative messages regarding sexual orientation) (Herek, Gillis, & Cogan, 2009; Lewis, Derlega, Berndt, Morris, & Rose, 2001; Meyer, 2003). Meyer's (2003) conceptualization of sexual minority stress included distal stressors (external stressors based on actual experiences of violence, discrimination, and harassment) as well as proximal stressors (internalized stressors such as openness about sexual orientation, perceived discrimination, and internalized homophobia). Consistent with the minority stress model, the Institute of Medicine (IOM, 1999) report on lesbian health recognized the connection between stress and health, noting that lesbians experience the stress of everyday life as well as additional stressors related to living in a homophobic society.

Sexual minority stress has been associated with negative mental health outcomes. King et al. (2008) suggest "…it is likely that the social hostility, stigma, and discrimination that most LGB people experience is at least part of the reason for the higher rates of psychological morbidity observed" (p. 84). For example, among older LGB adults, minority stress (i.e., negative reactions from others as well as expectations of negative reactions) was associated with increased loneliness (Kuyper & Fokkema, 2010). Similarly, higher levels of discrimination and perceived stigma were associated with more depressive symptoms (Fingerhut, Peplau, & Gable, 2010). Internalized homophobia has been associated with a variety of negative mental health outcomes, including substance use (Hatzenbuehler, 2009; Herek & Garnets, 2007; Kuyper & Fokkema, 2011; Szymanski, Kashubeck-West, & Meyer, 2008). Expectations of discrimination and rejection have been associated with negative mood as well (Lewis, Derlega, Clarke, & Kuang, 2006; Lewis, Derlega, Griffin, & Krowinski, 2003). In a recent study, LGB victimization and internalized homophobia was directly related to SMW's substance use (alcohol, drugs, and tobacco) and were indirectly related via social–psychological resources (Lehavot & Simoni, 2011).

5.1. Minority stress and substance use

Many factors may contribute to alcohol use and associated problems for SMW. Hughes' (2005) review concluded that heavy and problem drinking is not associated with sexual orientation per se, but rather a number of cultural and environmental factors related to marginalized status. She highlights experiences of discrimination, family rejection, lack of social support, and lack of traditional accepted societal roles such as motherhood as potential contributors to alcohol problems for SMW. These factors are consistent with the minority stress model (Meyer, 2003).

Cochran and Cauce (2006) suggest that there are two mechanisms by which stigmatization increases substance abuse in sexual minorities. Stigmatization and discrimination stress may directly impact on an individual's life experiences and/or may be internalized, which may result in increased levels of negative psychological distress and substance use. The latter pathway highlights the importance of considering mediators of the relationship between sexual minority stressors and substance use.

In one of the few empirical investigations of the relationship between discrimination and substance use, substance use disorders were more prevalent in sexual minorities who reported discrimination experiences. Three types of discrimination were assessed: sexual orientation, gender, and race. Sexual orientation discrimination alone was not associated with alcohol use disorders, but sexual orientation discrimination in combination with other types of discrimination was

associated with alcohol use disorders (McCabe, Bostwick, Hughes, West, & Boyd, 2010). In contrast, Weber (2008) found that participants classified with at least one substance use disorder reported experiencing more heterosexism as well as more internalized homophobia than those without such a disorder. A recent review of the relationship between internalized homophobia and substance abuse concludes that, "…taken as a whole it appears that there is a small to moderate positive relationship between internalized homophobia and substance abuse among lesbian and gay persons" (Brubaker, Garrett, & Dew, 2009, p. 81). In spite of the mixed findings in the research literature, Brubaker et al. suggest that it is too early to dismiss the role of internalized homophobia in substance abuse for sexual minorities. They suggest that with improved methodologies the relationship between internalized homophobia and substance use may be better understood.

Cochran and Mays (2009) speculate that discrimination and victimization associated with sexual minority status may be associated with increased risk for internalizing disorders, such as depression and anxiety, but question whether it would be associated with substance dependence. Yet, if discrimination and victimization are related to internalizing problems, and depression and anxiety are related to increased substance use, especially in women (e.g., Almog, Anglin, & Fisher, 1993; Dunne, Galatopoulos, & Schipperheijn, 1993; Teesson et al., 2005), it seems plausible that discrimination and victimization may be associated with LB alcohol use. In turn, this association may be mediated by psychological distress. Furthermore, in a review of the literature on sexual minority stigma, Hatzenbuehler (2009) suggested that coping/emotional regulation processes, social/interpersonal processes, and cognitive processes may mediate the relationship between discrimination and alcohol use in sexual minorities.

Although there is a strong theoretical basis to expect a relationship between sexual minority stress and substance use in lesbians, empirical research is far behind. As Irwin (2009) reports, "discrimination, victimization, and stress among LGBT individuals may have very large consequences for the subsequent development of SUDs [substance use disorders] and other mental health problems" (p. 485). He notes that SMW have been underserved by the research community with much more funding and intervention/prevention efforts directed toward gay men and heterosexual women (Irwin, 2009).

In a large, nationwide sample that assessed the association between minority stress and alcohol outcomes, Lehavot and Simoni (2011) found that minority stressors of victimization, concealment, and internalized homophobia were each, independently associated with fewer social-psychological resources (e.g., social support and spirituality). Fewer resources were then associated with more depression and anxiety and drug and alcohol problems.

5.2. Minority stress, relationship factors, and IPV

A review of the research literature suggests a connection among sexual minority stressors, relationship satisfaction, and IPV. There is also evidence that social and relationship factors play an important role in the relationship between sexual minority stress and psychological distress. Specifically, internalized homophobia and discrimination were associated with higher levels of perceived stress, which in turn was related to poorer relationship quality (Otis, Rostosky, Riggle, & Hamrin, 2006). Similarly, internalized homophobia was associated with more depressive symptoms which, in turn, was related to greater relationship strain (Frost & Meyer, 2009). Relationship satisfaction among lesbians is also associated with negative mental health outcomes (Otis et al., 2006; Riggle, Rostosky, & Horne, 2010) and intimate partner abuse (Balsam & Szymanski, 2005). For instance, Riggle et al. (2010) found that same-sex couples in committed or legally recognized relationships reported less minority stress (i.e., internalized homophobia) as well as less psychological stress and greater well-being. In fact, same-sex couples in a legally recognized relationship fared even better in terms of less distress and greater well-being compared to those in a committed, but not legally recognized, relationship. Furthermore, among LGB youth, unsupportive social interactions had the strongest direct effect on well-being, followed by stigma consciousness, internalized homophobia, and support from confidants (Berghe, Dewaele, Cox, & Vincke, 2010). In another study, social support also mediated the relationship between internalized homophobia and psychological distress (Szymanski & Kashubeck-West, 2008).

Sexual minority stress may also be related to IPV. For example, stigma consciousness (Pinel, 1999), the extent to which members of a stigmatized group such as LB women expect to be stereotyped by others and experience discrimination, was associated with GL participants' desire to keep abuse silent in an effort to protect victims of same-sex IPV from a homophobic legal system (Carvalho, 2006). Participants high in stigma consciousness were also more likely to be involved in violent relationships (Carvalho, Lewis, Derlega, Winstead, & Viggiano, 2011). Among sexual minority men and women, lifetime frequency of sexual minority stressors was related to more unwanted pursuit for those individuals who disengaged from a relationship (Derlega et al., 2011). For lesbians, lifetime discrimination was associated with lifetime IPV victimization and internalized homophobia was related to past year IPV; however, this association was fully mediated by relationship quality (Balsam & Szymanski, 2005). As Brown concludes, "Exploring the connection between issues of minority stress and partner abuse among the GLBT population can help and produce more effective treatment and help articulate how issues of minority stress and homophobia affect every aspect of this violence: the abused partner, the abuser, and the helping resources" (p. 459). In spite of numerous risk factors, including minority stress, the majority of sexual minorities do not have alcohol-related problems or violent relationships. This underscores the importance of considering what factors serve to protect SMW from what may be associated with substance abuse and IPV. It is possible that individual characteristics as well as social and community support may reduce the effects of minority stress on SMW.

6. Protective factors

In one of the few studies to examine the role of social supports on mental and physical health of SMW, Hatzenbuehler (2009) found that both internal and external factors buffered against the impact of minority stressors on mental and physical health. It is important to note that the main external factor was quantity of social support a person receives, whereas internal factors can include how much a person identifies as a sexual minority and how much control they feel they have over their life. All of these will be discussed and future avenues for research will be explored.

6.1. Social and community support

Drawing on the general psychological health literature, social support should be expected to play a key role in how one responds to stressful events (e.g., Cohen & McKay, 1984; Field & Schuldberg, 2011; Lazarus & Folkman, 1984; Turner & Brown, 2010). Social support can encompass multiple levels of support, from interpersonal to community. Anecdotally, lesbians state that the community is important to their well-being (Lehavot, Balsam, & Ibrahim-Wells, 2009) and community membership is often noted as a positive aspect of sexual-minority status (Riggle, Whitman, Olson, Rostosky, & Strong, 2008). In a qualitative study of coping with sexual minority stressors, lesbian bars were often cited as a safe haven for relieving stress (Hequembourg & Brallier, 2009). In addition, some lesbians have noted that a downside of more mainstream approval of homosexuality is the disappearance of lesbian-focused venues and activities (Ellis, 2007). It should also be noted that the social networks developed as a sexual minority woman may be more helpful than the social networks of heterosexual women for stressors unrelated to sexual minority status. For instance, lesbians with breast cancer had a wider

social support network and were better at active coping than heterosexual women (Fobair et al., 2001).

Among SMW, there is ample evidence for the positive effects of social support. For example, among older lesbians (mean age of 65), an LGB social network buffered against minority stress and an LGB network and minority stressors helped to explain more variance in a model used to explain loneliness (Kuyper & Fokkema, 2010). A study of cohabiting lesbians found that social support from friends and partners predicted higher levels of psychological adjustment (Kurdek, 1988). Additionally, while social support has been found to be helpful for both heterosexual and SMW (and both groups reported similar levels of support), they differed on the aspects of social support that increased well-being. Wayment and Peplau (1995) found that reassurance of worth support (i.e., feeling that you are respected for who you are) was more helpful for lesbians, whereas guidance support (i.e., help with solving problems) was more helpful for heterosexual women. Beals and Peplau (2005) found, in a SMW sample, that higher levels of identity support ("How much does [this person] show that he/she cares about you?"; p. 142) from one's social support network predicted higher levels of life satisfaction and self esteem and lower levels of depression, whereas higher levels of identity devaluation ("How much does [this person] make you feel bad about yourself?"; p. 142) from one's social support network predicted lower levels of life satisfaction and self-esteem. Zea, Reisen, and Poppen (1999) found similar results in that higher levels of social support predicted higher self-esteem and lower levels of depression in a sample of Latina lesbians.

Although the majority of research examining social support in SMW has examined support from friends and partners, Ryan, Russell, Huebner, Diaz, and Sanchez (2010) found that having parents with low religiosity, non-immigrant status, and high SES predicted higher levels of acceptance for LGBT young adults. Higher levels of acceptance predicted higher levels of self esteem, social support, and general health, and lower levels of depression, substance abuse, and suicidal ideation. It is important to note that sexual minorities may be faced with an implicit choice between the social support of their family and the social support of their community (Koh & Ross, 2006). SMW who are "out" often receive more social support from their community but this gain in one area may be tempered by decreased support from disapproving family and friends (Morris, Waldo, & Rothblum, 2001; Oetjen & Rothblum, 2000).

Other researchers have found less positive benefits of social support. For example, group-level coping (i.e., participating in sexual minority or feminist activities like marches and rallies) generally did not predict higher levels of well-being in SMW (Szymanski & Owens, 2009). The one exception was that participating in high levels of feminist activities buffered against low levels of sexism (but not heterosexism). Although there are clear benefits to social support, there are also potential drawbacks. Because lesbian communities tend to be smaller than other communities, many people know others in the community. This can be problematic for disclosing negative information about another lesbian as one might be talking to a friend. Specifically, multiple interview studies (Bornstein, Fawcett, Sullivan, Senturia, & Shiu-Thornton, 2006; Turell & Herrmann, 2008) have found that disclosure of IPV to others within the community can lead to isolation. Additionally, some lesbians have noted that they felt pressure to conform to aspects of their community that they disagreed with (e.g., norms about sexual activity) or face being ostracized (Heath & Mulligan, 2008).

6.2. Identity

In addition to the support of the community, how much a person identifies as a lesbian can also affect her ability to cope with stressors. As with the research on social support and community, lesbian identity can both improve and impair a person's ability to cope. Lesbian identity is a blanket term that can be conceptualized in a number of different ways, which may partially explain the mixed results in terms of its effectiveness as a buffer against stressors.

Some research has found clear links between lesbian identity and coping. For example, Bowleg, Craig, and Burkholder (2004) used a conceptual model that included internal factors (e.g., lesbian identity) and external factors (e.g., social support) to predict active coping in Black lesbians. After controlling for all other internal and external factors examined, lesbian identity was the sole predictor of active coping. However, the benefits of a strong lesbian identity are not universally reported in the literature. For instance, a higher level of social identity in the lesbian community was positively correlated to self-esteem, but also positively correlated to cocaine use (Kerby, Wilson, Nicholson, & White, 2005).

In other studies, lesbian identity has been unrelated to health outcomes. Willoughby, Doty, and Malik (2010) predicted that negative LGB identity (i.e., negative thoughts about your own sexual identity) would buffer the effects of minority stressors on negative outcomes (e.g., substance abuse) but found no evidence to support this hypothesis. Additionally, Swim, Johnston, and Pearson (2009) predicted that LGB identity would buffer the relationship between heterosexist hassles and negative psychological outcomes. Contrary to their hypothesis, Swim et al. found no support for LGB identity as a buffer. However, LGB identity moderated the effects of heterosexist hassles. That is, participants with a stronger LGB identity experienced more negative effects as heterosexist hassles increased. Among Latina lesbians, a greater importance placed on lesbian identity predicted higher levels of depressive symptoms (Zea et al., 1999).

The literature on sexual minority stress, identity, and health outcomes is limited, and available findings are quite mixed. Yet, identity as a sexual minority, and affiliation with the sexual minority community are important areas for future investigation.

6.3. Mastery

Although social support and identity are the two factors that have most commonly been studied in terms of lesbians' coping with stress, a variable that has emerged as a protective factor in recent years is personal mastery (i.e., how much a person feels that they can change the forces that impact their lives). Inclusion of personal mastery and social support in a model using age, gender, and sexual orientation to predict depressive symptoms and self esteem accounted for nearly 50% of the variance and rendered all other variables non-significant (Spencer & Patrick, 2009). Among American Indian and Alaskan Native SMW, mastery mediated the relationship between sexual and physical assault on mental and physical health. Higher levels of assault predicted lower levels of mastery, which in turn predicted poorer physical and mental health (Lehavot, Walters, & Simoni, 2010).

While considerable research has demonstrated the importance of social and community stress, identity, and mastery, few studies have examined whether these variables protect SMW from harmful levels of substance use or IPV. The investigation of how well these minority stress buffers work to protect SMW against these negative outcomes should be a priority in future research.

7. Directions for future research

Although reliable population based prevalence estimates have been difficult to obtain, there are sufficient data that document the occurrence of IPV in the relationships of SMW. The literature on violence against heterosexual women and on IPV in heterosexual relationships has demonstrated connections among stress, substance use, and IPV. nformation on the antecedents, correlates, and consequences of IPV among heterosexuals has been instrumental in the design, implementation, and evaluation of methods to reduce partner violence. Therefore, to develop effective methods for reducing partner

violence in sexual minority populations, it is critical that well-designed, programmatic areas of research are continued. Advancing the literature in this area will require using (or developing) psychometrically sound measurement instruments to assess both IPV and sexual orientation. Further, longitudinal investigation of women's experiences of IPV over time will permit assessment of causal direction. Given the co-occurrence of substance use and IPV among heterosexuals, additional research on these factors in SMW is also warranted. As Bimbi et al. (2008) urged, "… future research should focus on what leads lesbians and gay men to batter their partners. Specifically, the influence of internalized oppression and domestic violence should be examined…" (p. 6).

Finally, as researchers and clinicians gather more information IPV among SMW, we must not lose sight of the individual, social, and community resources that may buffer against the experiences of discrimination, harassment, victimization, and stigmatization of sexual minorities. Although prejudice and stigma remain a significant concern for SMW, in recent years, society has become less disapproving toward sexual minorities (Pew Research Center, 2007). As noted in Ellis (2007), a downside of this mainstreaming is the disappearance of lesbian-specific venues. Additionally, Liddle (2005) has noted that the number of feminist bookstores, a haven for sexual minorities, has declined. It is important to see how lower numbers of spaces specifically for women may translate in terms of a support network. Also, the technological advances made in recent years (the internet, social networking, and so forth) may affect where women can turn to address stress.

The potential change in type and amount of social support also means that new avenues should be explored in terms of within-person resources for buffering against stress. The initial literature for mastery as a buffer looks promising but should be done with more samples to become generalizable to the sexual minority population at large. Another variable that has shown promise in recent years as both buffer and outcome for stress is self-compassion (Neff & Vonk, 2009). This construct may be particularly important to address among SMW.

IPV among heterosexuals has received considerable attention in the research literature and in the popular media as a serious public health issue. Yet, very little is known or reported about this phenomenon, its antecedents and consequences, and how to prevent or reduce its occurrence among SMW. Ultimately, high quality, programmatic research on minority stress, substance use, and IPV among SMW must be done and then translated into accessible, cost-effective, and cultural sensitive prevention and intervention programs to improve SMW's health.

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