

# Discrepant Alcohol Use, Intimate Partner Violence, and Relationship Adjustment among Lesbian Women and their Same-Sex Intimate Partners

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**Abstract** This study examined the association between relationship adjustment and discrepant alcohol use among lesbian women and their same-sex intimate partners after controlling for verbal and physical aggression. Lesbian women ( $N=819$ ) who were members of online marketing research panels completed an online survey in which they reported both their own and same-sex intimate partner's alcohol use, their relationship adjustment, and their own and their partner's physical aggression and psychological aggression (i.e., verbal aggression and dominance/isolation). Partners' alcohol use was moderately correlated. Discrepancy in alcohol use was associated with poorer relationship adjustment after controlling for psychological aggression and physical aggression. Results are discussed in terms of the similarity and differences with previous literature primarily focused on heterosexual couples.

**Keywords** Lesbian women · Same-sex intimate partner violence · Relationship adjustment

The most recent Institute of Medicine report (Institute of Medicine 2011) on sexual minority health documented that, compared to heterosexual individuals, those with same-sex partners have higher rates of substance use and alcohol consumption. Although considerable research has examined discrepant drinking patterns, relationship adjustment, and

intimate partner violence (IPV) among heterosexual partners (e.g., Leadley, Clark, and Caetano 2000), far less research has examined these associations among lesbian women and their same-sex intimate partners. Given the heightened risk of hazardous drinking (based on *Diagnostic and Statistical Manual of Mental Disorders* [4th ed.; DSM-IV; American Psychiatric Association 1994] criteria of drinking 4 or more drinks in a two-hour period) among lesbian women (e.g., Cochran and Mays 2009; McCabe, Hughes, Bostwick, West, and Boyd 2009) and levels of IPV that are equal to or greater than heterosexual women (see Messinger 2014; Walters, Chen, and Breiding 2013 for reviews), it is important to examine whether discrepancies in alcohol use are associated with relationship adjustment. In this study, we begin to address the gap in knowledge regarding whether discrepancy in alcohol use among lesbian women and their same-sex intimate partners is associated with relationship adjustment among lesbian couples after controlling for partner physical and psychological aggression.

## Alcohol Use among Lesbian Women

Alcohol use has been shown to be consistently higher among lesbian as compared to heterosexual women (e.g., Wilsnack et al. 2008). Using data from the 2004–2005 Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), McCabe et al. (2009) found rates of past year binge drinking (four or more drinks in a period of 2 h or less) and alcohol dependence were 20.1% and 13.3% among lesbian women, compared to 8.4% and 2.5% of heterosexual women, respectively. Similarly, the one-year prevalence rate for likely alcohol dependence was 4.7% among lesbian women versus 2.8% for exclusively heterosexual women who participated in the California Quality of Life

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Survey (Cochran and Mays 2009). Relative to heterosexual women, lesbian women are more likely to socialize in venues such as bars and clubs that often promote alcohol use (e.g., Hughes 2005; Wilsnack et al. (2008)). Furthermore, while risky alcohol use tends to decline from early to middle adulthood, hazardous alcohol use and drinking disparities increase for lesbian and bisexual women during this same period (e.g., Substance Abuse and Mental Health Services Administration 2009).

Few studies have examined whether discrepancy in alcohol use among lesbian women and their relationship partners may be associated with relationship adjustment. The paucity of research is especially notable given the long history of research on heterosexual couples that, consistent with social learning theory (Bandura 1977), shows partners may co-create environments that promote, maintain, or exacerbate alcohol use (see Fischer and Wiersma 2012, for a review; Homish and Leonard 2006, 2007). The lack of attention to drinking partnerships among lesbian women is also of concern given that the percentage of lesbian women in intimate relationships is similar to that of heterosexual women. Specifically, using data from the State of California's 2003 Lesbian, Gay, Bisexual, and Transgender Tobacco Survey, and the 2001, 2003, and 2005 waves of the California Health Interview Survey, Carpenter and Gates (2008) reported 51% to 62% of lesbian women aged 18 to 59 are in relationships; this estimate compares to 62% of heterosexual women of similar ages.

### **Alcohol Use, Intimate Partner Violence, and Relationship Adjustment among Heterosexual Couples**

Extensive theoretical and empirical literature on heterosexual partners has shown that alcohol use is linked to physical and verbal aggression (e.g., Dawson, Grant, Chou, and Stinson 2007; Homish and Leonard 2007; Leonard 2005; Stuart et al. 2009) and break-ups (e.g., Torvik, Røysamb, Gustavson, Idstad, and Tambs 2013). Although few studies have investigated the link between alcohol use and partner violence among lesbian women, Goldberg and Meyer (2013) found that both heterosexual and bisexual women, who reported binge drinking daily or weekly, were more likely to report physical assault or sexual violence in their relationships. Moreover, Eaton et al. (2008) reported a non-significant trend for lesbian women with a history of IPV (i.e., physical assault, destruction of property, psychological aggression, sexual coercion, and threats of revealing one's partner's sexual orientation) to have clinically meaningful scores on the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, and Grant 1993). Furthermore, in a study of women who have sex with women,

Glass et al. (2008) reported physical partner violence was associated with current or ex-partner alcohol misuse.

Although a number of processes have been used to explain this relationship, the psychopharmacological effects of alcohol may disinhibit aggression and directly or indirectly contribute to psychological aggression and physical abuse (Giancola 2000; Pernanen 1991; Shorey, Stuart, and Cornelius 2011). More specifically, when intoxicated, alcohol use interferes with one's primary cognitive ability by limiting the capacity to take in as much information from our surroundings as when not drinking heavily. That is, the user may focus on one aspect of the situation and be unable consider other aspects such as the surrounding, social norms, and so forth. Furthermore, secondary cognitive abilities may be impacted and reduce the user's ability to read the situation rationally and speak clearly (i.e., the user may be unable to discuss the situation calmly; Pernanen).

Other research has supported the association between alcohol and violence. Retrospective reports of alcohol use and violence demonstrated that drinking within 3 h of an argument predicted female college students' use of verbal and physical aggression (Shook, Gerrity, Jurich, and Segrist 2000). Similarly, among college women, the odds of being involved in physical aggression increased by 11.84, and the odds of being involved in verbal aggression increased by 2.25 on heavy drinking days (i.e., more than four drinks; Parks, Hsieh, Bradizza, and Romosz 2008). Furthermore, Fischer et al. (2005) found episodes of heavy drinking resulted in modest increases in negative interactions and disagreements later that same day. In a study of 19,997 Norwegian couples, heavy drinking was associated with future marital dissolution; however, it is important to note that the odds of divorce were twice as high when the female (3.07) versus the male (1.51) partner was the heavy drinker (Torvik et al. 2013).

Although literature on heterosexual couples has focused mostly on quantity of alcohol use or alcohol problems as related to physical aggression, discrepancy in partner drinking may also be key to relationship problems. For instance, heterosexual couples in which both partners were categorized as alcohol dependent based on an instrument that included *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III*; American Psychiatric Association 1987) symptoms of alcohol dependence reported more positive marriages compared to discordant couples (McLeod 1993). In a longitudinal study of 418 newlywed couples, Homish and Leonard (2005) examined patterns of marital satisfaction among congruent nondrinkers, congruent drinkers who typically drank with their partners, and congruent drinkers who typically drank apart from their spouses. Although the pattern of marital decline was similar for men in each group, women who typically drank with their spouses showed less declines in marital satisfaction over time relative to nondrinkers.

Similar results were found in a cross-sectional sample of New Zealand adults. Couples who reported the highest number of drinking occasions with their partner in the previous 12 months were most likely to indicate they were happy in their relationship. As the number of heavy drinkers in the couple increased, the likelihood of being happy in the relationship declined (Meiklejohn, Connor, and Kypri 2012). Thus, it appears that, among heterosexual couples, frequent (but not heavy) drinking is associated with better relationship quality (Roberts and Linney 2000), whereas heavy levels of alcohol use and alcohol use disorders, and wives or both partners' alcohol abuse, may have stronger associations with relationship satisfaction and dissolution. Specifically, Leadley et al. (2000) found discrepant drinking couples were 3.1 times more likely to have experienced intimate partner violence in the previous year as compared to abstaining couples. Discrepant drinking also predicted heterosexual women's relationship satisfaction after controlling for her partner's physical and verbal aggression (Kelly and Halford 2006).

### Alcohol Use and Partner Physical and Psychological Aggression among Lesbian Woman and their Same-Sex Intimate Partners

A growing body of research has also documented the co-occurrence of alcohol use and physical and psychological partner violence among women who have sex with women (i.e., Bimbi, Palmadessa, and Parsons 2008; Lewis, Millettich, Kelley, and Woody 2012). 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. Similarly, in a sample of 104 lesbian women, Schilit, Lie, and Montagne (1990) reported that 37% of their respondents were in abusive relationships. Of those in violent relationships, 64% of both batterers and victims reported using alcohol or drugs prior to or during the incidents of battering.

In one of the few studies to examine emotional abuse and substance use with lesbian women, Lockhart, White, Causby, and Isaac (1994) found lesbian women who reported verbal abuse with their same-sex intimate partners reported significantly greater likelihood of arguing over their partner's alcohol/drug use as compared to women with no verbal abuse in their relationships. Moreover, a recent review demonstrated the importance of psychological aggression and health outcomes in Lesbian/Gay/Bisexual samples (see Mason et al. 2014).

Schumacher and Leonard (2005) found that verbal aggression predicted physical aggression and lower relationship satisfaction 1 to 2 years after couples had applied for marriage licenses. O'Leary (1999) argued that psychological aggression has as strong, if not stronger, an impact on domestic violence victims. Furthermore, Marshall (1999) found that

men's subtle psychological aggression had stronger and more consistent relationships with women's self-esteem, psychological symptoms, and relationship perceptions than did overt psychological, physical, and sexual aggression. In a recent study, both psychological aggression victimization and prior physically aggressive relationships predicted women's reports of more frequent perpetration of physical aggression toward their same-sex relationship partners (Millettich, Gumieny, Kelley, and D'Lima 2014). Given that psychological aggression and physical aggression may be associated with relationship adjustment, both were examined in the present study.

### The Present Study

Although discrepant drinking patterns between heterosexual partners has been clearly linked to intimate partner violence and dissatisfaction, this association has not, to our knowledge, been examined among lesbian women and their partners. We chose to focus on young women (ages 18 to 35) given that for many emerging and young adults, time and energy are devoted to partners, and friendships tend to wane as romantic partners quickly become the most important close relationship (Collins 2003; Collins and Laursen 2004; Steinberg and Monahan 2007).

Based on the findings for heterosexual partners, we hypothesized that discrepancy in partners' alcohol use (i.e., number of standard drinks per week as compared to partners' standard drinks per week), as reported by lesbian women for themselves and for their same-sex intimate partners, would be associated with poorer relationship adjustment after controlling for reports of partner physical and psychological aggression. Our decision to control for partner aggression is based on the notion that the association between alcohol use discrepancy and relationship satisfaction may be an artifact of verbal conflict and aggression; that is, partner verbal and physical aggression may in part stem from differences in alcohol use (Kelly and Halford 2006). As a result, it is important to determine if discrepant alcohol use is associated with relationship satisfaction independently of partners' psychological and physical aggression that no doubt also contributes to relationship adjustment.

### Method

#### Participants

Self-identified lesbian women were recruited from several online market research panels. Criteria for participation were that the women: (a) self-identified as lesbian; (b) were between 18 and 35 years of age; (c) were in a romantic or dating relationship with a same-sex intimate partner for at least 3 months (see Table 1 for a description of types of relationships); and (d) reported seeing their partner in person at least once monthly.

**Table 1** Demographics of Sample

Variable	<i>n</i>	%
Ethnicity		
White	648	79.1
African American	73	8.9
American Indian and Alaska Native	6	0.7
Asian	35	4.3
Native Hawaiian and Other Pacific Islander	2	0.2
Some other race alone	35	4.3
Two or more races	11	1.3
Prefer not to answer	9	1.1
Highest educational level		
High school graduate	35	4.3
Some college	165	20.1
Associate's degree	64	7.8
Bachelor's degree	333	40.7
Master's degree	173	21.1
Doctoral/professional degree	47	5.7
Missing	2	0.2
Annual income		
<\$50,000	342	41.8
\$50,000 to <\$100,000	287	35.0
\$100,000 to <\$150,000	115	14.0
>\$150,000	39	4.8
Declined to answer	36	4.4
Relationship status		
Single, dating in a casual relationship	26	3.2
Single, dating in a serious relationship	38	4.6
Partnered, in a casual relationship	27	3.3
Partnered, in a committed relationship	524	64.0
Partnered, married, or in a civil union	189	23.1
Other	15	1.8
Cohabiting with partner		
Yes	600	73.3
No	217	26.5
Missing	2	0.2
Frequency of physically seeing partner		
Daily	634	77.4
A few times a week	86	10.5
Once or twice a week	44	5.4
A few times a month	28	3.4
Monthly	27	3.3
Sexual orientation		
Only homosexual/lesbian	582	71.1
Mostly homosexual/lesbian	219	26.7
Other	18	2.2
Prefer not to answer	4	0.5
Lifetime sexual behavior <sup>a</sup>		
Women only	310	37.9
Women and men	504	61.5
No one	1	0.1

**Table 1** (continued)

Variable	<i>n</i>	%
Prefer not to answer	4	0.5
Past year sexual behavior <sup>b</sup>		
Women only	776	94.7
Women and men	35	4.3
No one	5	0.6
Prefer not to answer	3	0.4
Sexual attraction		
Only women	463	56.5
Mostly women	351	42.9
Prefer not to answer	5	0.6

*N*=819

<sup>a</sup> Participants were asked, "During your lifetime, with whom have you had sex?"

<sup>b</sup> Participants were asked, "During the past year, with whom have you had sex?"

Potential participants were invited to take part in a study about "your experiences as a lesbian, your relationships with others, and your thoughts, feelings, and behaviors." In exchange for completing this survey, participants received incentives consistent with the market research firm's structure such as points that could be exchanged for gift cards or cash payments into an account. The survey took approximately 30 min to complete.

Sixty percent (60%) of participants who received the e-mail invitations and met eligibility requirements completed the survey (*N*=1051). For the present study, only data from respondents who indicated that they and their partners had consumed alcohol in the last 3 months were included in the analyses that follow. A total of 228 participants indicated that they (*n*=60), their partner (*n*=19), or both (*n*=149) had not consumed alcohol in the past 3 months and were excluded from the analyses. In addition, data were excluded from four participants who reported drinking more than 100 drinks per week. After removing non-drinkers and outliers, the final sample included 819 lesbian women. Demographic characteristics of the sample are presented in Table 1.

## Measures

**Daily Drinking Questionnaire** Participants reported their own and their partners' alcohol use using the Daily Drinking Questionnaire (DDQ; Collins, Parks, and Marlatt 1985). Participants were shown a chart that defined one standard drink as 12 oz. beer, 1 ½ oz. of liquor, or 5 oz. of wine and depicted a picture of each. They used the DDQ 7-day grid to report: 1) the average number of 'standard' drinks they consumed in the past 3 months, and 2) the average number of 'standard' drinks consumed by their same-sex intimate partners in the past 3 months. Participant responses for each day of



the week were summed, yielding a total score for typical drinks per week for themselves and their partners. The DDQ has good convergent validity and test–retest reliability (Collins et al. 1985; Collins and Lapp 1992).

**Revised Conflict Tactics Scale-2** The Conflict Tactics Scale-2 (CTS-2; Straus, Hamby, Boney-McCoy, and Sugarman 1996) is an expanded version of the original CTS. For the purposes of the present study, we examined data from the physical assault subscale. The CTS-2 measures physical aggression victimization (i.e., how often their partner committed acts of physical aggression toward them) in the past year. Sample items include “My partner slapped me,” “My partner grabbed me,” and “My partner beat me up.” Participants responded to 12 items indicating the frequency of physical aggression victimization during the past year using count-based anchors ranging from 0 (*never*) to 6 (*more than 20 times*). The reliability and validity of the CTS-2 has been demonstrated previously with lesbian women (Matte and Lafontaine 2011; McKenry, Serovich, Mason, and Mosack 2006). Cronbach’s alpha in the current study was .89.

**Psychological Maltreatment of Women Inventory** The Psychological Maltreatment of Women Inventory (PMWI; Tolman 1989) measures past-year partner psychological aggression with two 7-item subscales (i.e., dominance-isolation and emotional-verbal violence). The dominance-isolation subscale assesses monitoring and controlling behaviors and isolation from resources (e.g., “My partner monitored my time and made me account for my whereabouts”). The emotional-verbal subscale includes behaviors such as verbal attacks, withholding emotional resources, and demeaning actions (e.g., “My partner called me names,” “My partner treated me as an inferior”). In the case of participants who reported that their relationship was less than a year, they reported on psychological aggression that had occurred since they begin their current relationship. Participants responded to items by indicating the frequency of dominance/isolation and emotional/verbal violence during the past year using a scale ranging from 0 (*never*) to 6 (*very frequently*). Balsam, Rothblum, and Beauchaine (2005) established the reliability of the PMWI among lesbian women. Cronbach’s alpha for the dominance/isolation and emotional/verbal violence subscales in this study were .78 and .87, respectively.

**Revised Dyadic Adjustment Scale** Participants completed the Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, and Larson 1995) to assess relationship adjustment. The RDAS is a 14-item revised version of the original Dyadic Adjustment Scale (DAS; Spanier 1976) that assesses 3 of the 4 original DAS subscales: dyadic consensus (agreement on matters such as demonstrations of affection, conventionality; correct or proper behavior); dyadic satisfaction (e.g., “How often do you discuss terminating your

relationship?”; “How often do you and your partner ‘get on each other’s nerves?’”); and dyadic cohesion (e.g., “Do you and your partner engage in outside interests together?”). Busby et al. demonstrated strong factor loadings for each of the scales and good concurrent validity with the Locke-Wallace Marital Adjustment Test (MAT; Locke and Wallace 1959). In addition, both the RDAS and DAS correctly distinguished 81% of distressed (i.e., individuals seeking marital therapy and who scored above both of the recommended cutoffs for dyadic stress on the DAS and the MAT) from non-distressed individuals (i.e., a convenience sample who scored below the DAS and MAT cutoff scores for distress). Internal consistency and Guttman and Spearman-Brown split-half reliability coefficients were reported for each of the subscales and the overall RDAS. Internal consistency for the present study was  $\alpha = .82$ .

## Results

The data were analyzed for missing data patterns. Approximately 98% of respondents had complete data for all items; approximately .31% of data points were missing. Missing values were imputed using the expectation-maximization algorithm. Alcohol quantity discrepancy was calculated by taking the absolute value of subtracting the participant’s number of standard drinks per week from their partner’s standard drinks per week. For example, if a participant reported that their partner consumed 10 standard drinks and they consumed 7 standard drinks, then their discrepancy score would be 3 standard drinks. Participants reported on average that they consumed 8.56 ( $SD = 8.10$ ) drinks per week and partners consumed 8.01 ( $SD = 9.04$ ) drinks per week. Although the means appear to show that participants and their partners drink the same amount per week, the mean discrepancy in drinks per week between participants and their partners was 4.51 ( $SD = 7.59$ ). Descriptive information and correlations for the study variables are provided in Table 2.

A bootstrapped multiple regression with 1,000 resamples was conducted of relationship quality on the partner aggression variables (i.e., physical aggression, emotional-verbal, and dominance-isolation), relationship length, self alcohol quantity, partner alcohol quantity, and alcohol quantity discrepancy (see Table 3). Bootstrapping was applied to the regression analysis due to non-normality of variables (see Table 2 for skewness and kurtosis; Efron and Tibshirani 1993). The variance inflation factor (VIF) was examined to detect multicollinearity using criteria of  $VIF > 5$  as potential multicollinearity (Chatterjee and Yilmaz 1992). All VIF values were less than 5 with the highest value being 2.00, suggesting that multicollinearity was not present. Both types of psychological aggression examined (i.e., partner emotion/verbal aggression and dominance/isolation aggression), and alcohol quantity discrepancy, were significantly associated with poorer relationship adjustment. Greater partner alcohol

**Table 2** Pearson Correlations among Study Variables

	1	2	3	4	5	6	7	8
1. Relationship adjustment	–	–.32**	–.45**	–.53**	–.02	–.12**	–.08*	–.22**
2. Physical assault		–	.45**	.55**	.01	.08*	.24**	.23**
3. Partner dominance/isolation aggression			–	.63**	–.03	.20**	.19**	.27**
4. Partner emotional/verbal aggression				–	.10**	.15**	.21**	.24**
5. Relationship length (in years)					–	–.07	–.10**	–.08*
6. Self alcohol quantity						–	.48**	.50**
7. Partner alcohol quantity							–	.54**
8. Alcohol quantity discrepancy								–
<i>M</i>	44.42	.92	1.76	3.53	3.65	8.56	8.01	4.51
<i>SD</i>	6.56	3.33	2.92	4.19	3.13	8.10	9.04	7.59
Minimum	10.00	0.00	0.00	0.00	.25	1.00	1.00	0.00
Maximum	59.00	34.00	21.00	26.00	17.83	60.00	85.00	81.00
Skewness	–1.10	5.70	2.65	1.69	1.33	2.29	3.76	4.88
Kurtosis	2.35	38.67	8.40	3.27	1.61	7.39	22.93	34.73

\* $p < .05$ , \*\* $p < .01$

quantity was significantly associated with better relationship adjustment. The model explained 32% of the variance in relationship quality and demonstrated a large effect size.

## Discussion

We sought to examine whether discrepancy in alcohol use between lesbian women and their same-sex intimate partners would be associated with lower relationship adjustment after controlling for reports of their partners' physical aggression and psychological aggression. We controlled for partner aggression based on the notion that the association between alcohol use discrepancy and relationship adjustment may in part stem from differences in alcohol use (Kelly and Halford 2006).

As predicted, and consistent with findings for heterosexual couples (e.g., Kelly and Halford 2006), discrepancy in partners' alcohol use was significantly associated with poorer relationship adjustment after controlling for physical and

psychological aggression. This finding is of note as psychological aggression has been associated with poorer relationship quality among lesbian women (Matte and Lafontaine 2011) and has been shown to be one of the strongest predictors of relationship problems in heterosexual couples (Karney and Bradbury 1995; O'Leary 1999; Schumacher and Leonard 2005). This result was expected given that marriages in which male partners drink heavily and their female partners do not are often marked by relationship distress (Halford et al. 2001).

In addition, higher levels of partner psychological aggression (i.e., emotional/verbal aggression and dominance/isolation) were associated with poorer relationship adjustment. This finding is consistent with previous research that found a strong negative relationship between relationship satisfaction and psychological aggression among lesbian women (Lewis, Milletich, Derlega, and Padilla 2014). Furthermore, Lie, Schilit, Bush, Montagne, and Reyes (1991) argued that the alienation and isolation experienced by some lesbian and bisexual women may be associated with feelings of loss of control. Hoskins (1986) contends that individuals high in

**Table 3** Multiple Regression Predicting Relationship Satisfaction

	<i>B</i>	$\beta$	<i>CI</i>	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>
Partner physical aggression	–.04	–.02	[–.25, .17]	.56	.32	53.68*
Partner dominance/isolation aggression	–.38	–.17	[–.59, –.13]			
Partner emotional/verbal aggression	–.64	–.41	[–.79, –.49]			
Relationship length	.05	.02	[–.08, .16]			
Self alcohol quantity	–.01	–.01	[–.07, .06]			
Partner alcohol quantity	.09	.12	[.03, .15]			
Alcohol quantity discrepancy	–.11	–.13	[–.19, –.04]			

For predictors, CIs that do not include 0 are significant. \* $p < .001$ .

dominance are more likely to use verbal means to attempt to control their relationship partners. Although our data do not allow us to determine directionality, verbal aggression and dominance/isolation were moderately correlated. Furthermore, our results are similar to those of Lockhart et al. (1994) who found lesbian women who experienced verbal abuse in their relationships reported significantly greater likelihood of arguing over their partners alcohol/drug use.

Previous research with heterosexual (e.g., Shortt, Capaldi, Kim, and Laurent 2010) and lesbian participants (e.g., Balsam and Szymanski 2005) demonstrated that physical aggression was associated with lower relationship quality. Similarly, in the present study the bivariate correlation between these variables was significant. Yet, when physical aggression was entered in the multiple regression along with other variables, it was not significantly associated with relationship quality. These results are consistent with Kelly and Halford (2006) who found that partner verbal aggression and disparities in partners' alcohol use predicted 65.8% of the variance in relationship satisfaction. However, individual alcohol consumption of each partner and partner physical aggression were not associated with relationship quality when verbal aggression and alcohol discrepancy were entered into a multiple regression. It seems that among heterosexual and lesbian women with same-sex intimate partners, physical aggression is associated with poorer relationship adjustment when physical aggression is considered alone. When both physical and psychological aggression are considered together, however, psychological aggression is a stronger predictor of relationship adjustment. It has been suggested that controlling behaviors and verbal aggression characterize relationships in which physical aggression is present (Matte and LaFontaine 2011). If this is the case, this would explain the lack of association between physical aggression and relationship adjustment after controlling for psychological aggression. Another explanation for this finding is that our model became saturated (see Rauer, Karney, Garvan, and Hou 2008). In this case, as the number of risk factors in the model increase, additional variables have less impact on relationship adjustment.

In some ways, our results parallel the long history of research with heterosexual couples that has examined concordance in partner alcohol use and the association between alcohol use and intimate partner violence. For instance, as demonstrated in previous research with heterosexual couples (see Fischer and Wiersma 2012, for a review; Homish and Leonard 2006), partners' alcohol use was moderately correlated.

In contrast to what was expected, higher alcohol use by one's partner was associated with better relationship adjustment in the multiple regression. In part, this finding may be explained by the argument made by Roberts and Linney (2000) that frequent (but not heavy) drinking is associated with higher relationship quality, whereas heavy levels of alcohol use and alcohol use disorders are associated with

relationship dissatisfaction and dissolution. In addition, lesbian women tend to drink more than heterosexual women (for a review, see Hughes 2011). Because lesbian women tend to drink more than heterosexual women, it is possible that lesbian women have higher perceived norms about alcohol use (i.e., descriptive norms). If descriptive norms for alcohol use are higher among lesbian women, they may not perceive their same-sex intimate partners' alcohol use as heavy, which may account for the association between higher alcohol use and better relationship adjustment.

Another possible explanation for the unexpected direction of the association between partner alcohol use and relationship adjustment is that including the violence measures in the multivariate regression caused the regression coefficient of partner drinking to change to a positive sign. Because the correlations between other predictors in the model and relationship satisfaction were significantly different from zero and the correlations between partner drinking and the other predictors in the model were significantly different from zero, the conditions for positive net suppression were met (Darmawan and Keeves 2006). Thus, the sign change for partner drinking may be explained as positive net suppression; that is, the zero-order correlation between partner drinking and relationship adjustment was negative, but in the multivariate model the sign for partner drinking changed from negative to positive (Darmawan & Keeves 2006). Furthermore, according to Darmawan and Keeves, partner drinking is suppressing the error variance in the other predictors and not influencing relationship satisfaction greatly.

### Study Limitations

Although this is the first study to examine associations between psychological and physical aggression, alcohol use, and relationship adjustment in a large sample of lesbian women, there are several notable limitations. The data are cross-sectional, thus we cannot establish causality nor the temporal order of relationships. In addition, participants reported on their drinking and their same-sex intimate partners' alcohol use. These reports may be subject to under or over-reporting. Although the majority of the sample saw their partners daily or a few times a week, we included women who saw their partners less frequently. It is likely that reports of their partners' alcohol use may have been less accurate for women who saw their partners infrequently.

Furthermore, while the sample included 171 women of color, most women were White. Future research should attempt to oversample women of color. In addition, most participants were middle to high income. Thus, our method of recruitment (via online research panels) may exclude those who cannot afford computers or internet services. We targeted emerging adult and young adult lesbians, most of whom reported they were 'not too worried' or 'never hesitated' to

disclose their sexual orientation. In addition, all participants had a same-sex intimate partner. Thus, our results may not generalize to older lesbian women, those less open about their sexuality, or those who are not in relationships with same-sex partners.

### Clinical Implications

The association between partners' drinking quantity and both psychological aggression and relationship adjustment is important to understanding lesbian women's individual health and has implications for improving the quality of lesbian women's relationships. Specifically, clinicians who work with lesbian women around issues of hazardous drinking must be aware of the association between partners' drinking. To reduce an individual's problem drinking, primary care physicians and other treatment providers should be encouraged to ask relevant questions to assess partner drinking as well as to consider involving partners in treatment to reduce hazardous drinking. In addition, clinicians who treat lesbian couples must recognize that discrepancy in drinking between partners may be more important than either partner's individual alcohol use. Effective efforts to address relationship conflict and aggression among lesbian women should include the role of alcohol in relationship dynamics.

### Future Research Directions

Our results extend the literature on discrepant alcohol use from heterosexual relationships to same-sex intimate partnerships. Previous research with heterosexual couples shows that dating partners may co-create environments or drinking contexts that promote or exacerbate alcohol use. Thus, partners may reinforce initial drinking behaviors or create "contagion" or socialization effects (Fischer and Wiersma 2012; Fleming, White, and Catalano 2010; Homish and Leonard 2006). In fact, Mushquash et al. (2013) found bidirectionality in partner alcohol influences in emerging adult dating partners over a 28-day period. Research is needed to examine whether young lesbian women may change their alcohol use to align with their partners.

Although our results suggest that discrepant drinking patterns are associated with poorer relationship adjustment, it is important to ascertain the underlying mechanism to determine how this pattern creates relationship problems. As Kelly and Halford (2007) suggest, perhaps couples' discrepant drinking creates disagreement or one partner's heavy drinking creates additional stress as the other partner assumes more responsibility. Increased understanding of this underlying mechanism will provide useful information for couples' intervention and treatment. In addition, given that lesbian women appear to use more alcohol than heterosexual women (Cochran and Mays 2009; McCabe et al. 2009), understanding how descriptive

norms are associated with alcohol use, and potentially problematic alcohol use, is important.

### Conclusion

Among lesbian women who were part of online marketing research panels, discrepancy in alcohol use between their own and their same-sex intimate partners was associated with relationship adjustment, after controlling for psychological and physical aggression, such that greater discrepancy was associated with lower relationship adjustment. Importantly, results suggest both similarities and differences with previous literature on heterosexual couples and the need for additional research on dyadic satisfaction and alcohol use among lesbian women and their same-sex intimate partners. Clinical treatment providers may also use the results of this study to inform and deliver culturally informed treatment for lesbian women.

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