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The Power of Being Present: The Role of Mindfulness on the Relation Between Men's Alcohol Use and Sexual Aggression Toward Intimate Partners

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Abstract

The primary aim of this investigation was to examine the association between men's level of mindfulness and histories of alcohol consumption and sexual aggression toward intimate partners. Participants were 167 heterosexual drinking males who completed self-report measures of mindfulness, *frequency* and *quantity* of alcohol consumption during the past 12 months, and sexual aggression against intimate partners during the past 12 months. Results indicated that a history of consuming *larger amounts* when drinking was associated with more frequent sexual coercion/aggression among men who reported low, but not high, levels of mindfulness. However, drinking more frequently by itself was not associated with more frequent sexual coercion/aggression. These results support the attention-allocation model and suggest implications for future intervention research aimed at reducing alcohol-related aggression.

Keywords

Intimate Partner Violence; Alcohol Consumption; Attention-Allocation; Mindfulness

Evidence for the link between alcohol use and sexual aggression is well-established (for reviews, see Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Testa, 2002). However, despite a substantial literature in this area, interventions aimed at reducing alcohol-related aggression have only begun to take shape. Recently, Giancola, Josephs, DeWall, and Gunn (2009) proposed preventative strategies for alcohol-facilitated aggression based upon the attention-allocation model (AAM; Pernanen, 1976; Steele & Josephs, 1990; Taylor & Leonard, 1983). The AAM is an empirically supported and widely accepted explanation for intoxicated behavior (Giancola & Corman, 2007; Josephs & Steele, 1990; Steele & Josephs, 1988; Zeichner, Allen, Giancola, & Lating, 1994). According to the AAM, alcohol intoxication impairs executive cognitive functioning, which then restricts the inebriate's ability to perceive and process instigatory and inhibitory cues. Because in most real-world situations cues that instigate behavior are more salient and easier to process than cues that inhibit behavior, intoxication is likely to produce myopia toward cues that instigate behavior (e.g., desire to have sex). Furthermore, this model is in line with past research demonstrating that alcohol impairs self-awareness processing (Hull, 1981; Hull, Levenson, Young, & Sher, 1983), which may impede a person's capacity to process self-relevant cues that discourage aggressive behavior.

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In accordance with these data, Giancola and colleagues (2009) argued that interventions designed to increase mindfulness may serve to decrease aggression in intoxicated individuals by shifting attention back to inhibitory cues (e.g., social norms that proscribe sexual aggression). Indeed, mindfulness is a state, trait, and acquirable skill that has been defined as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). Research indicates that mindfulness is associated with a range of other constructs that have been shown to moderate the link between alcohol and myriad adverse effects, including aggression (Heppner et al., 2008; Singh, Wahler, Adkins, & Myers, 2003; Singh et al., 2007). For instance, studies indicate that low levels of mindfulness are related to increased neuroticism (Baer, Smith & Allen, 2004; Brown and Ryan, 2003), negative affect (Brown and Ryan, 2003; Wupperman, Neumann, Whitman, & Axelrod, 2009), impulsivity (Wupperman, Neumann, & Axelrod, 2008; Wupperman et al., 2009), avoidance coping (Ostafin & Marlatt, 2008; Witkiewitz, Marlatt, & Walker, 2005), as well as lower levels of executive functioning and metacognitive awareness (Chambers, Lo, & Allen, 2008). Pertinently, research also indicates that alcohol is more positively associated with adverse outcomes (e.g., aggression, poor relationship satisfaction) in persons who possess these individual risk factors. Collectively, these data provide compelling support for the hypothesis that mindfulness may similarly moderate the relation between alcohol and intimate partner aggression.

Researchers posit that mindfulness may decrease aggression by promoting greater cognitive flexibility and self-awareness which allows for the reception of even threatening information about oneself in a more accepting, less defensive manner (Carson & Langer, 2006; Heppner et al., 2008; Lakey, Kernis, Heppner, & Lance, 2008). Consistent with these data, prior research has identified empathy (Giancola, 2003; Phillips & Giancola, 2007) and self-awareness (Bailey, Leonard, Cranston, & Taylor, 1983; Berman, Bradley, Fanning, & McCloskey, 2009; Scheier, Fenigstein, & Buss, 1974) as mitigating factors against aggressive behavior. Likewise, the association between mindfulness and better overall marital adjustment has been explained by mindful partners’ attentiveness and awareness of both their own present moment needs (e.g., emotional connection, empathy) as well as their partner’s present moment needs (Wachs & Cordova, 2007). As such, it is reasonable to contend that men who are high in mindfulness may be less susceptible to alcohol’s effect on sexual aggression against intimate partners because of their heightened awareness of present moment decisions and lower reactivity to cues that may otherwise instigate sexually aggressive behavior (e.g., desire to have sex).

Despite emerging knowledge of how mindfulness may reduce aggressive behavior, research to date has not yet examined how mindfulness and histories of alcohol consumption may interactively relate to perpetration of sexual aggression toward intimate partners. As such, the aim of the present study was to address this gap in the literature by providing preliminary data on these relations to serve as the foundation for future experimental research. Importantly, this investigation was focused on sexual aggression within intimate relationships because (1) recent data suggest that approximately 60% of adult female sexual assault survivors report that their assailant was a current or past intimate partner (Basile, Chen, Black, & Saltzman, 2007; NVAWS, Tjaden & Thoennes, 2000), and (2) data indicate that women are significantly more likely to report injury if their male intimate partner consumed alcohol at the time of the sexual assault (NVAWS, Tjaden & Thoennes, 2000).

Notably, past research has made a crucial distinction between quantity and frequency of alcohol consumption (reviewed in Parrott & Giancola, 2006). This literature has defined *quantity* as the average number of drinks an individual consumes per drinking occasion and *frequency* as the average number of drinking days per week an individual consumes alcohol.

Importantly, research has evidenced that one's typical quantity and volume of alcohol consumption is more predictive of aggression than the average daily frequency of alcohol consumption (Parrott & Giancola, 2006; Wells, Graham, & West, 2000). This extrapolation is consistent with the wealth of literature that has established that it is the acute effects of alcohol that most impact aggressive behavior (Chermack & Blow, 2002; Murphy, Winters, O'Farrell, Fals-Stewart, & Murphy, 2005).

As reviewed previously, the AAM suggests that in most real-world situations alcohol intoxication focuses attention on cues that instigate sexually aggressive behavior (e.g., desire to have sex) while simultaneously pulling attention away from cues that inhibit sexually aggressive behavior (e.g., partner's desire *not* to have sex; Pernanen, 1976; Steele & Josephs, 1990; Taylor & Leonard, 1983). Thus, within this framework, it was expected that a history of consuming larger amounts when drinking would be associated with more frequent perpetration of sexual aggression toward intimate partners. It was further hypothesized that this relation would be more pronounced among low, relative to high, mindful men because lower levels of mindfulness are associated with less cognitive flexibility and self-awareness. Indeed, these deficits increase the likelihood that men will maintain attentional focus on more easily processed, instigatory cues that facilitate sexually aggressive behavior. However, based on copious findings that a history of consuming large amounts when drinking is a stronger indicator of intimate partner aggression than a history of frequent drinking (e.g., Foran & O'Leary, 2008; Parrott & Giancola, 2006), this pattern of results was not expected to emerge for men with a history of frequent alcohol use.

Method

Participants

Participants were 203 heterosexual, drinking males between 21 and 35 years of age. All participants were recruited through on-line resources (e.g., job classifieds) and advertisements placed in various newspapers in a large city in the southeastern United States. Respondents were initially screened by telephone. In order to qualify for the study, participants had to report alcohol consumption during the past year; non-drinkers were excluded. Upon arrival to the laboratory, eight men did not self-identify as heterosexual, 14 did not complete the questionnaire battery in its entirety, and 14 reported that they had not been in an intimate relationship during the past year. This left a final sample of 167 men who had been in a heterosexual intimate relationship during the past year (Age: $M = 26.35$, $SD = 4.94$). The racial composition of this sample consisted of 101 African Americans, 49 Caucasians, and 17 men who identified with another racial description. Eighty-one percent of participants had never been married, and the mean education level was fourteen years. This study was approved by the university's Institutional Review Board.

Measures

Frequency and quantity of drinking—Participants' alcohol use during the past year was measured using the National Institute on Alcohol Abuse and Alcoholism's (NIAAA, 2003) recommended set of six alcohol consumption questions. Of interest to the present study, *frequency* of alcohol consumption was assessed with the question, "During the last 12 months, how often did you usually have any kind of drink containing alcohol?" A categorical response ranging from "everyday" to "I never drank alcohol in my whole life" was provided. In addition, average *quantity* of alcohol consumption during the past year was assessed with the question, "During the last 12 months, how many alcoholic drinks did you have on a typical day when you drank alcohol?" A categorical range of responses from "1 drink" to "25 or more drinks" was provided (e.g., 3–4 drinks, 5–6 drinks etc.). Total scores were obtained by computing the average number of drinks in each range. For example, if a

participant indicated a response of “9–11” drinks per drinking occasion, his average quantity of alcohol consumption would be “10.” This strategy reliably assesses an individual’s average quantity of alcohol consumption per drinking day over a specific period of time (for a review, see Sobell & Sobell, 1995).

Mindfulness—The Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) was used to assess men’s level of mindfulness. This scale consists of 15 items in which participants are asked to rate how frequently a variety of experiences occur. Sample items include “It seems I am ‘running on automatic,’ without much awareness of what I’m doing” and “I tend not to notice feelings of physical tension or discomfort until they really grab my attention.” Responses may range from 1 (*almost always*) to 6 (*almost never*). Higher scores indicate a greater level of mindfulness. Exploratory and confirmatory factor analyses support the reliability and validity of the MAAS for use with both general adult ($\alpha = .87$) and college student ($\alpha = .82$) populations. For instance, evidence indicates that the MAAS reliably differentiates between those who have sought to cultivate mindfulness (e.g., Zen practitioners) from controls (Brown & Ryan, 2003). In the present study, the alpha reliability coefficient was .89.

Intimate partner coercion/aggression—The Sexual Coercion subscale of the Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Bony-McCoy, & Sugarman, 1996) was used to assess perpetration of sexual coercion/aggression toward intimate partners during the past year. The CTS-2 is a widely used and well-validated self-report instrument. Participants are instructed to indicate on a 7-point scale how many times they have engaged in certain behaviors over the past year. Responses range from 0 (*never*) to 6 (*more than 20 times*). Following Straus and colleagues (1996), a chronicity variable for sexual coercion/aggression was computed by adding the midpoints of the score range for each item to form a total score. For example, if a participant indicated a response of “3–5” times in the past year, his score would be a “4.” This method of scoring the CTS-2 permits examination of the frequency of sexually coercive and aggressive acts perpetrated against intimate partners. Sample items include “Have you insisted on sex when your partner did not want to (but did not use physical force)?” and “Have you used force (like hitting, holding down, or using a weapon) to make your partner have sex?”

Procedure

Upon arrival to the laboratory, participants were greeted by an experimenter and led to a private experimental room. After providing informed consent, participants were asked to complete a questionnaire battery comprised of a demographic form to assess pertinent background information (e.g., age, self-identified sexual orientation), NIAAA-recommended questions to assess alcohol use during the past year, the MAAS, and the revised Conflict Tactics Scale, respectively. Participants completed these measures on a computer using MediaLab 2000 software (Empirisoft Research Software, Philadelphia, PA). Additional questionnaires were also completed but are unrelated to the current study and are thus not reported here. A randomly generated administration order was predetermined. All participants completed questionnaires in this fixed order. The experimenter provided instructions on how to operate the computer program that administered the questionnaire battery and was available to answer any questions during the session. After completing the test battery, participants were debriefed and paid for their time at a rate of ten dollars per hour.

Results

Descriptive Statistics

Descriptive statistics and bivariate correlations are displayed in Table 1. These data indicated a significant correlation between quantity and frequency of alcohol consumption in the past 12 months, but neither variable was significantly associated with mindfulness. In order to test for multicollinearity (i.e., level of correlation between predictor variables) the variance inflation factor (VIF) and tolerance were computed. The VIF and tolerance are general tests that assess the impact of collinearity among the variables in the regression model (Cohen, Cohen, West, & Aiken, 2003). Indeed, it is important to check for the presence of multicollinearity because it reduces the interpretability of the independent variable's effects on the outcome measure. Results of these tests demonstrated that multicollinearity was not an issue in these data (i.e., $VIF < 10$; $Tolerance > .10$). Furthermore, 50% of men reported to have engaged in at least one episode of sexual aggression against their partner during the past year. Finally, preliminary analyses were conducted to assess whether pertinent demographic variables (i.e., age, race) significantly covaried with the predictor, moderator, or dependent variables. Analyses did not detect a significant association between age and quantity or frequency of alcohol use, mindfulness, or perpetration of sexual aggression. Moreover, significant racial differences were not detected. As such, subsequent analyses did not control for these demographic variables.

Regression Analyses

Because mindfulness and alcohol use variables were continuous in measurement, linear regression analyses were indicated to test for moderation (Aiken & West, 1991; Cohen et al., 2003). As such, mindfulness and alcohol use variables were mean centered by subtracting the mean score of the variable from the raw score of the variable. Mean centering first-order continuous variables is advantageous for both statistical and substantive reasons. Most importantly, this procedure reduces multicollinearity between interaction terms and their constituent lower-order terms and improves the interpretability of regression equations. Furthermore, the computation of interactions with raw scores yields incorrect regression coefficients because they are not scale invariant. Accordingly, interaction terms were calculated by obtaining the cross-product of the mean centered mindfulness and alcohol use variables. When using this procedure, it is important to interpret the unstandardized, and not the standardized, regression solution. As such, all parameter estimates for interaction effects are reported as unstandardized *bs*. Estimates of main effects and simple slopes are reported as standardized β s.

For each hierarchical analysis, main effects of mindfulness and alcohol use were entered first (Step 1) and their interaction was entered second (Step 2). This resulted in a full model comprising three variables. To explicate significant interaction terms, regression coefficients for simple effects were examined at one standard deviation above and below the mean of the moderator variable to determine whether they were significantly different from zero (Aiken & West, 1991; Cohen et al., 2003).

Association Between Average Quantity of Drinking, Mindfulness, and Sexual Coercion/Aggression

In Step 1, the regression model for sexual coercion/aggression was significant, $F(2, 164) = 5.75, p < .01, R^2 = .065$. Larger average quantities of alcohol consumed when drinking and lower levels of mindfulness were associated with more frequent perpetration of sexual coercion/aggression toward intimate partners (see Table 2).

In Step 2, the regression model remained significant, $F(3, 163) = 7.12, p < .001, R^2 = .12$. The interaction effect between larger quantities of alcohol consumed and mindfulness was significant. Explication of this interaction evidenced a significant positive relation between larger quantities of alcohol consumed and more sexual coercion/aggression for individuals who reported lower mindfulness ($\beta = .28, p = .001$) but not for individuals who reported higher mindfulness ($\beta = .03, p = .705$). As can be seen in Figure 1, these data indicated that drinking larger quantities on average was associated with more frequent perpetration of sexual coercion/aggression toward intimate partners among men who endorse low, but not high, levels of mindfulness.

Association Between Frequency of Drinking, Mindfulness, and Sexual coercion/aggression

In Step 1, the regression model for sexual coercion/aggression was significant, $F(2, 164) = 5.50, p < .01, R^2 = .063$. More frequent drinking and lower levels of mindfulness were associated with more frequent perpetration of sexual coercion/aggression toward intimate partners. In Step 2, the regression model remained significant, $F(3, 163) = 3.72, p < .01, R^2 = .064$. However, the interactive effect of frequency of drinking and mindfulness on sexual coercion/aggression was not significant. Consequently, subsequent analyses were not conducted¹ (see Table 2).

Discussion

The present study provides the first support for mindfulness as a moderator of the relation between men's alcohol use and sexual coercion/aggression toward intimate partners. Consistent with prior research (e.g., Foran & O'Leary, 2008; Parrott & Giancola, 2006), the present results indicate that a history of consuming larger amounts when drinking was associated with more frequent perpetration of sexual coercion/aggression against intimate partners. This conclusion is in line with prior theoretical evidence suggesting that alcohol-facilitated aggression is a result of pharmacological disruption of executive functioning that occurs only after sufficient levels of intoxication have been reached (e.g., Fals-Stewart, Golden, & Schumacher, 2003; Leonard, 1984; Steele & Josephs, 1990). More importantly, results indicate that a history of consuming larger amounts when drinking was associated with more frequent sexual coercion/aggression among men who reported low, but not high, levels of mindfulness. These data are consistent with the attention-allocation model (AAM; Parnanen, 1976; Steele & Josephs, 1990; Taylor & Leonard, 1983) and research on the mindfulness-aggression link (Heppner et al., 2008; Singh, et al., 2003; Singh et al., 2007).

According to the AAM, alcohol intoxication disrupts executive cognitive functioning. This impairment engenders myopia toward cues that instigate behavior (e.g., desire to have sex) to the exclusion of cues that inhibit behavior (e.g., partner's desire *not* to have sex). As a result, sexual coercion/aggression is more likely to occur. However, research suggests that mindfulness may decrease the likelihood of aggression toward intimate partners by promoting greater cognitive flexibility and self-awareness (Carson & Langer, 2006; Heppner et al., 2008; Lakey, Kernis, Heppner, & Lance, 2008) as well as better overall marital adjustment (Wachs & Cordova, 2007). This heightened self-awareness is posited to "free up" attention and allow for the more flexible distribution of limited cognitive resources to respond and, when needed, to regulate emotional and behavioral reactions (Brown & Ryan, 2003; Kabat-Zinn, 2003). It is these effects of mindfulness that are hypothesized to account for decreases in aggressive action (Heppner et al., 2008). For instance, laboratory research

¹Alcohol use (i.e., quantity and frequency) and sexual aggression tend to have an inherent positive skew by nature. Analyses conducted with transformed variables did not indicate a significant change in the pattern of results.

has evidenced that intoxicated, provoked men who received moderate-load cognitive distraction were significantly less aggressive and displayed significantly less attentional bias toward aggression-related stimuli relative to their provoked non-distracted *and* sober peers (Gallagher & Parrott, 2010; Giancola & Corman, 2007). Indeed, this distraction manipulation required participants to shift their attention in such a way that forced cognitive flexibility. Other studies provide indirect support for this effect (e.g., Zeichner, Allen, Giancola, & Lating, 1994).

Furthermore, past research demonstrates that alcohol impairs self-awareness processing (Hull, 1981; Hull, Levenson, Young, & Sher, 1983), which may impede a person's capacity to process self-relevant cues that discourage sexually aggressive behavior (e.g., personal values that discourage violence toward women). In support of this, laboratory research suggests that interventions designed to increase self-awareness processing, such as the addition of mirrors to the drinking setting, reduce aggressive behavior toward oneself (Berman et al., 2009) and others (Bailey, Leonard, Cranston, & Taylor, 1983). Thus, by increasing self-awareness processing, the inebriate is distracted from provocation and able to process self-relevant cues that proscribe aggression. In accordance with this literature, it is not surprising that participants who consume large amounts when drinking but score high in mindfulness were less likely to perpetrate sexual coercion/aggression toward intimate partners than those who consume large amounts but score low in mindfulness.

Unexpectedly, our results also indicate that a history of frequent episodic drinking is associated with more frequent perpetration of sexual coercion/aggression. One explanation for this result may be that high frequency drinkers are oftentimes in situations where alcohol is consumed (e.g., bars, parties). Although a man may not necessarily drink in high quantities, these situations may provide him with more opportunities to manipulate his female partner to drink alcohol as a tactic to obtain sex. Indeed, prior research has shown that men are more likely to use alcohol to obtain sex from intimate partners as opposed to strangers (Cleveland, Koss, & Lyons, 1999). Alternatively, men's expectations that women's alcohol use is associated with sexual promiscuity (e.g., George, Cue, Lopez, Crowe, & Norris, 1995; George, Gournic, & McAfee, 1988) may lead to sexually coercive behaviors in these settings. Future research is needed to examine further these explanations in the context of intimate relationships.

However, as expected, men's level of mindfulness did not moderate the positive association between frequency of drinking and perpetration of sexual coercion/aggression. Coupled with the previous findings, these data suggest that mindfulness moderates the relation between men's histories of heavy, but not frequent, alcohol consumption and sexual coercion/aggression. Importantly, this further supports the conclusion that mindfulness may interrupt the disruption of executive functioning brought on by alcohol intoxication but may not influence non-pharmacological pathways to intoxicated sexual coercion/aggression.

The present findings are in line with past research that has evidenced a synergistic relationship between the effects of alcohol, men's personality traits (e.g., high impulsivity, low empathy), attitudinal beliefs (e.g., hostility toward women, rape myth acceptance), and life experiences (e.g., history of heavy alcohol consumption childhood sexual or physical abuse) on sexual aggression (reviewed in Abbey, 2002). Collectively, this literature strongly suggests that certain individual risk factors moderate the alcohol-sexual aggression link (reviewed in Testa, 2004), which is consistent with research on alcohol-related physical aggression toward intimate partners (e.g., Fals-Stewart, Leonard, & Birchler, 2005; Schumacher, Homish, Leonard, Quigley, & Kearns-Bodkin, 2008). Importantly, the present findings complement this literature by identifying a new, modifiable risk factor that moderates the proximal effect of alcohol on sexual aggression.

Several limitations of this study merit discussion. Foremost, interpretations are predicated on the assumption that participants were intoxicated during perpetration of sexual coercion/aggression. However, the present results are based on participants' self-reported histories of alcohol consumption and sexual coercion/aggression aggregated across situations; thus, it is not clear if alcohol was consumed during an aggressive episode and, if so, how much alcohol was consumed. To that end, the present study did not intend to investigate whether higher levels of mindfulness causally serve as a protective factor against alcohol-related sexual aggression; rather the purpose of this research was to provide preliminary data on the relations between these variables to serve as the foundation for future experimental research. As such, future studies can utilize these findings to more directly assess the "in the moment" link between alcohol intoxication and sexual aggression. Event-based assessment strategies or laboratory methods seem particularly well-suited for this purpose.

Second, we cannot rule out the possibility that learned expectancies may have contributed to the present findings. In other words, a priori beliefs regarding the effect of alcohol on behavior may have contributed to the higher rates of sexual coercion/aggression among low mindful, binge drinking men. However, it should also be noted that this limitation is tempered by the empirical finding of negligible effects of alcohol expectancies on aggression (e.g., Bushman & Cooper, 1990; Chermack & Taylor, 1995; Hull & Bond, 1986). Third, we did not experimentally test the AAM and, as a result, are not certain that men were allocating their attention as theorized. Until future studies more directly test the AAM by examining how mindfulness moderates the event-based link between alcohol consumption and sexual aggression, conclusions based on this theoretical mechanism should be considered tentative. One potential avenue for remedying this limitation would be to use laboratory-based paradigms to examine the effect that inducing state mindfulness may have on alcohol-facilitated sexual aggression. Indeed, this methodology has been successful in establishing a causal link between alcohol and aggression (e.g., Giancola & Chermack, 1998; Giancola & Parrott, 2008) and could be tailored toward sexual aggression within intimate relationships (e.g., Hall & Hirschman, 1994; Hall, Hirschman, & Oliver, 1994). Fourth, we measured men's self-reported acts of intimate partner aggression. Indeed, questions that require people to report aggressive behaviors are considered "sensitive" and, as a result, are more likely to produce high non-response rates or larger measurement error (Catania, Gibson, Chitwood, & Coates, 1990). Finally, the present sample was drawn from the general population of an urban catchment area, which limits our ability to generalize these findings to men who are legally mandated to treatment for intimate partner aggression. That stated, this diverse sample of men may also be viewed as a strength; our findings likely extend to a greater proportion of young adult men as compared to a sample comprised exclusively of adjudicated men.

In spite of these limitations, results of the present study provide data to inform future intervention efforts for alcohol-related aggression. In accordance with recommendations put forth by Giancola and colleagues (2009), our data tentatively implicate mindfulness as one potential point of intervention for the reduction of both sexual aggression and alcohol-related sexual aggression. Although sexual aggression within intimate relationships is influenced by many individual and situational factors, increasing men's level of mindfulness may help to attenuate the effects of several risk factors (e.g., poor relationship satisfaction, cognitive rigidity). In addition, such work would constitute primary prevention, which is greatly needed in the area of sexual aggression within intimate relationships. Indeed, if experimental research can replicate and extend the findings of this study, implications of this work may have significant clinical and public health benefits for alcohol-related violence against women.

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Figure 1. Frequency of sexual aggression as a function of heavy episodic drinking and level of mindfulness.

Table 1

Descriptive Statistics and Correlations for Predictor and Criterion Variables

Variable	Descriptives				Correlations			
	<i>M</i>	<i>SD</i>	range	1.	2.	3.	4.	
1. Drinking Quantity	4.39	3.10	1–25	—				
2. Drinking Frequency	105.40	81.58	7–365	.206*	—			
3. Mindfulness	70.96	12.16	36–105	.038	-.108	—		
4. Sexual Aggression	8.72	14.69	0–75	.148*	.168*	-.203*	—	

Note. *n* = 167.*
p < .05.

Table 2

Summary of Regression Analyses for the Associations Between Alcohol Consumption, Mindfulness, and Perpetration of Sexual Aggression.

Models	<i>b</i>	β	<i>t</i>	<i>p</i>
Heavy episodic drinking				
Model 1				
Heavy episodic drinking	0.74	0.16	2.10	<.05
Mindfulness	-0.18	-0.15	-2.80	<.05
Model 2				
Heavy episodic drinking X Mindfulness	-0.05	-0.23	-3.05	<.01
Frequent episodic drinking				
Model 1				
Frequent episodic drinking	0.03	0.15	1.96	<.05
Mindfulness	-0.23	-0.19	-2.46	<.05
Model 2				
Frequent episodic drinking X Mindfulness	0.00	-.04	-.47	NS