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Sensation Seeking and Alcohol Expectancies Regarding Sexual Aggression as Moderators of the Relationship between Alcohol Use and Coercive Condom Use Resistance Intentions

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Abstract

Objective: Despite condoms' effectiveness at preventing STIs and unplanned pregnancy, coercive condom use resistance (i.e., using coercive tactics to resist condom use with a partner who wants to use one; CUR) is relatively common. However, research has not examined how risk factors, including alcohol use, alcohol expectancies related to sexual coercion, and sensation seeking, may interact to predict coercive CUR. The present study used an alcohol administration experiment to assess sensation seeking and alcohol expectancies as moderators of the relationship between acute alcohol intoxication and intentions to perpetrate coercive CUR during a hypothetical scenario.

Method: Single, young, heterosexual men ($N = 313$) were randomly assigned to a control, placebo, low (BrAC = .04%), or high dose alcohol condition (BrAC = .08%). Participants then read and projected themselves into a sexually explicit stimulus story and indicated the likelihood that they would perpetrate coercive CUR.

Results: Findings indicated that intoxication interacted with expectancies and sensation seeking to predict coercive CUR intentions, such that alcohol intoxication was associated with greater coercive CUR intentions only among participants who reported greater sensation seeking and stronger alcohol expectancies.

Conclusions: Both alcohol expectancies and myopia play a key role in coercive CUR intentions, especially among sensation seeking individuals. Thus, intervention programs should evaluate men's alcohol use, alcohol expectancies, and sensation seeking behaviors as possible targets to reduce the perpetration of coercive CUR.

In spite of numerous attempts to educate youths about the dangers of sexually transmitted infections (STIs) and unwanted pregnancy (CDC, 2009), condom use among young men in the United States remains inconsistent. Specifically, only half of young men under the age of 30 report having used a condom during their most recent sexual encounter (Davis et al., 2014b; Reece et al., 2010). Furthermore, despite the fact that proper condom use dramatically reduces the risk of both STIs and unwanted pregnancy (Coyle et al., 2016),

80% of young men report that they have successfully avoided using a condom in a situation in which their partner wanted them to use one (Davis et al., 2014a, 2014b). Additionally, more than 30% of men reported using coercion, such as emotional manipulation, deception, condom sabotage, or physical force, to obtain condomless sex from a woman who only consented to sex with a condom – a behavior termed coercive condom use resistance (CUR; Davis et al., 2014b). Alcohol use contributes to this issue, as it is associated with sexual coercion (Abbey, 2002; Kirwan et al., 2019) and risky sexual behaviors (Coleman & Cater, 2005), including coercive CUR (Davis et al., 2018). Likewise, sensation seeking behaviors are also associated with sexual coercion (Garner et al., 2020; Whilte & Fromme, 2021) and risky sexual behaviors, including coercive CUR (Davis et al., 2014b; Thornton et al., 2019). However, despite the positive associations between alcohol use and sensation seeking (Hittner & Swickert, 2006; Lydon-Staley et al., 2020), they have not yet been considered together as risk factors for coercive CUR. More research on predictors of coercive CUR is needed, particularly because of its impact on women, namely that it reduces their agency during sexual situations and prevents them from protecting themselves from STIs and unplanned pregnancy (Teitelman et al., 2011). Furthermore, victims of coercive CUR report feelings of betrayal, less confidence to refuse sex in the future, and less agency over themselves as sexual beings (Boadle et al., 2020; Czechowski et al., 2019).

As such, the current study sought to examine the ways in which sensation seeking and alcohol expectancies may relate to the association between alcohol and coercive CUR perpetration intentions among young men who have sex with women. Participants were randomly assigned to consume alcohol, remain sober, or receive a placebo before imagining themselves as the protagonist within a sexually explicit stimulus story involving condom negotiation in order to determine whether alcohol expectancies and sensation seeking would moderate the effect of acute alcohol intoxication on intentions to perpetrate coercive CUR.

Alcohol and Coercive CUR

Alcohol use is associated with increases in both coercive CUR and other forms of sexual coercion. Specifically, individuals who on average consume higher amounts of alcohol than others are more likely to perpetrate sexual coercion and coercive CUR (Abbey, 2002; Davis, Neilson et al., 2018; Kirwan et al., 2019). Likewise, acute alcohol intoxication is known to cause an increase in both coercive CUR intentions (Davis, Gulati et al., 2018) and sexual coercion intentions (Abbey et al., 2014), likely due to alcohol myopia. Alcohol myopia refers to an individual's reduced ability to process environmental cues as a result of being intoxicated, which restricts the aspects of a situation to which an intoxicated individual is able to attend. Specifically, individuals experiencing alcohol myopia focus most strongly on the more immediate and salient cues in their environment, while disregarding more distal or peripheral cues (Steele & Josephs, 1990). In the context of coercive CUR and other sexual coercion, this manifests as intoxicated individuals focusing most closely on sexual cues, such as erotic stimuli and their own sexual desires, rather than more peripheral cues, such as their partner's reluctance or unwillingness to engage in unprotected sexual activity, or the possible moral, social, or legal ramifications of continuing to pursue sex with a non-consenting partner (George, 2019).

In addition to alcohol use, alcohol expectancies may also play a role in predicting coercive CUR perpetration. Specifically, alcohol expectancy theory suggests that individuals' behavior following alcohol consumption is influenced by their expectations of how they will behave after drinking (Crowe & George, 1989; Lang, 1985; Scott-Sheldon et al., 2016). In the context of coercive CUR, sex-related alcohol expectancies are associated with sexually coercive behaviors such that men who reported stronger alcohol expectancies related to sex and aggression were more likely to perpetrate sexual coercion (Palmer et al., 2010; Rapoza & Drake, 2009). In other words, men who expect that drinking alcohol will enhance their sexual desire or lead to more aggressive behaviors are more likely to perpetrate coercive sexual behaviors than those who do not hold these expectancies, likely because expectations translate into actual behaviors after drinking (Rapoza & Drake, 2009). Indeed, this explanation is supported by findings that, among men, alcohol expectancies moderate the relationship between alcohol use and sexual coercion perpetration against women. Specifically, men who endorsed stronger alcohol expectancies related to sex were more likely to perpetrate sexual coercion when they also reported typically consuming larger quantities of alcohol before having sex (Bonneville & Trottier, 2021). Likewise, intoxicated men with greater expectations that alcohol will make them more aggressive are also more likely to perpetrate sexual coercion relative to sober men, or men who do not expect that alcohol will make them behave more aggressively (Davis, 2010).

In addition to sexual coercion, sex related alcohol expectancies are also associated with a reduction in condom use (Brown et al., 2016; Currin et al., 2017; Labrie et al., 2002; 2005; Turner, 2019). Notably, men who had stronger expectancies about how alcohol enhances their sexual experience were less likely to use a condom during their most recent sexual encounter (Currin et al., 2017), possibly indicating that men with such expectancies resisted condom use after drinking in order to further enhance their sexual experience. Such an explanation is supported by findings showing that the combined effects of alcohol use and alcohol expectancies are better predictors of condom use than either of those variables in isolation. Specifically, men who consumed more alcohol prior to their most recent sexual encounter, and who believed that alcohol made them less likely to use condoms, were less likely to have used a condom during that encounter than men who did not drink, or who did not believe that consuming alcohol made them less likely to use a condom (Dermen et al., 1996).

Given the tenets of alcohol expectancy theory, and that sex related alcohol expectancies and alcohol use together are known to predict both sexually coercive behaviors (Palmer et al., 2010; Rapoza & Drake, 2009) and condom non-use (Brown et al., 2016; Currin et al., 2017; Labrie et al., 2002; 2005; Turner, 2019), it seems logical that alcohol use and alcohol expectancies together would also predict coercive CUR behaviors, specifically. This notion is further supported by research showing that alcohol expectancies related to sexual coercion moderate the relationship between alcohol use and anger, which is subsequently associated with coercive CUR. Specifically, intoxicated individuals who possess strong expectancies that drinking alcohol would make them more sexually coercive experienced more anger towards a fictional sexual partner during a hypothetical sexual encounter and subsequently expressed greater intentions to perpetrate coercive CUR. However, individuals who were sober or who did not have strong expectancies regarding alcohol's effect on their sexually

coercive behaviors did not experience this increase in anger, nor did they display increased intentions to perpetrate coercive CUR (Davis et al., 2020). Although this result provides support for the assertion that alcohol use and alcohol expectancies are associated with coercive CUR, the direct relationship between alcohol use, alcohol expectancies related to sexual coercion, and coercive CUR has not yet been established.

Sensation Seeking and Coercive CUR

The effect of alcohol use and alcohol expectancies on coercive CUR has also not been considered in the context of sensation seeking, another variable which is associated with both sexual coercion and CUR. Sensation seeking refers to an individual's desire to seek out varied, novel, complex, or intense sensations and experiences, even when doing so requires one to undergo a physical, social, legal, or financial risk (Zuckerman, 1994). In terms of its effects on coercive CUR, individuals who report high levels of sensation seeking engage in more risky sexual behaviors than individuals with lower levels of sensation seeking, which include having sex without a condom (Donohew et al., 2000; Thornton et al., 2019). In other words, sensation seeking likely increases an individual's desire to experience the more intense physical and emotional sensations and experiences which are often associated with unprotected sex, which may lead these individuals to engage in CUR behaviors to obtain unprotected sex. Such an explanation is supported by research specifically examining CUR, which shows that men who are higher in sensation seeking engage in more CUR tactics to obtain unprotected sex than men lower in sensation seeking (Davis et al., 2014b). Likewise, higher levels of sensation seeking are also associated with an increased likelihood of sexual coercion perpetration (Garner et al., 2020). For this reason, it seems likely that sensation seeking would also be directly and specifically associated with engagement in coercive CUR. However, the existence of such a relationship has not yet been studied.

Additionally, alcohol use and expectancies may exacerbate the association between sensation seeking and risky and coercive sexual behaviors like coercive CUR. Specifically, sensation seeking is associated with greater alcohol use during sex, sex related alcohol expectancies, and risky sex, suggesting that sensation seeking is a key predictor of these three factors (Banks & Zapolski, 2017). Likewise, engagement in sensation seeking behavior interacts with alcohol use to predict sexual coercion perpetration, such that individuals who engage in more sensation seeking behaviors and who drink more alcohol are more likely to perpetrate sexual coercion than individuals with low levels of sensation seeking or alcohol use (Wilhite & Fromme, 2021). In other words, sensation seeking individuals, who are already inclined to engage in behaviors like sexual coercion and CUR, may have these inclinations exacerbated due to the cognitive effects of intoxication (Corte & Sommers, 2005), leading to further increases in risky or coercive sexual behaviors such as coercive CUR.

The Present Research

Informed by both past research and alcohol expectancy theory, the present research sought to examine the relationship between sensation seeking, alcohol intoxication, and alcohol expectancies related to coercive CUR behaviors. Specifically, although sensation seeking

and alcohol use are known to be associated with sex-related alcohol expectancies, risky sex, and sexually coercive behaviors (Banks & Zapolski, 2017; Donohew et al., 2000; White & Fromme, 2021), research has not yet examined the synergistic effects of alcohol use, alcohol expectancies, and sensation seeking on coercive CUR. Such research is important to better inform intervention efforts, due to the heightened negative consequences associated with coercive CUR victimization (Boadle et al., 2020; Czechowski et al., 2019).

Based on alcohol expectancy theory and other previous research, we hypothesized that alcohol expectancies related to sexual coercion and sensation seeking would moderate the relationship between alcohol intoxication and coercive CUR intentions. Specifically, we expected that this moderation would occur such that intoxicated individuals who reported greater alcohol expectancies related to sexual coercion and greater levels of sensation seeking would report stronger coercive CUR intentions than sober participants or participants with lower levels of sensation seeking or alcohol expectancies related to sexual coercion.

Method

Participants

We recruited men between the ages of 21–30 who were interested in having sex with women. Furthermore, additional eligible criteria included having unprotected vaginal or anal sex with a woman at least once in the past year, and that participants conform to the guidelines on the ethical administration of alcohol established by the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2005). Specifically, these guidelines require that men be of legal drinking age, that they not have any medical conditions or prescriptions which contraindicate alcohol consumption and not have a history of negative reactions to alcohol or problem drinking, based on the Brief Michigan Alcohol Screening Test (Connor et al., 2007; Pokorny et al., 1972). A total of 321 men who met these criteria were recruited for their participation. Of these 321, two withdrew from the study, another two had large amounts of missing data, and four failed experimental manipulation checks. As a result, these eight participants were excluded from data analysis, leaving 313 participants in the final analyses. Overall, the sample was 66.1% White, 8.0% Asian, 7.7% Black, 0.6% Native American, 0.3% Native Hawaiian, 13.7% Multiracial, and 1.6% some other race. Additionally, 1.9% of participants declined to identify their race. In terms of ethnicity, 6.4% of participants identified as Hispanic or Latino, 92.0% of participants did not identify as Hispanic or Latino, and 1.6% declined to identify their ethnicity.

Procedure

Procedures included three phases: a background survey, an alcohol administration experiment, and a follow-up survey; however, only data from the background survey and experimental phases were used in the current analyses. All participants were recruited from an urban northwest community in the United States via print and online advertisements, which targeted single, 21–30 year old male non-problem drinkers for an experiment on social interactions between men and women. Interested individuals were instructed to call the laboratory to be screened for eligibility, and eligible individuals were scheduled for

a laboratory session following their screening call. All procedures were approved by the University's Institutional Review Board. This study was not preregistered.

Background Survey Session.—During their lab visit, participants were greeted by a male research assistant (RA) who checked their ID to confirm their identity, and administered a breathalyzer test to confirm that their breath alcohol concentration (BrAC) was .00%. Following this, participants provided informed consent and were escorted by the RA to a private room with a computer to complete the background survey.

Beverage administration session.—Upon completion of their background survey, participants were randomly assigned to one of four beverage conditions: high dose alcohol (target peak = .08% BrAC), low dose alcohol (target peak = .04% BrAC), placebo (participants were told they would receive a .04% BrAC alcohol dose, but in reality, did not receive any alcohol), and control (received no alcohol and were told they would not receive any alcohol). Alcoholic beverages included orange juice and 100 proof vodka mixed in a 3:1 ratio, with participants in the low dose condition receiving .41 ml of ethanol per pound of body weight, and participants in the high dose condition receiving twice as much ethanol per pound of body weight. Control participants received pure orange juice in an equivalent amount to the total volume of liquid they would have consumed had they been in the alcohol condition of the participant they were yoked to, and placebo participants received an amount of pure orange juice equivalent to the total volume of liquid they would have consumed had they been in the low dose alcohol condition. Participants in all conditions were asked by the RA to pace their alcohol consumption over 9 minutes.

To ensure that the stimulus story and assessments were completed while participants were on the ascending limb of the BAC curve, participants were breathalyzed every four minutes until they reached a criterion BrAC of at least .02% in the low dose alcohol condition and .05% for participants in the high dose alcohol condition. To reduce error variance caused by the differing times between beverage consumption and beginning the stimulus story, participants in the control and placebo groups were yoked to a previous alcohol participant, and they received an equivalent number of breathalyzer tests at the same intervals as the participant they were yoked to (Giancola & Zeichner, 1997). Upon reaching the criterion BrAC, or completing the appropriate number of yoked breathalyzer tests, participants began reading the stimulus story (Schacht et al., 2010).

Stimulus Story.—The stimulus story in the present study was a sexually explicit scenario written in the second person, in which participants were asked to imagine themselves as the protagonist at their current level of intoxication. In the story, the protagonist interacts with an attractive woman, whom they have previously had sex with twice, named Erica. On one of the previous occasions, they used a condom, but in the other, they did not. The story describes Erica and the protagonist as being in Erica's apartment, drinking either soda or a mixed drink of soda and alcohol, depending on their alcohol condition (with control participants reading about drinking a soda, and placebo, low dose alcohol, and high dose alcohol participants reading drinking about a mixed drink). After some consensual kissing and touching, the protagonist and Erica realize they do not have a condom. Erica states that she does not want to have unprotected sex, due to either the STI risk or the risk of pregnancy

associated with it, with the specific reason Erica cites for not having sex being determined by random assignment. Erica and the protagonist resume their consensual sexual activity, before the protagonist climbs on top of Erica, and touches his genitals to hers. Following this, Erica reiterates that she does not want to have sex due to STI or pregnancy concerns and suggests that she obtain a condom from her roommate. Participants found the scenario to be realistic (“I feel that the scenario depicted a realistic situation that might happen to me”; 1 = *not at all*; 7 = *very much*; $M = 5.84$; $SD = 1.56$). They also reported finding it easy to imagine themselves in the situation presented in the scenario (“I found it easy to project myself into the scenario, i.e., imagine the scenario was happening to me”; 1 = *not at all*; 7 = *very much*; $M = 5.96$; $SD = 1.43$).

After the story ends, participants completed dependent measures about the story. After completing these questionnaires, participants were debriefed, paid \$15 per hour they spent in the lab, and released once they reached a BrAC of .03% or lower, per NIAAA (2005) guidelines.

Measures

Alcohol Expectancies Related to Sexual Coercion.—Participants rated the extent to which they agreed or disagreed with six statements regarding their expectations of how alcohol influences their likelihood of perpetrating sexual coercion (Abbey et al., 1999; Davis et al., 2015; e.g., “When drinking alcohol, I am more likely to pressure a woman to have sex”). These statements were assessed on a five-point scale, with higher scores indicating higher levels of agreement. A mean score was computed ($\alpha = .86$).

Sensation Seeking.—Participants rated their sensation seeking during sexual encounters using the 11-item “Sexual Sensation Seeking” subscale of the Sensation Seeking Questionnaire (Kalichman & Rompa, 1995). Participants described the extent to which they believed the 11 statements in this scale described them on a four-point scale from 1 *not at all like me* to 4 *very much like me*. Mean scores for these items were calculated, with higher scores indicating greater sensation seeking. An example item from this scale was “The physical sensations are the most important thing about having sex” ($\alpha = .79$).

Coercive Condom Use Resistance.—Participants’ intentions to use coercive CUR to have unprotected sex with Erica in spite of her refusal to do so at the end of the story was assessed with 13 items that included responses such as emotional consequences, deception, condom sabotage, and physical force/threat of force. Examples of these items include “pretending that you had been tested and did not have any STD’s” or “agreeing to use a condom, but removing it before or during sex without telling her.” The likelihood that participants would use each of these tactics during the stimulus story was assessed on a seven point scale from 1 *Very unlikely* to 7 *Very likely*, and the mean of these 13 items was calculated, with higher scores indicating greater intentions to use coercive CUR ($\alpha = .88$).

Results

Preliminary Analyses

Before the main analyses were conducted, the bivariate correlations, means, and standard deviations of the relevant study variables were assessed (Table 1). Additionally, because an independent samples t-test confirmed the manipulation regarding Erica's condom request had no impact on participant intentions to perpetrate coercive CUR during the stimulus story ($t(310) = 1.263, p = .21$), we controlled for this variable in analyses. Thus, Erica's reason for condom refusal was not considered within the interaction, although it was still dummy coded and entered into the hierarchical linear regression model as a covariate.

Additionally, a one-way ANOVA was used to examine the effect of alcohol condition on participants' intentions to perpetrate coercive CUR. Results showed that alcohol condition significantly affected intentions to perpetrate coercive CUR ($F(3) = 6.14, p < .001$), such that individuals in the high dose group ($M = 1.47, SD = .85$) reported greater intentions to perpetrate than individuals in the low dose ($M = 1.25, SD = .43, p = .01$), placebo ($M = 1.11, SD = .19, p < .001$), or control ($M = 1.20, SD = .48, p = .002$) groups. Participants in the control and placebo groups did not differ from one another in their intentions to perpetrate coercive CUR ($p = .32$). For this reason, and because neither the control nor placebo groups received alcohol during the manipulation, the control and placebo groups were combined during subsequent data analyses. Thus, the alcohol condition variable was entered into the main, hierarchical linear regression model using two dummy coded variables, with control/placebo participants serving as the reference group for comparisons with the low dose group and the high dose group.

Regression Analysis

Hierarchical linear regression was conducted to test our hypotheses. Values for sensation seeking and alcohol expectancies related to sexual coercion were centered before they were entered into the hierarchical linear regression analysis, along with the two dummy coded alcohol condition variables. Intentions to use coercive CUR at the end of the stimulus story served as the dependent variable. In Step 1 of the regression model, Erica's stated reason for wanting to use a condom was entered as a dummy coded covariate. In Step 2, the two dummy coded alcohol variables were entered, along with the centered sensation seeking and alcohol expectancies related to sexual coercion variables. In Step 3, five two-way interaction terms were entered, by multiplying sensation seeking by alcohol expectancies related to sexual coercion, sensation seeking by both of the dummy coded alcohol condition variables, and alcohol expectancies related to sexual coercion by both of the dummy coded alcohol condition variables. Finally, in Step 4, two three-way interaction terms were entered, by multiplying sensation seeking and alcohol expectancies related to sexual coercion by each of the two dummy coded alcohol condition variables.

Results of this analysis showed that there were main effects of receiving a high dose of alcohol relative to control/placebo ($B = .281, t = 3.653, p < .001$) and alcohol expectancies related to sexual coercion ($B = .116, t = 2.455, p = .015$) on intentions to perpetrate coercive CUR. The main effects of receiving a low dose of alcohol ($B = .101, t = 1.426, p = .16$)

and sensation seeking behaviors ($B = -.024, t = -.262, p = .794$) were not associated with coercive CUR intentions. Although none of the two-way interactions between any of the independent and moderating variables had a significant effect on intentions to perpetrate coercive CUR (all p 's $> .05$), there was a significant effect of one of the two three-way interactions entered in Step 4 ($R^2 = .23, F(2, 295) = 4.24, p = .015$). Specifically, results showed that the three way interaction between sensation seeking, alcohol expectancies related to sexual coercion, and the dummy coded high dose alcohol variable was significant ($B = .42, t = 2.88, p = .004$). The three way interaction which included the dummy coded low dose alcohol condition was not significant ($B = .11, t = .72, p = .47$). Full results of this analysis are available in Table 2.

The results of the significant, three-way interaction between sensation seeking, alcohol expectancies related to sexual coercion, and alcohol condition were probed using simple slopes testing (Aiken et al., 1991). Simple slopes revealed the sensation seeking and alcohol expectancies related to sexual coercion moderated the relationship between alcohol condition and coercive CUR intention, such that individual with high (+1 SD) levels of sensation seeking and high (+1 SD) levels of alcohol expectancies related to sexual coercion reported greater levels of coercive CUR intentions in the high dose alcohol condition compared to the low dose ($B = .49, t = 4.65, p < .001$) and control/placebo ($B = .72, t = 6.28, p < .001$) conditions. However, among individuals with low (-1 SD) levels of sensation seeking and/or alcohol expectancies related to sexual coercion, intentions to perpetrate coercive CUR following the stimulus story did not vary based on their alcohol condition (all p 's $> .05$). The full interaction at all three levels of the alcohol condition is depicted in Figure 1.

Discussion

The results of this study suggest that alcohol expectancies and sensation seeking may play a role in intoxicated men's coercive CUR perpetration. Alcohol myopia theory states that intoxicated individuals tend to focus only on the cues which are most proximal and salient to them, while disregarding cues which are more peripheral and less noticeable (Steele & Josephs, 1990). Because of this, individuals who value risk taking and novel, intense sensations may be especially susceptible to perpetrating coercive CUR while intoxicated. For example, sensation seeking individuals may be able to resist the urge to perpetrate coercive CUR while sober, because they retain the cognitive capacity to recognize the increased risks associated with coercive CUR, including STIs, unwanted pregnancy, and the potential social, emotional, and legal consequences which either they or their partner may face if they were to perpetrate coercive CUR. However, when intoxicated, the cognitive effects of alcohol may increase their likelihood of perpetrating coercive CUR by impairing their consideration of the more peripheral negative consequences of coercive CUR, leaving only the more proximal perceived benefits. Indeed, sensation seeking individuals are known to engage in more risky behaviors on days when they consumed alcohol compared to days when they remained sober (Lydon-Staley et al., 2020). This may occur because alcohol myopia increases the perceived benefit of the novel sensations associated with engaging in risky behaviors for these individuals, while reducing their focus on the potential consequences of their risky behaviors.

In a similar manner, alcohol expectancies may also guide ways in which alcohol myopia is experienced. Specifically, individuals who expect that being intoxicated will make them behave in a more coercive manner may perceive cues congruent with sexual coercion as being more salient than individuals who do not possess these expectancies (Moss & Albery, 2009). Indeed, alcohol expectancies are associated with differences in how myopia affects individuals (Lac & Brack, 2018), and furthermore, expectancies related to sexual coercion are associated with motivations and emotions which are congruent with perpetration among intoxicated individuals (Davis, 2010). Thus, an individual's engagement in coercive CUR while intoxicated is a product of both their expectancies regarding how alcohol will increase their sexually coercive behaviors and the acute effects of alcohol intoxication and myopia.

Although this study contained a placebo manipulation, the results indicated that individuals in the placebo condition did not behave in a meaningfully different manner than individuals in the control condition in terms of their intentions to perpetrate coercive CUR. Such results are fairly common in alcohol administration studies examining sexual coercion (Johnson et al., 2000; Marx et al., 1997, 1999; Norris et al., 1999), and provide further evidence of the importance of both alcohol myopia and alcohol expectancy theories. Specifically, sensation seeking participants who believed that consuming alcohol would increase their coercive sexual behaviors did not show an increase in intentions to perpetrate coercive CUR unless they consumed an actual, high dose of alcohol, and experienced the effects of alcohol myopia as a result. Likewise, sensation seeking individuals who experienced myopia after consuming a high dose of alcohol, but who did not expect to behave in a sexually coercive manner while intoxicated, did not show elevated rates of coercive CUR relative to the other groups. Thus, actual acute alcohol intoxication at a relatively high level, and the myopia which accompanies it, appears to be a prerequisite for sensation seeking individuals with high expectancies regarding their tendency to perpetrate sexual coercion while intoxicated to perpetrate coercive CUR. The expectation that alcohol will increase their coercive behaviors and the belief that they may be intoxicated, are not sufficient.

Limitations

In spite of the present study's numerous strengths, it is also important to consider its limitations. For example, coercive CUR intentions may be considered sensitive by many participants, which may have made them reluctant to disclose such intentions. Additionally, the generalizability of the data is limited by study inclusion criteria - namely that participants were required to be young, single men interested in dating women. Although such restrictions are common in research examining CUR attitudes and behaviors (Davis et al., 2014a, 2014b), future research should examine these attitudes in older men, men who have sex with men, and non-male samples to determine whether or not a similar pattern of results is present for other populations. In particular, there is a dearth of research regarding CUR among men who have sex with men; future research in this area would significantly advance the field. Finally, this study had participants project themselves into a hypothetical stimulus story in order to assess the dependent variable. Although such stimulus stories are common in research on sexual coercion (see Davis, Parrott et al., 2014 for a review), the artificial nature of the stimulus may nonetheless have affected participants' responses. While written sexual stimuli have some advantages in that they allow participants to imagine their

preferred sexual interests (e.g., partner appearance, situational characteristics), they may not be as immersive as other formats (i.e., virtual reality approaches). Future research could use such technological advances to create scenarios that may evoke more ecologically valid responses. Finally, we examined coercive CUR strategies in combination; future research could explore whether the current pattern of findings differs for specific types of coercive CUR (i.e., emotional manipulation, deception, condom sabotage, and force).

Implications

The results of this study may be used to develop and refine intervention programs that seek to reduce the prevalence of coercive CUR perpetration among young men who have sex with women. Specifically, the results indicate that intoxicated men who also believe that alcohol makes them more sexually coercive and engage in sensation seeking behaviors have elevated coercive CUR perpetration intentions. As such, alcohol use interventions, which have been demonstrated to be effective at preventing other forms of sexual coercion (Denhard et al., 2020; Orchowski et al., 2018), may also be effective in reducing the perpetration of coercive CUR. Likewise, previous intervention research has successfully modified participants' sex related alcohol expectancies, including alcohol's effect on sexual arousal, sexual attractiveness, and sexual performance (Labbe & Maisto, 2011; Rheeder, 2018; Scott-Sheldon et al., 2012). Thus, future research should examine the efficacy of such alcohol use and expectancy intervention programs with regards to coercive CUR specifically to confirm whether or not successful implementation of these intervention programs would reduce the prevalence of coercive CUR perpetration. Future research could also examine whether these interventions have varied effects for different types of coercive CUR tactics.

Conclusions

The results of this study indicates that sensation seeking men who expect that drinking alcohol will make them more sexually coercive report stronger coercive CUR intentions when intoxicated, compared to men who are low in sensation seeking, have low alcohol expectancies related to sexual coercion, or are sober. Such results suggest that both alcohol expectancies and alcohol myopia play a key role in the perpetration of coercive CUR, in that participants who expect to behave more aggressively after consuming alcohol are more likely to follow through on those expectations, especially when intoxicated and experiencing the effects of alcohol myopia. The results of this study may be used to inform targeted intervention programs by identifying men who are at greater risk for coercive CUR perpetration due to their alcohol use, alcohol expectancies, or sensation seeking behaviors in order to reduce their risk of perpetration.

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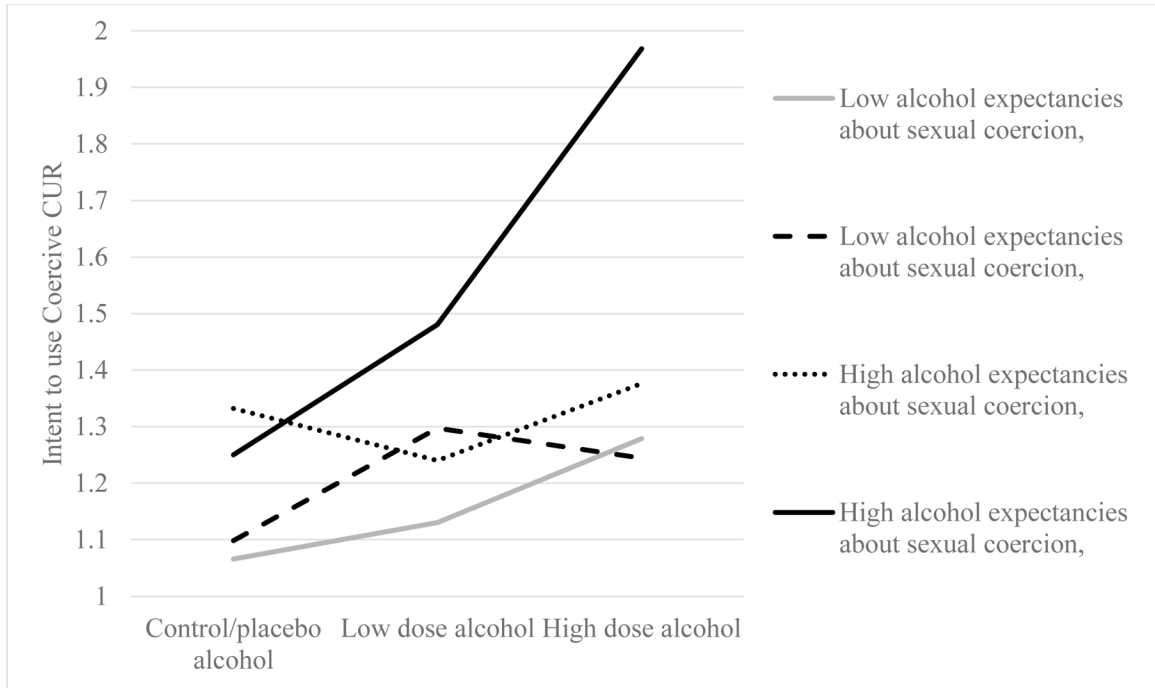


Figure 1: Simple slopes test examining the effects of sensation seeking and alcohol expectancies related to sexual coercion on intentions to use coercive CUR among participants in the control/placebo, low dose alcohol, and high dose alcohol groups.

Table 1:

Bivariate Correlations, Means, and Standard Deviations of Study Variables.

	1	2	3
1. Sensation seeking			
2. Alcohol expectancies related to sexual coercion	.394 [‡]		
3. Coercive CUR intentions	.199 [‡]	.288 [‡]	
Mean	2.952	2.203	3.221
Standard Deviation	0.495	0.905	6.910

Note:

[‡] $p < .001$

Table 2:

Full Regression Results

Variable	B	t	S.E.	95% CI	R ²
Step 1					0.01
Dummy coded condom reason	-.09	-1.59	.06	-1.19, 1.01	
Step 2					0.16 [‡]
Dummy coded low dose alcohol	.10	1.43	.07	-.04, .24	
Dummy coded high dose alcohol	.28	3.65 [‡]	.08	.13, .43	
Alcohol expectancies related to sexual coercion	.12	2.46 [*]	.05	.02, .21	
Sensation seeking	-.02	-.26	.09	-.20, .15	
Step 3					0.04 ^{**}
Low dose alcohol x alcohol expectancies	-.04	-.43	.08	-.19, .12	
Low dose alcohol x sensation seeking	.23	1.51	.15	-.07, .53	
High dose alcohol x alcohol expectancies	.11	1.16	.10	-.08, .30	
High dose alcohol x sensation seeking	.31	1.93	.16	-.00, .62	
Alcohol expectancies x sensation seeking	-.07	-.72	.09	-.24, .11	
Step 4					0.02 [*]
Low dose alcohol x alcohol expectancies x sensation seeking	.11	.72	.15	-.18, .39	
High dose alcohol x alcohol expectancies x sensation seeking	.42	2.88 ^{**}	.14	.13, .70	

Note:

* $p < .05$

** $p < .01$

[‡] $p < .001$