Sexual assault and alcohol abuse:  
A comparison of lesbians and heterosexual women

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Abstract

Purpose: To compare and contrast lesbians’ and heterosexual women’s experiences of sexual assault and to investigate relationships between sexual assault and alcohol abuse. Methods: In-depth interviews were conducted with 63 lesbians and a demographically matched comparison group of 57 heterosexual women. Lesbians’ and heterosexual women’s experiences of sexual assault, drinking levels, and alcohol-abuse indicators were compared using descriptive statistics. LISREL analysis was used to test the effects of sexual assault on a latent measure of alcohol abuse. Results: Lesbians reported more childhood sexual experiences, were more likely to meet the study definition for childhood sexual abuse (CSA), and were more likely to perceive themselves as having been sexually abused as children. CSA was associated with lifetime alcohol abuse in both lesbian and heterosexual women. However, adult sexual assault (ASA) was associated with alcohol abuse only in heterosexual women. Implications: Sexual assault is a common experience among both lesbians and heterosexual women. Findings emphasize the importance of asking about sexual assault in health histories, and assessing clients for substance abuse and other sequelae of sexual assault. © 2001 Elsevier Science Inc. All rights reserved.

Keywords: Alcohol abuse; Sexual assault; Childhood sexual abuse; Lesbian; Sexual orientation

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1. Introduction

In the past 25 years, research has begun to document the prevalence and effects of sexual assault in women’s lives. Sexual assault is recognized to occur across all racial/ethnic, socioeconomic, and age groups and to have important implications for women’s physical and mental health. Rates of childhood sexual abuse (CSA) have ranged from 2% (George and Winfield-Laird’s study cited in Russell & Bolen, 2000) to 62% (Wyatt, 1985), but most fall between 20% and 38% in community samples of women (Anderson, Martin, Mullen, Romans, & Herbison, 1993; Finkelhor, Hotaling, Lewis, & Smith, 1990; Russell, 1983; Wilsnack, Volfeltanz, Klassen, & Harris, 1997). Variations in rates are likely attributable to different methods and definitions of sexual abuse used in the studies and to differences in age ranges and other characteristics of samples surveyed (Bolen & Scannapieco, 1999; Russell & Bolen, 2000). For many of the same reasons, the prevalence of adult sexual assault (ASA) is also difficult to estimate. Investigators studying rape or attempted rape have reported rates ranging from a low of 2.6% (Breslau, Davis, Andreski, Federman, & Anthony, 1991) to a high of 44% (Russell, 1984a, 1984b), with higher rates typically reported in studies of younger women (Koss, Gidycz, & Wisniewski, 1987; Sorenson, Stein, Siegel, Golding, & Burnam, 1987; Wyatt, 1985).

Studies show sexual assault to be associated with anxiety, depression, self-destructive behavior (e.g., suicide attempts), poor self-esteem, difficulty trusting others, and alcohol and other drug abuse (Briere & Runtz, 1993; Browne & Finkelhor, 1986; Green, 1993; Wilsnack et al., 1997). In addition, women who experience childhood victimization appear to be at increased risk for revictimization in adulthood (Browne & Finkelhor, 1986; Descamps, Rothblum, Bradford, & Ryan, 2000; Wyatt, Guthrie, & Notgrass, 1992), which likely exacerbates the impact of earlier abuse experiences. Despite the substantial and growing body of research focusing on sexual assault among women in the general population, relatively little research has focused on lesbians’ experiences of sexual assault.

Some authors have speculated that lesbians may be more likely than heterosexual women to have been sexually abused as children (Beitchman, Hood, daCosta, Akman, & Cassavia, 1992; Gundlach, 1977), and researchers in at least one study suggest that homosexuality is caused by CSA (Cameron & Cameron, 1995). While some studies have found higher rates of CSA among lesbians (Hughes, Haas, Razzano, Matthews, & Cassidy, 2000; Lechner, Vogel, Garcia-Shelton, Leichter, & Steibel, 1993; Roberts & Sorensen, 1999), others have found rates similar to those of women in the general population (Bradford, Ryan, & Rothblum, 1994; Brannock & Chapman, 1990; Peters & Cantrell, 1991; Rankow, Cambre, & Cooper, 1998). As in studies of women in the general population, differences in rates of CSA among lesbians are likely due to variations in study methods and definitions, specificity and number of questions, and sample characteristics. For example, Bradford et al. (1994) used one screening question to assess CSA. This question asked respondents if they were “ever raped or sexually attacked while growing up.” Roberts and Sorensen (1999) also asked only one screening question, but specifically asked respondents for their perceptions of whether they were sexually abused, i.e., “when you were a child (18 or under), can you remember having an experience you would now consider sexual abuse?” Higher rates of CSA among lesbians
may also partially reflect lesbians’ greater openness or willingness to report such experiences (Duncan, 1990).

Because lesbians are less likely to be in intimate relationships with men, it is believed they are less subject to ASA by male partners (Descamps et al., 2000). However, some evidence suggests that lesbians are at least as likely as heterosexual women to have experienced ASA or rape (Brannock & Chapman, 1990), and that sexual coercion may be as prevalent in lesbian relationships as in heterosexual relationships (Waldner-Haugrud & Gratch, 1997).

Although research findings related to both CSA and ASA among lesbians are limited and inconsistent, the literature suggests that a substantial proportion of lesbians have been sexually assaulted at some point in their lifetimes. Further, the relative risk of adverse consequences associated with sexual assault may differ for lesbians and heterosexual women (Descamps et al., 2000; Roberts & Sorensen, 1999). Lesbians must learn to manage stigma and to cope in a world that is hostile toward them. Some lesbians may find that this experience helps them cope more effectively and protects them to varying degrees when faced with negative life experiences (DiPlacido, 1998), such as sexual assault. Conversely, other lesbians may be at a relatively higher risk (than heterosexual women) for negative coping because of the impact of chronic stresses related to their minority statuses (Meyer, 1995). Given that alcohol abuse is among the most commonly reported sequelae of sexual assault among women, and that lesbians are believed to be at higher risk than heterosexual women for alcohol abuse or alcohol-related problems (Bergmark, 1999; Heffernan, 1998; Hughes & Wilsnack, 1997; McKirnan & Peterson, 1989; Skinner, 1994), understanding factors, such as sexual assault, that may increase lesbians’ risk for alcohol abuse is particularly important. Further, understanding whether and how the relationship between sexual assault and alcohol abuse differs among various groups of women is important for the development of effective prevention and intervention strategies.

The objectives of this study were to examine similarities and differences between lesbians and heterosexual women in their experiences of sexual assault, and to investigate the relationships between sexual assault and alcohol abuse.

2. Method

2.1. Sample

A sample of 63 English-speaking women, 18 years old or older that self-identified as lesbian were recruited from Chicago and the surrounding suburbs. Because it is not currently possible to reliably estimate the prevalence or distribution of women who might be considered lesbian by virtue of their sexual behavior or attraction — nor is it economically feasible to obtain large enough random samples of self-identified lesbians — our approach attempted to minimize the limitations and maximize the strengths of available sampling strategies and the information such studies can provide. To minimize systematic bias and to increase the diversity of the sample, we used a broad range or recruitment methods and
sources. For example, advertisements were placed in local newspapers, and flyers were posted in churches and bookstores, and were distributed to individuals and organizations via formal and informal social events and social networks. Interested women were asked to call the project office to schedule an interview. During the initial telephone contact, each lesbian participant was asked whether she knew a heterosexual woman of the same race who had a job, (or in the case of students or retirees a role), similar to her own, who might agree to be interviewed. The lesbian respondents contacted and provided the heterosexual women with the project office’s telephone number to call if interested. Despite a US$10 incentive to lesbian participants for their assistance in recruiting a heterosexual counterpart, this method of obtaining a comparison group was only partially successful. More than one-third of heterosexual matches for the lesbian sample were found using recruitment methods similar to those used to obtain the lesbian sample (i.e., through advertisements and social network referrals). The final sample included a comparison group of 57 heterosexual women who were demographically very similar to the lesbian group.

2.2. Measures

2.2.1. The NSHLEW and HLEW

We used a slightly adapted version of the interview questionnaire from the National Study of Health and Life Experiences of Women (NSHLEW), a longitudinal study of women’s drinking (Wilsnack, Klassen, Shur, & Wilsnack, 1991; Wilsnack, Wilsnack, Klassen, 1984). The NSHLEW questionnaire (HLEW) has been developed over the past 20 years and used in four waves of data collection (1981, 1986, 1991, and 1996) with more than 1100 US women. The HLEW was designed in cooperation with the National Opinion Research Center (NORC) to gather data on drinking behavior and drinking-related problems, physical and mental health, and a variety of life experiences. The nearly 400 questions permit assessment of the individual and combined effects of a large number of variables identified in previous theory or research as being associated with women’s drinking (e.g., social roles, relationship characteristics, depression and anxiety, physical and sexual abuse). Questions, indexes, and scales used in the initial (1981) HLEW were selected, whenever possible, from instruments that had been well validated in previous research. The HLEW has been extensively pretested prior to each wave of data collection and refined over time to retain variables with the greatest predictive value. Sexual orientation questions were developed in two focus groups with 16 women in Chicago. The Chicago-HLEW, with the new sexual orientation questions and some changes in wording to make the other questions more inclusive of lesbians’ experiences, was pretested in 1996 with 15 self-identified lesbians (Skrocki, 1996). The sexual orientation questions are now used with both lesbians and heterosexual women in the NSHLEW.

2.2.2. Childhood sexual abuse

CSA questions in the HLEW are based on work by Russell (1983), Wyatt (1985), and others, and were pretested with three samples of women, one of which included members of a sexual abuse support group (Wilsnack et al., 1997). Questions ask about the following eight...
types of experiences before age 18: exposure (of the respondent’s genitals), exhibitionism (by the perpetrator), touching/fondling (as initiator and recipient), sexual kissing, oral–genital activity (as initiator and recipient), and vaginal or anal intercourse. For each activity reported, follow-up questions ask about the number of other persons involved; the other person’s or persons’ relationship to the respondent; the respondent’s and other persons’ ages at first occurrence; and the respondent’s feelings about the experience at the time it occurred. Consistent with definitions used in previous analyses of data from the NSHLEW (Wilsnack et al., 1997) and the work of Wyatt, the first measure of CSA (Wyatt CSA) included: (1) any intrafamilial sexual activity before age 18 that was unwanted by the respondent or involved a family member 5 or more years older than the respondent; or (2) any extrafamilial sexual activity that occurred before age 18 and was unwanted, or that occurred before age 13 and involved another person 5 or more years older than the respondent. A second measure (self-perception of CSA) consisted of responses to a single question (following the series of questions above) asking if the respondent felt that she had been sexually abused when she was growing up. Finally, we constructed a third, continuous measure that summed the number of different sexual experiences (0–8) prior to age 18 reported by each respondent (number of childhood sexual experiences).

2.2.3. Adult sexual assault

ASA was measured by one question that asked “Since you were 18 years old was there a time when someone forced you to have sexual activity that you really did not want (yes/no)?” Additional questions asked whether the unwanted sexual activity happened with (1) a stranger or strangers; (2) a steady date or romantic partner; (3) current partner; (4) a family member; (5) someone in a position of influence over the respondent (e.g., employer, teacher, therapist); or (6) someone else known to the respondent, but not a family member.

2.2.4. Drinking measures

The questions measuring alcohol use in the HLEW were originally designed to allow comparisons with results of earlier national drinking surveys, in particular, surveys conducted by the Alcohol Research Group (Cahalan, 1970; Clark & Midanik, 1982). Questions were modified to increase their sensitivity to characteristics of women’s drinking.

To assess frequency and quantity of alcohol consumption, respondents were asked beverage-specific questions about the frequency of drinking wine, beer, and liquor during the past 30 days, and the number of drinks of each beverage consumed on a typical day when they drank that beverage. Drinking frequency, quantity, average drink sizes, and ethanol content for all types of beverages were combined to calculate average daily consumption in ounces of ethanol. In addition, a modified measure of total consumption (adapted from Polich & Orvis, 1979) takes into account the number of days during the past 12 months when the respondent reported having six or more drinks. This measure was used to classify respondents’ levels of drinking as lifetime abstainers, 12-month abstainers (no alcohol consumed in the previous 12 months), 30-day abstainers, light drinkers (less than 0.22 oz ethanol/day), moderate drinkers (0.22–0.99 oz ethanol/day), and heavy drinkers (1 oz or more ethanol/day).
2.2.5. Alcohol abuse indicators

There were three measures of alcohol abuse in the present analyses. Eight questions ask about adverse drinking consequences. Six questions were from previous drinking surveys (Cahalan, 1970; Clark & Midanik, 1982) and ask about (1) driving while drunk or high from alcohol; (2) starting arguments or fights with partner or (3) with persons outside the family when drinking; (4) drinking-related harm to work or job; and (5) complaints about respondent’s drinking from her partner or (6) from relatives or close friends. Two newer questions asked about (7) drinking-related accidents in the home; and (8) interference by drinking with housework or chores. Other questions were drawn from indexes used in national drinking surveys, such as the CAGE alcoholism screening test (Mayfield, McLeod, & Hall, 1974) and others (Cahalan, 1970; Clark & Midanik, 1982; Polich & Orvis, 1979). The CAGE questions asked about: (1) inability to stop or reduce alcohol consumption over time; (2) feeling annoyed by people who criticized the respondent’s drinking; (3) feeling bad or guilty about drinking; and (4) morning drinking (CAGE symptoms). Three additional questions included: (1) rapid drinking; (2) inability to stop drinking before becoming intoxicated; and (3) memory lapses while drinking (blackouts) (adverse drinking behaviors). All three measures assessed both lifetime and past 12-month experiences.

2.2.6. Sexual orientation

Although the HLEW includes multiple measures of sexual orientation (i.e., identity, behavior, and attraction), for this study, women were considered lesbian if they answered “mostly” or “only homosexual, lesbian, or gay” when asked to define their sexual identities, and heterosexual if they answered “mostly” or “only heterosexual.” Because women were screened prior to participation in the research, no women who identified as bisexual were included in the study.

2.3. Data collection

Following a review of the study’s purpose and procedures, participants were asked to read and sign a detailed consent form. Data were collected in face-to-face interviews lasting approximately 90 min. All women were interviewed individually in a private setting by one of four female interviewers. Confidential self-administered handouts were used to collect data on sensitive topics such as those related to sexual experiences. Lesbians received US$20 for their interviews and an additional US$10 for assisting with a successful contact and interview of a heterosexual counterpart. The heterosexual women also received US$20 following completion of the interview.

2.4. Data analysis

Data were analyzed using SPSS 9.0. T tests were used to test for differences between continuous variables. Chi-square analyses were used to assess similarities and differences between lesbians’ and heterosexual women’s demographic characteristics, sexual assault
experiences, and drinking levels. Pearson’s $r$ was used to examine correlations between the alcohol abuse and sexual assault measures for lesbians and heterosexual women. Covariance structure models were tested separately for the lesbian and heterosexual subsamples to assess the effects of sexual assault on a latent alcohol abuse variable (Bollen, 1989; Joreskog & Sorbom, 1996). The significance level for all the analyses was set at .05.

3. Results

3.1. Description of the sample

A total of 120 women (63 lesbians and 57 heterosexual women) are included in the analyses presented here. The study sample is much more diverse than those included in previous research on lesbian health, which have been predominately white, middle-class, well educated, and relatively young (generally 25–35 years old). The average age of the combined sample was 40 years old (39 for lesbians and 41 for heterosexual women). As shown in Table 1, only about one-third of the respondents were white, more than one-fourth were African American, and about one-fourth were Hispanic/Latina (Mexican, Puerto Rican, or Cuban); the remainder were Asian American, Native American, or of another racial/ethnic background. Fifteen percent had a high school education or less. About one-fifth of the sample had household incomes under US$10,000 per year. More than one-half reported that they were currently married or in a committed relationship, though not all respondents who were married or in a committed relationship lived with their spouses or partners. There were no statistically significant differences between the groups on any of the key demographic characteristics.

3.2. Sexual assault experiences

Table 2 summarizes the number and percentage of lesbians and heterosexual women who obtained positive scores on the sexual assault measures. Significantly more lesbians than heterosexual women in this sample met Wyatt’s definition of CSA ($\chi^2 = 5.96$, $df=2$, $P = .05$) (three lesbians [5%] and eight heterosexual women [14%] provided insufficient information to determine whether their sexual experiences met Wyatt’s criteria for CSA). In addition, more lesbians than heterosexual women reported that they perceived themselves as having been sexually abused as a child ($\chi^2 = 4.61$, $df=1$, $P = .03$). Interestingly, both lesbian and heterosexual women in the sample were more likely to meet the Wyatt CSA criteria than to perceive themselves as having been sexually abused as children. However, percent agreement between these two measures was higher for lesbians ($55\%$, $\chi^2 = 17.41$, $df=2$, $P < .001$) than for heterosexual women ($30\%$, $\chi^2 = 8.81$, $df=2$, $P = .01$). Whether women perceived themselves to be sexually abused appeared to be influenced by whether the perpetrator was within the family (intrafamilial CSA) or outside the family (extrafamilial CSA). Self-perception of CSA was statistically associated with intrafamilial CSA ($\chi^2 = 15.56$, $df=2$, $P < .001$), but not extrafamilial CSA ($\chi^2 = 5.32$, $df=2$, $P = .07$) in lesbians. Findings were
similar for heterosexual women (intrafamilial, $\chi^2 = 24.75$, $df = 2$, $P < .001$; extrafamilial, $\chi^2 = 4.14$, $df = 2$, $P = .13$). As indicated in Table 2, there was a trend toward more lesbians than heterosexual women reporting intrafamilial CSA.

In this sample, lesbians reported a greater number of the eight childhood sexual experiences included in the CSA measure than did the heterosexual women. In addition, lesbians were significantly more likely than their heterosexual counterparts to report five of the eight sexual experiences; exceptions were being shown someone else’s private parts,
rates of ASA were similar for lesbians and heterosexual women. however, the two groups differed somewhat on reports of who committed the assaults. although not all differences were statistically significant at the .05 level, there was a clear trend toward heterosexual women being more likely to report having been sexually assaulted by a current partner or by a date; lesbians were more likely to report that they had been sexually assaulted by a family member.

3.3. drinking levels

table 3 summarizes descriptive data comparing lesbians’ and heterosexual women’s levels of drinking and drinking-related problems. levels of drinking differed significantly for lesbians and heterosexual women ($\chi^2 = 17.75$, $df=5$, $P=.003$). post hoc analyses revealed
that this difference was due to the greater percentage of lesbians (25%) than heterosexual women (4%) who were 12-month abstainers. The majority of lesbians (75%) and heterosexual women (84%) were current drinkers (alcohol consumed in the past 12 months); no lesbians were lifetime abstainers. Although not shown in Table 3, significantly more lesbians (18%) than heterosexual women (2%) reported that they were in recovery ($\chi^2 = 5.71, df = 1, P = .02$). Among respondents who had consumed alcohol in the past 12 months, more than one-half of both groups (56%, 54%) reported light (fewer than four drinks/week) drinking and about one-fourth (24%, 21%) reported moderate (fewer than two drinks per day on average) drinking. Only 5% of lesbians and 2% of heterosexual women reported drinking two or more drinks per day on average, classified here as heavy drinking.

Although lesbians reported a higher mean number of adverse drinking behaviors, consequences, and CAGE symptoms (both 12 months and ever) than did heterosexual women, these differences were not statistically significant. However, almost one-half (47%) of the lesbians compared with 16% of heterosexual women reported that they have wondered at some point in the past whether they might have a drinking problem ($\chi^2 = 11.42, df = 1, P = .001$). Among participants who reported ever wondering about this, lesbians tended to be slightly older (29.5 years compared with 26 years for the heterosexual women) when they first wondered about it. These questions did not address respondents’ current perceptions about potential drinking problems.

Table 3
Drinking levels and alcohol abuse indicators

<table>
<thead>
<tr>
<th></th>
<th>Heterosexual women ($n = 57$)</th>
<th>Lesbians ($n = 63$)</th>
<th>$P$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels of drinking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime abstainer</td>
<td>7 (13)</td>
<td>0</td>
<td>.003(^a)</td>
</tr>
<tr>
<td>12-month abstainer</td>
<td>2 (4)</td>
<td>15 (25)</td>
<td></td>
</tr>
<tr>
<td>30-day abstainer</td>
<td>8 (15)</td>
<td>8 (13)</td>
<td></td>
</tr>
<tr>
<td>Light drinker</td>
<td>26 (47)</td>
<td>25 (41)</td>
<td></td>
</tr>
<tr>
<td>Moderate drinker</td>
<td>11 (20)</td>
<td>10 (16)</td>
<td></td>
</tr>
<tr>
<td>Heavy drinker</td>
<td>1 (2)</td>
<td>3 (5)</td>
<td></td>
</tr>
<tr>
<td>Alcohol abuse indicators(^b)</td>
<td>Mean ($n = 50$)</td>
<td>Mean ($n = 53$)</td>
<td>$P$ value</td>
</tr>
<tr>
<td>Adverse drinking consequences (0–8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever</td>
<td>1.32</td>
<td>1.72</td>
<td>.29</td>
</tr>
<tr>
<td>12 months</td>
<td>0.33</td>
<td>0.71</td>
<td>.12</td>
</tr>
<tr>
<td>CAGE symptoms (0–4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever</td>
<td>0.56</td>
<td>0.74</td>
<td>.38</td>
</tr>
<tr>
<td>12 months</td>
<td>0.25</td>
<td>0.34</td>
<td>.54</td>
</tr>
<tr>
<td>Adverse drinking behaviors (0–3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever</td>
<td>0.78</td>
<td>0.94</td>
<td>.41</td>
</tr>
<tr>
<td>12 months</td>
<td>0.25</td>
<td>0.39</td>
<td>.33</td>
</tr>
<tr>
<td>Ever wondered if had drinking problem</td>
<td>8 (16%)</td>
<td>29 (46%)</td>
<td>.001</td>
</tr>
</tbody>
</table>

\(^a\) $P$ value is for differences in overall levels of drinking.

\(^b\) $n$’s for alcohol abuse indicators exclude lifetime and 12-month abstainers and one missing case.
3.4. Relationships between sexual assault and alcohol abuse indicators

Bivariate correlations between the sexual abuse and alcohol abuse indicators were next examined. Results are summarized separately by sexual orientation in Table 4. Among heterosexual women, CSA and ASA were consistently and positively correlated with lifetime and last 12-month measures of alcohol abuse. The pattern of correlations was different among lesbians. For this group, the associations between childhood sexual assault, measured as the number of types of childhood sexual experiences, and the alcohol abuse indicators were very similar to those found in the heterosexual sample. However, ASA was not significantly correlated with any of the six alcohol abuse measures examined. A covariance structure analysis was next employed to further compare the relationships between these two sets of measures in the lesbian and heterosexual samples.

A latent measure of alcohol abuse was developed from the three alcohol abuse indicators: lifetime adverse drinking consequences (eight items), lifetime CAGE symptoms (four items), and lifetime adverse drinking behaviors (three items). Alpha reliability coefficients for these measures in the lesbian and heterosexual subsamples, respectively, were alcohol consequences (.82 and .75), CAGE symptoms (.66 and .68), and adverse drinking behaviors (.66 and .68). Predictors included the same two independent measures of sexual assault examined in Table 4: (1) the sum of sexual experiences before age 18 (eight items; alpha coefficients were .85 and .88 in the lesbian and heterosexual samples, respectively); and (2) a single question that asked respondents whether or not they had experienced forced sexual activity since age 18. Group differences on these measures are shown in Table 2.

Covariance structure models assessing the effects of each sexual violence measure on the latent alcohol abuse variable were estimated separately for the lesbian and heterosexual subsamples using LISREL VIII. Models with increasing numbers of parameter restrictions between the lesbian and heterosexual subsamples revealed considerable similarity between the two groups. The best fitting model was one in which (1) factor loadings for the alcohol abuse construct, (2) the regression coefficient from CSA (but not ASA) to the latent alcohol

Table 4
Correlations between alcohol abuse indicators and sexual assault measures by sexual orientation

<table>
<thead>
<tr>
<th>Alcohol abuse indicators</th>
<th>Heterosexual women (n = 50)</th>
<th>Lesbians (n = 53)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA</td>
<td>ASA</td>
</tr>
<tr>
<td>CAGE (ever)</td>
<td>.38**</td>
<td>.33*</td>
</tr>
<tr>
<td>CAGE (12 months)</td>
<td>.28*</td>
<td>.36**</td>
</tr>
<tr>
<td>Adverse drinking consequences (ever)</td>
<td>.35*</td>
<td>.38**</td>
</tr>
<tr>
<td>Adverse drinking consequences (12 months)</td>
<td>.30*</td>
<td>.26</td>
</tr>
<tr>
<td>Adverse drinking behaviors (ever)</td>
<td>.50**</td>
<td>.28*</td>
</tr>
<tr>
<td>Adverse drinking behaviors (12 months)</td>
<td>.33*</td>
<td>.43**</td>
</tr>
</tbody>
</table>

* P < .05.
** P < .01.
*** P < .001.
abuse variable, and (3) all model error terms were constrained to be equal between the two subsamples. Differences between an initial model with no parameters constrained in the two subsamples and the final model were not significant ($\Delta \chi^2 = 1.58$, $\Delta df = 10$, ns). Final model fit statistics were excellent ($\chi^2 = 15.83$, $df = 18$, ns; Goodness-of-Fit Index = 0.95, Normed Fit Index = 0.92). Hence, all model parameters were found to be similar among lesbian and heterosexual women with the exception of the effects of ASA on alcohol abuse. As Fig. 1 indicates, CSA was associated with lifetime alcohol abuse to a similar (and significant) degree among both lesbians and heterosexuals. ASA, in contrast, was only associated with alcohol abuse among heterosexual women. The overall amount of variance in alcohol abuse accounted for in these two models was 18%.

4. Discussion

Although lesbians are assumed to be at heightened risk for alcohol abuse and alcohol-related problems, very few studies have examined factors that might contribute to this risk. In this study, ASA was associated with alcohol abuse among heterosexual women, but not among lesbians. This finding may reflect different forms or severity of ASA experienced by these two groups of women. In general, lesbians have less exposure to male partners from...
heterosexual dating and relationships. Although same-sex sexual assault is not uncommon, male dates or partners may be more likely than female dates or partners to use harm or threaten harm to obtain sex from women (Brand & Kidd, 1986; Sorenson et al., 1987), and assaults by men may be more invasive (i.e., vaginal or anal intercourse).

CSA was associated with alcohol abuse in both lesbians and heterosexual women—a finding that supports results from studies of women in the general population (McCaulley et al., 1997; Wilsnack et al., 1997), as well as studies of women in alcoholism treatment (Kovach, 1986; Masbaum, 1997; Miller, Downs, & Testa, 1993; Pribor & Dinwiddie, 1992; Rohsenow, Corbett, & Devine, 1988). The rates of reported CSA based on Wyatt’s measure were higher for both lesbians and heterosexual women in this study than in most other community-based samples. This can be explained in part by the method used (face-to-face interviews with a female interviewer); the number and specificity of the questions asked (multiple questions about specific experiences generally yield higher rates than one broad question) (Bolen & Scannapieco, 1999); placement of the questions in the interview (CSA questions were late in the interviews, after rapport and trust had been established); and the operational definition used (Wyatt’s definition is relatively extensive and may capture some experiences that are considered to be consensual by the respondent). Nevertheless, rates in this sample were substantially higher than the rate reported by women in the NSHLEW (21%) (Wilsnack et al., 1997), although both studies used the same interview methods and the same wording and sequence of questions. Higher rates of reported CSA may also reflect sample bias. Because this was a convenience sample, it is possible that women who chose to participate may have been more likely to have experienced difficult or traumatic experiences, including CSA; or, they may have been more willing to report such experiences.

Compared with rates of CSA based on Wyatt’s criteria, rates of self-perceived CSA were lower for both lesbians and heterosexual women; however, more than a third of lesbians, compared with 19% of the heterosexual women, reported that they felt they had been sexually abused when growing up. Higher rates of perceived CSA among lesbians may be partially explained by higher rates of intrafamilial CSA among lesbians than among heterosexual women. The rate of intrafamilial CSA among lesbians in this study (25%) was similar to rates reported for lesbians in the National Lesbian Health Care Survey (19%) (Bradford et al., 1994) and in the Boston Health Project (21%) (Roberts & Sorensen, 1999), as well as to rates for contact only intrafamilial CSA (21%) in Wyatt’s (1985) study of women in the general population. Intrafamilial CSA may be more traumatizing (Finkelhor, 1994) or more easily identified as abusive than are experiences that occur with nonfamily members. Further, the higher rates of reported CSA among lesbians may also be attributable to lesbians’ greater willingness to acknowledge and report this experience. In coming to terms with their sexual orientation, lesbians likely spend a substantial amount of time in self-reflection and grappling with issues related to authenticity. In addition, research has consistently found that the majority of lesbians have been in therapy at some point in their lives (Bradford et al., 1994; Hughes et al., 2000; Sorensen & Roberts, 1997). Therapy experiences may increase lesbians’ comfort with acknowledging and disclosing both sexual identity and other stigmatized statuses or experiences, such as CSA.
Finally, although differences were not statistically significant, lesbians reported a higher mean number of adverse drinking behaviors, drinking consequences, and CAGE symptoms than heterosexual women. Also, lesbians were significantly more likely to report that they were in recovery from alcoholism and to have wondered at some time whether they might be developing a drinking problem. These results support findings from previous studies suggesting that lesbians as a group may be at higher lifetime risk than heterosexual women for alcohol abuse.

Lesbians are assumed to be at heightened risk for alcohol abuse and drinking-related problems not because of their lesbian identity per se, but as a consequence of cultural and environmental factors associated with being part of a stigmatized and marginalized population subgroup. For example, lesbians suffer from discrimination in housing, employment, and basic civil rights (Lambda Legal Defense, 1999). Lesbians frequently feel uncomfortable with or rejected by their families of origin and often lose traditional social support when they disclose their sexual identity (Muller, 1997; Strommen, 1993; Vincze, Bolton, Mak, & Blank, 1993). In part because of societal stigma and discrimination, most lesbians do not bear or raise children (Patterson, 1998) or assume many of the other traditional roles and responsibilities that are believed to limit drinking among heterosexual women (Hughes & Wilsnack, 1997). Until recently, gay bars were among the few places lesbians could safely socialize and meet prospective partners. Despite these risk factors, the majority of lesbians do not drink excessively or experience alcohol-related problems. Nevertheless, higher rates of recovery in this and other studies (Bloomfield, 1993; Hughes et al., 2000) suggest that lesbians may have higher lifetime rates of alcohol abuse and alcoholism than do women in the general population. The finding that almost one-half of lesbians in the study had wondered at some time whether they might have a drinking problem also suggests that lesbians may be more aware of their harmful drinking behaviors and thus may be more amenable to intervention and treatment.

4.1. Strengths and limitations

Research with lesbians is inherently subject to sample bias resulting from the stigma associated with a nonheterosexual orientation. Existing studies typically overrepresent white, middle-class, and well-educated women. Racial/ethnic minority, poor, older, or working-class lesbians and women who partner with women but do not self-identify as lesbian are often underrepresented. In addition, few studies of lesbians have included comparison groups of heterosexual women, and even fewer have used well-validated instruments and measures. Unlike previous studies of lesbians’ drinking, our sample is very diverse in terms of race/ethnicity, age, education, and income. This internal diversity helps to minimize the potential for systematic bias that may influence study findings. Further, the inclusion of heterosexual women in the study provides a more closely matched basis for comparison. Because the heterosexual women were demographically very similar to lesbians in the study, differences between the two groups can more confidently be attributed to sexual orientation (Hughes, Wilsnack, & Johnson, in press). Despite these strengths, the lack of random selection and the relatively small sample size limit generalizability of the findings. At best, generalizability is
limited to women who are “out” enough to identify as lesbian in a confidential interview. The cross-sectional nature of these data also makes it difficult to rule out the effects of alternative causal processes. Most notable in this regard may be the possibility that alcohol abuse may make many women more vulnerable to sexual victimization. Prospective data will be necessary to resolve this issue.

Finally, although the covariance structure models yielded stable and theoretically useful findings, sample sizes were at the lower end of the acceptable range for these analyses (Chin & Newsted, 1999). Thus, despite the diversity of the sample and the consistency of results with previous research, we nonetheless caution readers that these findings will require confirmation using larger samples. Accumulating support of the relationship between CSA and later substance abuse emphasizes the importance of early identification and intervention with sexually abused girls and young women.

4.2. Implications for clinical practice and research

CSA is a common experience of women and research findings suggest that this experience is strongly and consistently associated with alcohol abuse and a number of mental health problems in adulthood. Given the prevalence of CSA, clinicians who provide care to women will inevitably have female clients who have had this experience. Because rates of CSA are even higher among women who seek substance abuse or other mental health treatment than among women in the general population, it is imperative that health care providers in these settings be knowledgeable about the common sequelae of CSA and appropriate interventions. Further, because the odds are doubled that at least one of the partners in lesbian couples has a history of CSA, lesbians may present with relationship difficulties. Although the common experience of sexual assault may encourage empathy within some same-sex female relationships (Miller, 1994), the secrecy and isolation common to many lesbians and survivors of sexual assault often compound difficulties in relationships (Kerewsky & Miller, 1996). Understanding the impact of CSA on relationship dynamics, as well as other common sequelae of CSA, can help clinicians provide more sensitive, effective care to both lesbians and heterosexual women.

Additional research is needed that examines the relationship between sexual assault and alcohol abuse among lesbians. Larger sample sizes will permit more in-depth assessment of factors that might influence the impact of sexual assault, such as age when the assault began, length and severity of abuse experiences, and experiences of revictimization. In addition, more research is needed that explores potential mediating influences such as early childhood factors (e.g., parental warmth or strictness, parental alcohol use and alcohol problems, absence of one or both parents) and potential moderating factors such as use of, and satisfaction with, mental health services. Such research will provide a better understanding of the characteristics of women who are sexually assaulted but do not use alcohol (or other drugs) to cope. Understanding potential protective or resiliency factors is important in the development of early intervention strategies. Such strategies may be particularly important for lesbians and other women who are believed to be at increased risk for alcohol abuse.
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