Published in final edited form as:

J Interpers Violence. 2020 January ; 35(1-2): 384–402. doi:10.1177/0886260516683178.

An Event-Level Investigation of Factors Associated With Young Women's Experiences of Coerced Consensual Sex

Cynthia A. Stappenbeck¹, Jeanette Norris¹, Rhiana Wegner¹, Amanda E. B. Bryan¹, Kelly Cue Davis¹, Tina Zawacki², Devon A. Abdallah¹, William H. George¹

¹University of Washington, Seattle, USA

²The University of Texas at San Antonio, TX, USA

Abstract

Little is known about instances of coerced consensual sex in which women report both that they consented to have sex and that their partner used coercive tactics (e.g., made threats) to get them to have sex when they did not want to. Yet, these experiences are frequently reported by young sexually active women. We examined the relationship between sexual victimization history and the woman's level of alcohol intoxication in the likelihood of experiencing coerced consensual sex using event-level data collected over a 1-year period from 548 young adult nonproblem drinking women who engaged in sexual activity with men. Twenty percent ($n = 112$) reported at least one incident of coerced consensual sex. A generalized estimating equation model revealed main effects of daily estimated blood alcohol content (eBAC) and sexual victimization severity. The more women increased their alcohol consumption above their own average and the more severe their sexual victimization history, the more likely they were to experience coerced consensual sex. Our findings highlight the fact that coercion and consent are not mutually exclusive in some situations and shed light on this important yet understudied coercive sexual experience.

Keywords

coercion; alcohol; sexual victimization history; consensual sex

Women may consent to having sex when they do not want to do so after their male partner engages in coercive tactics, such as verbal pressure, telling lies or making promises that were untrue, getting angry, criticizing or insulting, or threatening to either end the relationship or harm them (Livingston, Buddie, Testa, & VanZile-Tamsen, 2004), an experience we will refer to as coerced consensual sex. Women may consent in response to their partners' coercive tactics for a variety of reasons, including a desire to maintain the relationship or fear of being harmed (Peterson & Muehlenhard, 2007). Coerced consensual sex is important to understand because it may be associated with subsequent negative

Reprints and permissions: sagepub.com/journalsPermissions.nav

Corresponding Author: Cynthia A. Stappenbeck, Department of Psychiatry & Behavioral Sciences, University of Washington, 1100 NE 45th Street, Suite 300, Seattle, WA 98105, USA. cstappen@uw.edu.

Declaration of Conflicting Interests

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

emotional consequences and posttraumatic symptoms (Broach & Petretic, 2006). However, little is known about the unique consequences of these experiences or the specific risk factors associated with women's experiences of coerced consensual sex, the latter of which is the focus of the present investigation. In the present study, women reported on days on which they had either consensual or nonconsensual sex and focused on instances of reported consensual sex, including coerced consensual sex in which they indicated consenting to sex that they did not want after their partner engaged in coercive tactics. We examined whether level of alcohol intoxication and history of sexual victimization (SV) were associated with the likelihood of experiencing coerced consensual sex.

Rates, risk factors, and consequences of coerced consensual sex are not known due to a lack of research on this specific experience. A few related and somewhat overlapping constructs, however, have previously been examined. One is *sexual compliance*, which refers to instances in which women consent to having unwanted or undesired sexual activity that did not involve coercion by the partner (O'Sullivan & Allgeier, 1998). Approximately one third of women have reported sexual compliance (Katz & Tirone, 2009; O'Sullivan & Allgeier, 1998). *Rape by acquiescence* is another related experience defined as experiences in which a woman acquiesces (e.g., passively submits or complies) to her partner despite not wanting to have sex (Basile, 1999). However, it is not clear that women actually consented to sex in all of these instances because some women labeled their experience as rape. Relatedly, some researchers have investigated *verbal sexual coercion*, which focused on nonconsensual unwanted sex in which a partner engaged in verbal coercion tactics (Gilmore et al., 2014; Livingston et al., 2004). Rates of nonconsensual coercive sexual experiences range from 19% to 50% depending on the definition of sexual coercion and the samples of women assessed (Fiebert & Osburn, 2001; Hines, 2007; Koss, Gidycz, & Wisniewski, 1987; Livingston et al., 2004; Testa & Derman, 1999). Further, women who reported coerced nonconsensual sex had similar levels of posttraumatic symptoms to women who reported rape (Broach & Petretic, 2006). Importantly, women may consent to sex that they did not want in response to their partners' coercive tactics. Although this would not meet the traditional definition of sexual assault or rape (due to the fact that women explicitly indicated that they gave consent), it is important to understand more about the experience of coerced consensual sex.

In response to traditional models of sex as either wanted and consensual or unwanted and nonconsensual, Peterson and Muehlenhard (2007) describe a multidimensional model that conceptualizes wanting to have sex as distinct from consenting to sex and allows for instances in which sex is both unwanted and consensual. There are several reasons that women might consent to have sex when they did not want to, including to maintain their relationship, avoid tension in their relationship, or avoid use of coercive tactics by their partner (Katz & Tirone, 2009; O'Sullivan & Allgeier, 1998). When women do not want sex and experience coercion, they may consent as a way to avoid continued coercion or out of fear of what their partners may do, including using more severe forms of pressure or physical force to obtain sex (Basile, 1999; Noel, Ogle, Maisto, & Jackson, 2016).

SV History as a Risk Factor for Coerced Consensual Sex

Women with a history of SV (i.e., nonconsensual unwanted sexual experience) may expect that their sexual relationships will be characterized by sexual exploitation and coercion (Himelein, 1995; Messman-Moore & Long, 2003). Additionally, women with a history of SV may have negative appraisals of themselves including thoughts of self-blame after the assault (e.g., “I blame myself because my actions made things worse”; Ehlers & Clark, 2000). To the extent that women with a history of SV experience negative self-appraisals following a sexual assault, they may subsequently be more likely to consent to have sex in response to their partners’ use of coercive tactics as an attempt to avoid more severe or aggressive tactics by the partner. Indeed, women with a history of SV reported decreased sexual assertiveness (Stoner et al., 2008), were subsequently more willing to consent to unwanted sex even though their partner did not use coercive tactics during that sexual encounter (Katz & Tirone, 2010), and were more willing to abdicate to a partner’s desire for unprotected sex (George et al., 2016). Moreover, college women who blame themselves for an earlier SV exhibit a significant decrease in their sexual refusal assertiveness (Katz, May, Sörensen, & DelTosta, 2010).

Women with a history of SV may be especially at risk for coerced consensual sex. Kennett, Humphreys, and Patchell (2009) found that women with more severe SV histories (i.e., experienced attempted and completed rape), compared with less severe (i.e., unwanted sexual contact), provided significantly more reasons why they would voluntarily consent to unwanted sexual activities (e.g., satisfy their partner’s needs, avoid tension in the relationship), reported significantly lower sexual self-efficacy and perceived self-control for handling men’s unwanted sexual advances, and more frequently giving in to unwanted sexual advances because of verbal persuasion or feeling pressured. The current study extends this cross-sectional research by considering the relationship between the severity of previous sexual assault victimization on women’s reports of consenting to unwanted and coerced sex over a 1-year period.

Alcohol Intoxication as a Risk Factor for Coerced Consensual Sex

Little research has examined the influence of alcohol use in coerced consensual sex. Investigations of the link between alcohol use and SV generally show that women who are typically heavy drinkers are at increased risk of experiencing SV (see Testa & Livingston, 2009, for review). When different types of SV experiences are examined, there is inconsistency about whether a pattern of heavy drinking is associated with experiences of sexual coercion. In some studies, heavy typical alcohol consumption was associated with a history of sexual coercion (Larimer, Lydum, Anderson, & Turner, 1999; Testa & Derman, 1999) whereas in other studies it was associated with rape and not with sexual coercion (Abbey, Ross, McDuffie, & McAuslan, 1996; Messman-Moore, Coates, Gaffey, & Johnson, 2008).

Approximately half of sexual assaults involve alcohol consumption at the time of the assault by the perpetrator, the victim, or most often both (Abbey, 2002; Testa & Parks, 1996, for reviews). To understand this proximal association, researchers have begun to examine event-

level relationships between alcohol use and experiences of sexual coercion (Noel et al., 2016; Parks, Hsieh, Bradizza, & Romosz, 2008). The amount of alcohol consumed on a given occasion and how that compares to women's typical alcohol consumption has been associated with experiencing sexual coercion (Neal & Fromme, 2007). Additionally, Neal and Fromme found that although typically heavy drinkers were more likely to have been coerced into sexual activity, typically light drinking women's risk of experiencing sexual coercion increased more rapidly when they consumed alcohol at greater amounts than their average. This may be because light drinkers are less tolerant of the effects of alcohol or because they lack experience dealing with the effects of greater alcohol intoxication. It is not known, however, how women's typical level of alcohol consumption and event-level deviation from their average level may be related to coerced consensual sexual experiences.

There are several possible explanations for why alcohol may increase the likelihood that women who do not want to have sex will consent to sex. First, alcohol may reduce women's likelihood of resisting unwanted sex (Norris, Nurius, & Dimeff, 1996). Livingston and colleagues (2004) interviewed 114 young adult women aged 18 to 30 about their most recent experience of verbal sexual coercion. The women who had consumed alcohol at the time of this experience indicated that they were less inhibited and therefore more likely to acquiesce to sex than they would have been had they not been drinking. Additionally, alcohol may serve to narrow a woman's attentional focus on compelling instigatory cues such as concern about her partner's coercive behavior (Steele & Josephs, 1990). This may be especially true for women with a history of SV because their fear regarding their partner's coercive behavior and possible escalation to physical aggression may be more salient than for women without a history of SV.

Present Study

Little is known about coerced consensual sex or the factors associated with its occurrence. Therefore, the present study sought to address this important knowledge gap by examining the influence of SV history, level of alcohol intoxication on a given day, and their interaction on the likelihood of experiencing coerced consensual sex. We examined longitudinal event-level data collected over a 1-year period from young adult women who were social drinkers and interested in sexual activity with men. We hypothesized that (1) women with a more severe history of SV would be more likely to experience coerced consensual sex, (2) heavier average level of intoxication and a greater increase in intoxication from one's average would be associated with an increased likelihood of coerced consensual sex, and (3) there would be a significant interaction between SV history and alcohol intoxication such that the association between increased level of intoxication and coerced consensual sex would be stronger among women with a more severe history of SV.

Method

Participants

Participants were 619 young female nonproblem drinkers who reported being sexually active with male partners. To participate in this study, women were required to be between the ages of 18 and 30, be interested in having sex with a man, report having had sex with men on

average at least once a month during the past year, and have engaged in binge drinking at least once during the last year (four drinks in a 2-hr period; National Advisory Council on Alcohol Abuse and Alcoholism, 2005). Women with symptoms of an alcohol use disorder were not included as indicated by the Brief Michigan Alcohol Screening Test (BMAST; Pokorny, Miller, & Kaplan, 1972). Data from 548 participants were used in the current analysis; 67 were excluded because they did not report any consensual sex events during the course of their participation and another four because of missing data.

Included participants' mean age at study entry was 23.2 ($SD = 3.3$). The majority of participants self-identified as European American/White (68.8%), 16.4% as multiracial, 7.6% as Asian American/Pacific Islander, 2.9% as African American/Black, 0.3% as American Indian/Alaskan Native, and 4.0% as "other" or prefer not to answer. Eight and a half percent identified as Hispanic or Latina. The majority of participants were employed either part- or full-time (68.3%) and were either full- or part-time students (50.1%). Most (55.5%) had incomes less than \$21,000 per year. At baseline, participants reported consuming an average of 11.9 ($SD = 7.6$) alcoholic drinks per week.

Procedure

Participants were recruited from the community for a study about "alcohol and social interactions between men and women" via posted flyers, advertisements in online forums, and email to students at a local university. Interested women's eligibility was determined with an online screening survey.

All data were collected via online survey. After a brief follow-up phone call by a project staff member, eligible participants were emailed a link to a 60-min baseline questionnaire, which they had 1 week to complete. Subsequently, over the course of participation (1 year), there were four 1-month assessment periods, which occurred during the third, sixth, ninth, and 12th months post-enrollment. Each assessment period consisted of four weekly surveys about the previous week's sexual experiences and alcohol consumption. Each weekly survey took 20 to 30 min to complete. Compensation for each weekly survey was provided in the form of [Amazon.com](https://www.amazon.com) gift card codes, and to encourage retention ascending bonus gift cards were provided to participants who completed all four surveys in an assessment month. A participant who completed all 16 weekly surveys earned a total of \$350 in gift cards.

Measures

History of adolescent/adult SV—At baseline, the revised version of the Sexual Experiences Survey (SES; Koss et al., 2007) was administered to assess women's history of adolescent/adult (i.e., since age 14) SV. Participants were asked to indicate whether they experienced unwanted sexual contact, and/or oral, vaginal or anal penetration, or attempted oral, vaginal, or anal penetration as well as types of tactics used by the perpetrator (i.e., verbal coercion, physical force, intoxication). Participants indicated the number of times they experienced each outcome type by each tactic (0 = *never*, 3 = *three or more times*). A continuous score representing severity of SV history was calculated by multiplying a severity rank for each outcome/tactic combination (0 = *no history of sexual assault*, 1 = *sexual contact by verbal coercion*, 2 = *sexual contact by intoxication*, 3 = *sexual contact by*

force, 4 = *attempted or completed rape by verbal coercion*, 5 = *attempted or completed rape by intoxication*, 6 = *attempted or completed rape by physical force*) by the frequency with which each combination was experienced and summing the products (Davis et al., 2014). The resulting SV history severity score had a possible range of 0 to 63.

Coerced consensual sex—In each weekly survey, participants were asked whether they had consensual sexual intercourse (defined as vaginal and/or anal intercourse that you wanted to have or agreed to have the entire time you were with the man on that occasion) with one or more male partners during the previous week. Participants were also asked to report separately on any nonconsensual sexual experiences (defined as sexual acts in which the man tried or actually put his penis or an object in your vagina or butt or forced you to perform oral sex on him after you told him that you did not want to or were too drunk or high to consent) during the past week. The reports of nonconsensual sexual experiences were not included in the current analyses. For each reported consensual sex event, participants were asked “Did your partner do any of the following on that day to get you to have sex when you did not want to?” They were instructed to check all that applied (0 = *no*, 1 = *yes*) to a list of items from the revised SES (Koss et al., 2007): *told lies, threatened to end the relationship, threatened to spread rumors about me, swore, made me feel guilty, made promises I knew were untrue, verbally pressured me, sulked or whined, criticized me, got angry but did not use physical force, and threatened to physically harm me or someone close to me*. These responses were used to create a single dichotomous variable representing whether the participant experienced coerced consensual sex on that day (0 = *consensual but not coerced sex*, 1 = *coerced consensual sex*).

Peak (event-level) estimated blood alcohol concentration (eBAC)—For each consensual sex event participants reported in their weekly survey, women were asked whether or not they had also consumed alcohol on that day. If they indicated yes, they were asked “How many alcohol drinks did you have on this day?” and were provided with a definition of different standard drinks to help them estimate accurately. To determine the period of time over which drinks were consumed, they were also asked what time they started and stopped drinking. These estimates, as well as participants’ estimated body weight in pounds (provided at baseline), were used to compute peak eBAC for the day of each sex event (Matthews & Miller, 1979).

Data Analytic Strategy

We examined the event-level association between eBAC and coerced consensual sex using two-level generalized estimating equations (GEE) in Stata version 13 (Hardin & Hilbe, 2003) because there were repeated measures nested within individuals. The dependent variable was dichotomous and represented whether or not the participant reported experiencing coerced consensual sex on that day. Therefore, we specified the binomial reference distribution and a logit link function. To examine the between- and within-person effects of eBAC on coerced consensual sex, we created an average eBAC variable (i.e., person-mean) to represent the between-person effects, and a daily eBAC variable by subtracting the person’s own mean from each day’s eBAC to represent the within-person effects (Raudenbush & Bryk, 2002). Prior to the analyses, both daily and average eBAC

values were multiplied by 100 so that the odds ratios reflect changes in odds associated with an eBAC change of .01g%. We also included the main effect of SV severity as well as the interactions between SV severity and both average eBAC and daily eBAC to examine whether SV severity moderated the association between alcohol intoxication and coerced consensual sex. We also included a variable to reflect whether the day was a weekend day or a week day, and a person mean-centered survey day variable to control for reactivity throughout the individual's study participation. Events were excluded if the eBAC was $\geq .40$ g%, which is standard practice (Neal & Fromme, 2007; Quinn, Stappenbeck, & Fromme, 2013) as such high eBACs likely resulted from inaccurate recall of either the number of standard drinks consumed or the time one started and stopped drinking.

Results

The majority of women in the study had a history of SV ($n = 405$; 73.4%). Participants' average SV severity was 19.7 ($SD = 19.8$, range = 0–63). Out of a possible 112 assessment days, participants provided data for an average of 92.2 ($SD = 26.8$, range = 2–112) days. Women reported having consensual sex on an average of 11.5 ($SD = 8.7$, range = 1–54) days which resulted in 6,113 total consensual sex events. Of those, participants indicated that their partner used coercive tactics in 205 (3.4%) events. Although these coercive sex events represent a small percentage of the overall number of consensual sex events, they were reported by 20% of the women ($n = 112$) an average of 1.8 ($SD = 1.3$, range = 1–8) times.

Of the coerced consensual sex events, the most frequently endorsed coercive tactic included the partner attempting to make the participant feel guilty (38.1%), sulking or whining (36.1%), or using verbal pressure (27.8%). Less frequently, the coerced consensual sex events involved the partner making promises the woman knew to be untrue (14.6%), telling lies (13.2%), and using force (5.4%). The majority of these events involved vaginal intercourse (92.7%) and only 25.3% involved condom use. Forty-eight percent of these coerced consensual sex events included alcohol consumption by the woman, and when alcohol was consumed, the average eBAC was .15% ($SD = .09\%$), almost twice that of the legal driving limit. This was a higher level of intoxication than the noncoerced consensual sex events involving alcohol for which the average eBAC was .10% ($SD = .07\%$). Further, the partner consumed alcohol in 55% of the coerced sex events compared with 41% of the noncoerced sex events. The majority of the time that the woman consumed alcohol on days on which coerced consensual sex was reported, the partner also consumed alcohol (84 of the 99 events in which she consumed alcohol).

Results of the GEE model predicting coerced consensual sex are shown in Table 1. Participants were less likely to report coerced consensual sex on later days of their survey participation. There was a main effect of daily eBAC such that the more participants increased their alcohol consumption above their own average, the more likely they were to experience coerced consensual sex. Specifically, a .01 increase in their eBAC was associated with a 4% increase in the odds of experiencing coerced consensual sex. Additionally, there was a main effect of SV severity such that every 1 unit increase in severity of SV history was associated with a 2% increase in the probability of experiencing coerced consensual sex. The interactions between average (between-person) eBAC and SV severity, and daily (within-

person) eBAC and SV severity were not significant suggesting that SV severity did not moderate the association between alcohol intoxication and coerced consensual sex.

Discussion

The present study highlights the pervasiveness of sexual coercion in women's lives. One fifth of the women in this study reported having experienced at least one coerced consensual sexual event across the year-long assessment. These events are conceptually different from sexual compliance (consensual, unwanted, but not coerced) and sexual coercion (nonconsensual, unwanted, and coerced) and suggest the need for a more nuanced taxonomy describing women's sexual experiences. Consistent with Peterson and Muehlenhard's (2007) multidimensional model, our results suggest that women's unwanted sexual experiences can be considered in terms of their desire (wanted vs. unwanted) and their eventual consent behavior (consenting vs. nonconsenting), but also suggest that all sexual experiences be further evaluated for the presence of coercion from the partner (coerced vs. noncoerced). Additional research is needed to understand how women define and label these different experiences and what key situation- and relationship-specific factors contribute to how women define and understand these experiences. Additionally, the fact that women labeled these coercive sexual experiences as consensual suggests that women do indeed differentiate nonconsensual experiences from consensual sexual experiences that involve coercion.

Our hypotheses were partially supported. Women who reported a more severe sexual assault history were also at greater risk for having experienced a coerced consensual sexual event (H1). Although it is widely known that a prior history of SV is a risk factor for subsequent victimization (Waldron, Wilson, Patriquin, & Scarpa, 2014), these results suggest that women with a history of SV may also experience a range of other negative sexual experiences, including coerced consensual sex. Although these data do not provide explanations as to why women may have consented to unwanted sex in response to their partners' coercive behaviors, previous research examining women's reasons for consenting to unwanted sexual activities suggest women may do so to prevent a partner from losing interest in the relationship, to fulfill perceived relationship obligations, to satisfy their partner's needs, to promote intimacy, or to prevent the dissolution of their relationship (Impett & Peplau, 2002; O'Sullivan & Allgeier, 1998; Shotland & Hunter, 1995). Women with more severe victimization histories may consent to avoid continued coercion or an increase in the severity of the tactics used by the partner (Katz & Tirone, 2010).

Women's event-level and average alcohol intoxication were considered as potential risk factors for experiencing coerced consensual sex over the 1-year period. Contrary to our hypotheses, women's average level of alcohol consumption was not associated with the likelihood of coerced consensual sex. However, on days on which women consumed more than their own average level of alcohol, they were more likely to have experienced coerced consensual sex. In these instances, women may lack experience managing the effects of greater-than-average levels of alcohol intoxication or be unaware of the additional risks associated with their above-average alcohol consumption (Kennett et al., 2009; Mallett, Turrise, Larimer, & Mastroleo, 2009). For example, during unwanted sexual experiences involving alcohol, there is often a high correlation between the amount of alcohol consumed

by the man and the woman (Brecklin & Ullman, 2002; Wegner, Abbey, Pierce, Pegram, & Woerner, 2015). However, when men and women consume similar levels of alcohol, women reach higher blood alcohol levels than their partner due to sex differences in weight and rates of metabolism. Additionally, women have been shown to experience greater cognitive deficits at similar levels of intoxication as men (see Graham, Wilsnack, Dawson, & Vogeltanz, 1998 and Nolen-Hoeksema, 2004, for reviews).

Additionally, women's higher than normal levels of alcohol consumption may have reduced their ability to fend off their partners' coercive tactics or increased the extent to which they were "worn down" and gave in to their partner's whining, sulking, guilt induction, or verbal pressure to have sex. This is consistent with other research on sexually coercive events in which women indicated that their intoxication made it easier for their partner to coax them into having sex when they otherwise would not have (Livingston et al., 2004). In this previous research, the most common reason women consented to sex was to get "the man to stop pestering her for sex" (Livingston et al., 2004, p. 291). It is also possible that the partners saw these women as more vulnerable and less likely to be able to resist their pressure and coercion and therefore took advantage of women's higher-than-normal levels of intoxication (Davis, Danube, Stappenbeck, Norris, & George, 2015).

Social marketing campaigns aimed at reducing heavy drinking may be needed to shine a spotlight on the added risks associated with women's above-average alcohol consumption (Young, Morales, McCabe, Boyd, & D'Arcy, 2005). Skills-based training programs promoting specific protective behavioral strategies for drinking, such as having plans to limit or stop drinking, or changing the manner of drinking so as not to feel pressured to "keep up" or out-drink others, may also be effective. Previous research has shown that using such protective behavioral strategies is associated directly and indirectly with fewer negative alcohol and sex-related consequences (e.g., having sex when they really didn't want to or with someone they normally wouldn't have had sex with) through consumption of fewer drinks during sexual behavior (Lewis, Rees, Logan, Kaysen, & Kilmer, 2010). It should be noted, however, that although it is important to provide women with tools to help them reduce their risk for coercion, the only way to actually prevent coercion is to intervene with the perpetrators of the coercive behavior. The current results suggest that these perpetrators may be more likely to use these coercive tactics when women reach levels of intoxication that is above their own average. Therefore, intervention and prevention efforts aimed at reducing coercion perpetration may benefit from focusing on strategies to improve perpetrators' self-regulation in these situations specifically.

Limitations

First, although a strength of this study was its examination of multiple sexual experiences at the event level, participants were only surveyed about the details of each experience at the end of each assessment week. The time women had to reflect on their sexual experiences before each survey may have influenced whether they reported events as consensual or nonconsensual. Future studies would benefit from employing more frequent assessments (e.g., daily diaries) to reduce the influence of retrospective narratives changing over time. Second, in examining partners' coercive behaviors, we were limited to women's reports

about those behaviors. These reports may have been influenced by other factors such as the women's level of intoxication at the time of the sexual event, partner type, and positive or negative feelings about the sexual encounter. Because we had only women's reports, we also did not have the ability to examine differences between men's and women's perceptions of coercion and consent, which is an important dimension of understanding how these events occur. Third, eBACs may be over- or under-estimated depending on the accuracy of multiple factors, including women's reports of their body weights, estimates of drinking quantities, and recollections of the amount of time over which alcohol was consumed. Last, it is not known why women's reports of coerced consensual sex decreased toward the end of the monitoring period. It is possible that women experienced fewer instances of coerced consensual sex in the later part of the study, or they opted not to report these instances as their participation in the study went on.

It is also important to note that generalizability of these findings is reduced due to the inclusion/exclusion criteria that limited diversity in terms of sex, sexual orientation, geography, and age. Specifically, our findings may not generalize beyond young adult women who have sex with men. Additionally, because the larger study involved an alcohol administration protocol in which some participants were required to attend a laboratory session, we necessarily had to limit our recruitment to the surrounding geographical region; therefore, results may not generalize to individuals living in nonurban settings or outside the United States. Moreover, our racial and ethnic distribution represents the local area in which the research was conducted; however, our sample was majority White. Future research should examine coerced consensual sex in a more diverse population regarding sex, sexual orientation, race, ethnicity, and geography.

Conclusion

Our findings shed light on an important and understudied subset of women's sexual experiences—consensual sex that was unwanted and coercive. Twenty percent of our participants reported at least one experience of coerced consensual sex over the course of 1 year, suggesting that it is a common experience that warrants further investigation. Our results suggest that women with a more severe history of SV are more likely to have experienced coerced consensual sex. Additionally, when women consume alcohol in greater amounts than their individual average level, they are at greater risk of experiencing coerced consensual sex. Future research is needed to examine the consequences of these experiences (those that overlap with nonconsensual sex and those that may be unique to coerced consensual sex), and partner and relationship characteristics that may help explain women's decisions to consent to sex in these instances to understand how best to intervene to reduce the occurrence of coerced consensual sex.

Acknowledgments

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by grants from the National Institute on Alcohol Abuse and Alcoholism (R01AA014512 and K08AA021745).

Biographies

Cynthia A. Stappenbeck, PhD, is an assistant professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington and a licensed clinical psychologist. Dr. Stappenbeck's research focuses on the associations between alcohol consumption and interpersonal aggression, sexual risk taking, as well as trauma exposure and posttraumatic stress disorder.

Jeanette Norris, PhD, is a senior research scientist at the University of Washington Alcohol and Drug Abuse Institute. She has conducted NIH-funded research on alcohol and women's issues for more than 25 years. Her current research interests include relationships among alcohol consumption and child sexual abuse, adult sexual assault victimization and perpetration, and consensual sexual decision making. Dr. Norris conducts both experimental and survey research and is interested in alcohol's learned expectancy and pharmacological effects.

Rhiana Wegner, PhD, is now an assistant professor of social psychology in the Department of Psychology at the University of Massachusetts - Boston. She completed her postdoctoral fellowship through an NIAAA-funded T32 training grant at the University of Washington. Dr. Wegner employs a biopsychosocial approach toward examining the etiology of gender-based violence and sexual risk behavior. She has examined neuroendocrine, personality, social cognitive, emotional and behavioral individual-level risk factors, as well as characteristics of the situation, victim-perpetration relationship and larger peer context.

Amanda E. B. Bryan, PhD, was a research scientist with the National Health, Aging, Sexuality and Gender Study at the University of Washington School of Social Work. She is a clinical psychologist whose research focuses on trajectories of change in behavioral health, influences of social relationships on health and well-being, and quantitative analytic methods.

Kelly Cue Davis, PhD, is a research associate professor in the School of Social Work at the University of Washington in Seattle as well as a licensed clinical psychologist. For over 20 years, Dr. Davis has researched the effects of alcohol consumption on sexual violence, sexual risk, and sexual health, with a particular emphasis on men's perpetration of sexual aggression.

Tina Zawacki, PhD, is an associate professor in the Department of Psychology at the University of Texas at San Antonio. Her research interests include the social-cognitive processes involved in sexual victimization, sexual aggression, and sexual risk taking.

Devon A. Abdallah, PhD, is a project and data manager in the Department of Psychiatry and Behavioral Sciences at the University of Washington in Seattle. For over 15 years, Dr. Abdallah has managed research projects focusing on public health with a particular emphasis on projects examining alcohol consumption.

William H. George, PhD, is professor of Psychology and Adjunct Professor of American Ethnic Studies at the University of Washington. Dr. George has led or co-led several NIH funded projects utilizing both experimental and survey methods, which have focused on a variety of alcohol and sexuality topics including child sexual abuse, sexual arousal, sexual perception, sexual assault, and sexual risk taking. Dr. George also studies cultural issues related to addictions and sexuality.

References

- Abbey A. 2002; Alcohol-related sexual assault: A common problem among college students. *Journal of Studies on Alcohol*. 2002(Suppl. 14):118–128.
- Abbey A, Ross LT, McDuffie D, McAuslan P. 1996; Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*. 20:147–169.
- Basile K. 1999; Rape by acquiescence: The ways in which women “give in” to unwanted sex with their husbands. *Violence Against Women*. 5:1036–1058. DOI: 10.1177/10778019922181617
- Brecklin LR, Ullman SE. 2002; The roles of victim and offender alcohol use in sexual assaults: Results from the National Violence against Women Survey. *Journal of Studies on Alcohol*. 63:57–63. [PubMed: 11925059]
- Broach JL, Petretic PA. 2006; Beyond traditional definitions of assault: Expanding our focus to include sexually coercive experiences. *Journal of Family Violence*. 21:477–486. DOI: 10.1007/s10896-006-9045-z
- Davis KC, Danube CL, Stappenbeck CA, Norris J, George WH. 2015; Background predictors and event-specific characteristics of sexual aggression incidents: The roles of alcohol and other factors. *Violence Against Women*. 21:997–1017. DOI: 10.1177/1077801215589379 [PubMed: 26048213]
- Davis KC, Gilmore AK, Stappenbeck CA, Balsan MJ, George WH, Norris J. 2014; How to score the Sexual Experiences Survey? A comparison of nine methods. *Psychology of Violence*. 4:445–461. DOI: 10.1037/a0037494 [PubMed: 25512879]
- Ehlers A, Clark DM. 2000; A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*. 38:319–345. DOI: 10.1016/S0005-7967(99)00123-0 [PubMed: 10761279]
- Fiebert MS, Osburn K. 2001; Effect of gender and ethnicity on self reports of mild, moderate and severe sexual coercion. *Sexuality & Culture: An Interdisciplinary Quarterly*. 5(2):3–11. DOI: 10.1007/s12119-001-1015-2
- George WH, Davis KC, Masters NT, Kajumulo KF, Stappenbeck CA, Norris J, Staples JM. 2016; Partner pressure, victimization history, and alcohol: Women’s condom-decision abdication mediated by mood and anticipated negative partner reaction. *AIDS and Behavior*. 20:134–146. DOI: 10.1007/s10461-015-1154-3
- Gilmore AK, Schacht RL, George WH, Davis KC, Norris J, Heiman JR. 2014; Verbal sexual coercion experiences, risky sexual behaviors, and substance use in women. *Journal of Aggression, Maltreatment & Trauma*. 23:725–739.
- Graham K, Wilsnack R, Dawson D, Vogeltanz N. 1998; Should alcohol consumption measures be adjusted for gender differences? *Addiction*. 93:1137–1147. DOI: 10.1046/j.1360-0443.1998.93811372.x [PubMed: 9813895]
- Hardin, JW, Hilbe, JM. Wiley encyclopedia of clinical trials. Boca Raton, FL: CRC Press; 2003. Generalized estimating equations; 1–8.
- Himelein MJ. 1995; Risk factors for sexual victimization in dating: A longitudinal study of college women. *Psychology of Women Quarterly*. 19:31–48. DOI: 10.1111/j.1471-6402.1995.tb00277.x
- Hines DA. 2007; Predictors of sexual coercion against women and men: A multilevel, multinational study of university students. *Archives of Sexual Behavior*. 36:403–422. DOI: 10.1007/s10508-006-9141-4 [PubMed: 17333324]
- Impett EA, Peplau LA. 2002; Why some women consent to unwanted sex with a dating partner: Insights from attachment theory. *Psychology of Women Quarterly*. 26:360–370. DOI: 10.1111/1471-6402.t01-1-00075

- Katz J, May P, Sörensen S, DelTosta J. 2010; Sexual revictimization during women's first year of college: Self-blame and sexual refusal assertiveness as possible mechanisms. *Journal of Interpersonal Violence*. 25:2113–2126. DOI: 10.1177/0886260509354515 [PubMed: 20065312]
- Katz J, Tirone V. 2009; Women's sexual compliance with male dating partners: Associations with investment in ideal womanhood and romantic well-being. *Sex Roles*. 60:347–356. DOI: 10.1007/s11199-008-9566-4
- Katz J, Tirone V. 2010; Going along with it: Sexually coercive partner behavior predicts dating women's compliance with unwanted sex. *Violence Against Women*. 16:730–742. DOI: 10.1177/1077801210374867 [PubMed: 20558767]
- Kennett DJ, Humphreys TP, Patchell M. 2009; The role of learned resourcefulness in helping female undergraduates deal with unwanted sexual activity. *Sex Education*. 9:341–353. DOI: 10.1080/14681810903264702
- Koss MP, Abbey A, Campbell R, Cook S, Norris J, Testa M, White J. 2007; Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*. 31:357–370. DOI: 10.1111/j.1471-6402.2007.00385.x
- Koss MP, Gidycz CA, Wisniewski N. 1987; The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*. 55:162–170. DOI: 10.1037/0022-006X.55.2.162 [PubMed: 3494755]
- Larimer ME, Lydum AR, Anderson BK, Turner AP. 1999; Male and female recipients of unwanted sexual contact in a college student sample: Prevalence rates, alcohol use, and depression symptoms. *Sex Roles*. 40:295–308. DOI: 10.1023/A:1018807223378
- Lewis MA, Rees M, Logan DE, Kaysen DL, Kilmer JR. 2010; Use of drinking protective behavioral strategies in association to sex-related alcohol negative consequences: The mediating role of alcohol consumption. *Psychology of Addictive Behaviors*. 24:229–238. DOI: 10.1037/a0018361 [PubMed: 20565149]
- Livingston JA, Buddie AM, Testa M, VanZile-Tamsen C. 2004; The role of sexual precedence in verbal sexual coercion. *Psychology of Women Quarterly*. 28:287–297. DOI: 10.1111/j.1471-6402.2004.00146.x
- Mallett KA, Turrissi R, Larimer ME, Mastroleo NR. 2009; Have I had one drink too many? Assessing gender differences in misperceptions of intoxication among college students. *Journal of Studies on Alcohol and Drugs*. 70:964–970. DOI: 10.15288/jsad.2009.70.964 [PubMed: 19895775]
- Matthews DB, Miller WR. 1979; Estimating blood alcohol concentration: Two computer programs and their applications in therapy in research. *Addictive Behaviors*. 4:55–60. DOI: 10.1016/0306-4603(79)90021-2 [PubMed: 420046]
- Messman-Moore TL, Coates AA, Gaffey KJ, Johnson CF. 2008; Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence*. 23:1730–1746. DOI: 10.1177/0886260508314336 [PubMed: 18349349]
- Messman-Moore TL, Long PJ. 2003; The role of childhood sexual abuse sequelae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Psychology Review*. 23:537–571. DOI: 10.1016/S0272-7358(02)00203-9 [PubMed: 12788109]
- National Advisory Council on Alcohol Abuse and Alcoholism. Recommended council guidelines on ethyl alcohol administration in human experimentation. 2005. Retrieved from <https://www.niaaa.nih.gov/Resources/ResearchResources/job22.htm>
- Neal DJ, Fromme K. 2007; Event-level covariation of alcohol intoxication and behavioral risks during the first year of college. *Journal of Consulting and Clinical Psychology*. 75:294–306. DOI: 10.1037/0022-006X.75.2.294 [PubMed: 17469887]
- Noel NE, Ogle RL, Maisto SA, Jackson LA. 2016; What do women want? A qualitative study of dating. *Violence Against Women*. 22:168–188. DOI: 10.1177/1077801214555472 [PubMed: 25331154]
- Nolen-Hoeksema S. 2004; Gender differences in risk factors and consequences for alcohol use and problems. *Clinical Psychology Review*. 24:981–1010. DOI: 10.1016/j.cpr.2004.08.003 [PubMed: 15533281]

- Norris J, Nurius PS, Dimeff LA. 1996; Through her eyes: Factors affecting women's perception of and resistance to acquaintance sexual aggression threat. *Psychology of Women Quarterly*. 20:123–145. DOI: 10.1111/j.1471-6402.1996.tb00668.x [PubMed: 25705073]
- O'Sullivan LF, Allgeier ER. 1998; Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *The Journal of Sex Research*. 35:234–243. DOI: 10.1080/00224499809551938
- Parks KA, Hsieh Y, Bradizza CM, Romosz AM. 2008; Factors influencing the temporal relationship between alcohol consumption and experiences with aggression among college women. *Psychology of Addictive Behaviors*. 22:210–218. DOI: 10.1037/0893-164X.22.2.210 [PubMed: 18540718]
- Peterson ZD, Muehlenhard CL. 2007; Conceptualizing the “wantedness” of women's consensual and nonconsensual sexual experiences: Implications for how women label their experiences with rape. *The Journal of Sex Research*. 44:72–88. DOI: 10.1080/00224490709336794 [PubMed: 17599266]
- Pokorny AD, Miller BA, Kaplan HB. 1972; The brief MAST: A shortened version of the Michigan Alcoholism Screening Test. *The American Journal of Psychiatry*. 129:342–345. DOI: 10.1176/ajp.129.3.342 [PubMed: 5053717]
- Quinn PD, Stappenbeck CA, Fromme K. 2013; An event-level examination of sex differences and subjective intoxication in alcohol-related aggression. *Experimental and Clinical Psychopharmacology*. 21:93–102. DOI: 10.1037/a0031552 [PubMed: 23421356]
- Raudenbush, SW, Bryk, AS. *Hierarchical linear models: Applications and data analysis methods*. 2nd. Thousand Oaks, CA: Sage; 2002.
- Shotland RL, Hunter BA. 1995; Women's “token resistant” and compliant sexual behaviors are related to uncertain sexual intentions and rape. *Personality and Social Psychology Bulletin*. 21:226–236. DOI: 10.1177/0146167295213004
- Steele CM, Josephs RA. 1990; Alcohol myopia: Its prized and dangerous effects. *American Psychologist*. 45:921–933. DOI: 10.1037/0003-066X.45.8.921 [PubMed: 2221564]
- Stoner SA, Norris J, George WH, Morrison DM, Zawacki TM, Davis KC, Hessler DM. 2008; Women's condom use assertiveness and sexual risk-taking: Effects of alcohol intoxication and adult victimization. *Addictive Behaviors*. 33:1167–1176. DOI: 10.1016/j.addbeh.2008.04.017 [PubMed: 18556139]
- Testa M, Derman KH. 1999; The differential correlates of sexual coercion and rape. *Journal of Interpersonal Violence*. 14:548–561. DOI: 10.1177/088626099014005006
- Testa M, Livingston JA. 2009; Alcohol consumption and women's vulnerability to sexual victimization: Can reducing women's drinking prevent rape? *Substance Use & Misuse*. 44:1349–1376. DOI: 10.1080/10826080902961468 [PubMed: 19938922]
- Testa M, Parks KA. 1996; The role of women's alcohol consumption in sexual victimization. *Aggression and Violent Behavior*. 1:217–234. DOI: 10.1016/1359-1789(95)00017-8
- Waldron JC, Wilson LC, Patriquin MA, Scarpa A. 2014; Sexual victimization history, depression, and task physiology as predictors of sexual revictimization: Results from a 6-month prospective pilot study. *Journal of Interpersonal Violence*. 30:622–639. DOI: 10.1177/0886260514535258 [PubMed: 24923892]
- Wegner R, Abbey A, Pierce J, Pegram SE, Woerner J. 2015; Sexual assault perpetrators' justifications for their actions: Relationships to rape supportive attitudes, incident characteristics, and future perpetration. *Violence Against Women*. 21:1018–1037. DOI: 10.1177/1077801215589380 [PubMed: 26056162]
- Young AM, Morales M, McCabe SE, Boyd CJ, D'Arcy H. 2005; Drinking like a guy: Frequent binge drinking among undergraduate women. *Substance Use & Misuse*. 40:241–267. DOI: 10.1081/JA-200048464 [PubMed: 15770887]

Table 1

Generalized Estimating Equation Model Predicting Coerced Consensual Sex.

Variable	<i>B</i>	OR [95% CI]	<i>p</i> value
Weekend	0.03	1.03 [0.80, 1.33]	.814
Survey day	−0.01	0.99 [0.986, 0.997]	.003
Average eBAC	0.03	1.03 [0.97, 1.09]	.370
Daily eBAC	0.04	1.04 [1.00, 1.08]	.042
SV severity	0.02	1.02 [1.01, 1.03]	.000
Average eBAC × Daily eBAC	0.00	1.00 [0.997, 1.00]	.700
Average eBAC × SV	0.00	1.00 [0.998, 1.00]	.255
Daily eBAC × SV	0.00	1.00 [0.999, 1.00]	.200
$\chi^2 = 102.79, df = 8, p < .001$			

Note. OR = odds ratio; CI = confidence interval; eBAC = estimated blood alcohol content. SV = adolescent/adult sexual victimization.