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## Intimate Partner Violence Perpetration and Problem Drinking Among College Students: The Roles of Expectancies and Subjective Evaluations of Alcohol Aggression\*

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### Abstract

**Objective**—The present research examined the effect of alcohol aggression expectancies and subjective evaluations of alcohol's effects on aggression in intimate partner violence (IPV) perpetration among college students. We were interested in determining the extent to which these relationships differed across gender.

**Method**—A total of 780 (57.3% female) incoming heavy drinking college freshmen who were between the ages of 18 and 25 years completed self-reported measures of IPV perpetration, alcohol use and problems, and alcohol aggression expectancies and subjective evaluations of those expectancies as part of the baseline assessment for a larger social norms alcohol intervention study. Analyses evaluated the effect of alcohol aggression expectancies and subjective evaluations of those expectancies on IPV perpetration.

**Results**—Results indicated that problem drinking was positively associated with IPV perpetration for those who were lower ( $\beta = .32, p < .001$ ) versus those who were higher ( $\beta = .07, p = \text{NS}$ ) in alcohol aggression expectancies. Among men, there was a significantly stronger relationship between problem drinking and IPV perpetration among those who evaluated alcohol's effects on aggression more favorably ( $\beta = .41, p < .001$ ) versus less favorably ( $\beta = .11, p = \text{NS}$ ). Among women, there was not a significantly stronger relationship between problem drinking and IPV perpetration at less favorable ( $\beta = .17, p < .05$ ) versus more favorable ( $\beta = .11, p < .06$ ) evaluations of alcohol's effects on aggression.

**Conclusions**—Findings suggest that, in understanding IPV perpetration, it may not be sufficient to evaluate expected alcohol effects without also including whether those effects are viewed as good or bad. Findings also suggest that the relationship between alcohol problems and IPV perpetration may be stronger and more straightforward for men than for women.

Perpetration of intimate partner violence (IPV) is a growing concern on college campuses across the nation. Approximately one third of students have experienced violence in their dating relationships in the past year, with male and female students reporting relatively equal rates of perpetration (Straus, 2006; White and Koss, 1991). Thus, research has begun to examine the personality, situational, and contextual factors involved in perpetration of IPV in the dating relationships of college students (Luthra and Gidycz, 2006; Riggs and O'Leary, 1989, 1996). Alcohol use specifically has been associated with perpetration of IPV in college populations.

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IPV perpetrators are five times more likely than nonperpetrators to use alcohol (Luthra and Gidycz, 2006), and both problem drinking and IPV perpetration are most prevalent among young adults in their early to mid-20s (O'Leary and Woodin, 2005). Although much of the past research in this area indicates a positive association between heavy drinking and IPV perpetration in college dating relationships, the nature of the relationship has proven to be complex and not well understood (Wood and Sher, 2002).

### **Intimate partner violence perpetration and alcohol consumption**

Based on studies of the general population (e.g., Caetano et al., 2005), as well as research with clinical populations (e.g., Fals-Stewart et al., 2005), alcohol consumption has been associated with the perpetration of IPV. Similarly, much of the existing literature on alcohol consumption and IPV perpetration in college populations points to a positive relationship between the two behaviors (Nicholson et al., 1998; Shook et al., 2000; Williams and Smith, 1994), where the use of alcohol before or during a relationship conflict is associated with greater IPV. However, when typical alcohol use (e.g., the average number of drinks per week), as opposed to incident-specific alcohol use, is examined in relation to IPV perpetration, the evidence is mixed. Some studies have indicated a positive relationship (e.g., Barnes et al., 1991; Luthra and Gidycz, 2006), whereas others have found no relationship between typical alcohol use and IPV perpetration (e.g., Matthews, 1984), and still others have found a negative relationship such that typical alcohol use was associated with lower IPV (e.g., Shook et al., 2000).

The mixed findings with regard to the relationship between typical alcohol use and IPV perpetration may be the result of moderators of the relationship between drinking and IPV. Previously identified moderators include gender (Johnson and Glassman, 1999), hostility (Leonard and Blane, 1992), verbal aggression (Leonard and Quigley, 1999), and antisocial personality disorder (Fals-Stewart et al., 2005). Thus, the relationship between typical alcohol consumption and IPV appears to be a complex phenomenon that differs as a function of other behavioral factors (i.e., moderators) such as drinking patterns, drinking problems, and past history of aggressive behavior.

### **Intimate partner violence perpetration and alcohol problems**

A small body of recent research has suggested that alcohol problems are positively associated with perpetration of aggressive and sometimes violent behavior in the dating relationships of college students (Follingstad et al., 1999; Lundeberg et al., 2004). In a study examining risk factors and correlates of dating violence among college students conducted by Follingstad and colleagues (1999), male college students who had perpetrated violence in their dating relationships reported more problems associated with alcohol use than those who had not perpetrated violence. Similarly, Lundeberg et al. (2004) found that male college students who were physically violent with their partners reported more problems because of alcohol than their psychologically violent and nonviolent peers. According to a recent review of IPV perpetration and problem drinking across the lifespan by O'Leary and Woodin (2005), young adults in general exhibited the highest rates of both IPV perpetration and problematic drinking. Given the high rate of co-occurring IPV and problem drinking in the young adult population, it is important to better understand factors that influence these behaviors.

### **Alcohol aggression expectancies and subjective evaluations**

Alcohol Expectancy Theory stipulates that choices to engage in drinking are influenced by perceived outcomes of drinking and whether these outcomes are viewed as desirable. Research suggests that alcohol expectancies contribute to problematic drinking and IPV perpetration. Specifically, expectancies pertaining to the effect that alcohol has on aggression have been associated with drinking problems (Noar et al., 2003) and IPV perpetration (Dermen and

George, 1989; Williams and Smith, 1994). Similarly, findings from a general population study conducted by Field and colleagues (2004) indicate that individuals who endorsed that they had a “strong chance” or a “very strong chance” of becoming aggressive after consuming alcohol were 3.2 times more likely to engage in perpetration of IPV after controlling for sociodemographic factors than those who did not endorse this belief.

Moreover, gender appears to moderate the relationship between alcohol expectancies and aggression. Alcohol expectancies in general appear more strongly associated with disinhibited behavior for men than for women (George and Norris, 1991). Given that men are more likely to endorse the use of alcohol as a rationale for aggressive behavior and to hold more favorable attitudes toward partner violence (Field et al., 2004), the expectation for alcohol’s disinhibiting properties may be especially likely to result in aggression for men. Moreover, higher alcohol aggression expectancies are also associated with a greater increase in alcohol problems for men than for women (Johnson and Glassman, 1999).

In addition, positive subjective evaluations or positive beliefs about alcohol’s effects on aggression may be more strongly associated with problem drinking and perpetration of IPV. Research conducted by Burden and Maisto (2000) found that subjective evaluations of the effects of alcohol (i.e., how positively or negatively participants viewed the particular effect that alcohol had on a behavior) were better predictors of problem drinking than expectancies alone. Similarly, Zamboanga (2006) found that favorable evaluations of negative alcohol expectancies (e.g., alcohol aggression expectancies) were predictive of problem drinking in a sample of female college students. Thus, individuals who value alcohol’s effects on aggression may be particularly prone to becoming aggressive while intoxicated.

The present research examined relationships among the perpetration of IPV, alcohol use, and alcohol-related problems, as well as alcohol aggression expectancies and subjective evaluations of alcohol’s effects on aggression among college students. The primary aim of this study was to examine the effect of alcohol aggression expectancies and subjective evaluations of those expectancies on IPV perpetration.

## Method

### Participants

All incoming college freshman who were not part of a similar ongoing study were invited to take part in an online Web-based survey as part of a larger social norms alcohol intervention study. Of the 4,103 students (52.6% female) invited to participate in the study, 2,095 students (57.8% female) completed an initial screening survey (51.1% recruitment rate). All students who met heavy drinking criteria were invited to participate in the larger social norms alcohol intervention study. A total of 896 students met the criteria and 818 completed the baseline survey (91.3% recruitment rate). Students who were age 17 years at the time of the survey ( $n = 38$ ) were not asked to complete the short form of the Revised Conflict Tactics Scale (CTS2S) because of the sensitivity of some of the questions, leaving a final sample of 780 participants (57.3% female). Analyses provided in this study are based on the 780 participants who provided informed consent, met the criteria for the larger social norms alcohol intervention study, completed the baseline assessment, and were age 18 years or older at the time of the assessment. The average (SD) age of participants was 18.18 years (0.42). The ethnicity of the sample was 65.9% white, 23.6% Asian/Asian American, 4.4% Hispanic/Latino, 1.3% black, 0.5% Native American/American Indian, and 4.1% who self-identified as other. Two participants (0.3%) did not report their ethnicity.

## Procedure

Participants completed an initial screening survey to see if they met the study heavy drinking criteria of having consumed five drinks for men or four for women on one occasion in the previous month. The screening survey took approximately 20 minutes to complete, and participants were paid \$10 for their cooperation. Participants meeting the heavy drinking criteria were invited to complete a 50-minute baseline assessment immediately following screening or within 2 weeks of completing the screening survey as part of a larger social norms alcohol intervention study. Participants were paid \$25 for their participation in this portion of the study. The university's institutional review board approved all aspects of the present study.

## Measures

**Perpetration of intimate partner violence**—The short form of the Revised Conflict Tactics Scale (CTS2S; Straus and Douglas, 2004) was used to assess IPV perpetration in a current or most recent relationship. The scale includes eight items that assess perpetration of physical (two items), sexual (two items), and psychological (two items) aggression, as well as injury (two items). Each subscale contains one item measuring a severe form of aggression and one item measuring a mild form of aggression, for a total of four items measuring severe aggression and four items measuring mild forms of aggression. Response options included the following: “0 = This has never happened before”; “1 = Not in the past year, but it did happen before”; “2 = Once in the past year”; “3 = Twice in the past year”; “4 = 3–5 times in the past year”; “5 = 6–10 times in the past year”; “6 = 11–20 times in the past year”; and “7 = More than 20 times in the past year.” Composite scores were created for subscales by the type of perpetration by summing the two items contained in each subscale. The same method was used for creating composite scores for mild versus severe perpetration. An overall score for perpetration was created by summing all items, where higher scores indicated greater levels of overall perpetration. Example items include the following: “I punched or kicked or beat-up my partner” (physical, severe); “I used force (like hitting, holding down, or using a weapon) to make my partner have sex” (sexual, severe); and “I insulted or swore or shouted or yelled at my partner” (psychological, mild). The scale includes two reversed items regarding positive relationship behaviors that were not included in analyses because they substantially reduced reliability. Internal consistency reliability in this study was  $\alpha = .84$ .

**Alcohol consumption**—The Daily Drinking Questionnaire (DDQ; Collins et al., 1985) was used to assess the quantity and frequency of alcohol consumption in this sample. Participants were asked to “Consider a typical week during the last three months. How much alcohol, on average (measured in number of drinks), do you drink on each day of a typical week?” Participants responded by reporting the typical number of standard drinks consumed on each day of a typical week. Participants' responses for each day of the week were summed to generate a typical weekly drinking variable. Previous research has established the DDQ to have good concurrent validity and test-retest reliability (Marlatt et al., 1998; Neighbors et al., 2006).

**Drinking problems**—The Rutgers Alcohol Problem Index (RAPI; White and Labouvie, 1989) was used to assess problems associated with alcohol use in the sample. The scale consists of 23 items that ask how many times each event occurred while drinking or because of alcohol use during the past 3 months. Example items include the following: “Neglected your responsibilities?” and “Kept drinking when you promised yourself not to?” Two items were added to assess the frequency of driving after consuming two or more drinks and driving after consuming four or more drinks. Response options range from “never” to “more than 10 times” on a 5-point scale. Items were summed to create a composite score. Internal consistency reliability in this study was  $\alpha = .89$ .

### **Alcohol aggression expectancies and subjective evaluation of alcohol's effects on aggression**

Alcohol aggression expectancies and evaluation of alcohol's effects on aggression were assessed using a subscale of the Comprehensive Effects of Alcohol (CEOA; Fromme et al., 1993) scale. Items assessed whether students expected to behave aggressively (four items) or take risks (one item) if they were under the influence of alcohol. For expectancies, students were asked to indicate their level of agreement, on a 4-point scale ranging from "disagree" to "agree," with whether they expected each effect to happen to them if they were under the influence from drinking alcohol. Five separate items assessed subjective evaluations or the degree to which students viewed the previous effects of alcohol's influence on their own aggressive or risky behavior as bad or good. For subjective evaluations, students were asked to rate, using a 5-point scale that ranged from "bad" to "good," how positive or negative each effect would be if it were to happen to them independent of their perceived likelihood of experiencing the effect. Example items include the following: "I would be dominant" and "I would act aggressively." Internal reliabilities for the expectancy and subjective evaluation scales were .75 and .73, respectively.

### **Analysis plan**

Data were analyzed using SAS Version 9.1 (SAS Institute Inc., Cary, NC). We examined alcohol consumption, alcohol-related problems, and IPV perpetration using independent sample *t* tests to evaluate gender differences. We then examined the effect of alcohol aggression expectancies and subjective evaluations of those expectancies on IPV perpetration, the outcome of interest, using hierarchical multiple regression (Cohen et al., 2003). Gender, drinking, alcohol-related problems, alcohol aggression expectancies, and subjective evaluations of alcohol's effects on aggression were the predictors. We were also interested in evaluating whether gender, drinking, and alcohol-related problems moderated alcohol aggression expectancies and subjective evaluations of alcohol's effects in predicting IPV perpetration. The main effects of predictors were entered at Step 1. Two-way interactions were evaluated at Step 2, where all two-way product terms were entered. All three-way product terms were entered at Step 3 to evaluate three-way interactions. Gender was dummy coded (women = 0, men = 1). Predictors were mean centered to reduce multicollinearity of product terms and to facilitate interpretation of interactions. Statistical significance was defined based on the conventional criteria of  $p < .05$ . Interactions were graphed where predicted cell means were derived from the regression equation at the step in which the relevant interaction was significant. High and low values were specified as one standard deviation above and below the respective means. Simple slopes analyses were performed to evaluate significant differences between slopes. Detailed descriptions for evaluating interactions with continuous variables in multiple regression analyses are provided by Aiken and West (1991) and Cohen et al. (2003).

## **Results**

### **Mean differences and bivariate associations**

**Gender differences**—Sample characteristics are presented in Table 1. On average, participants in this sample reported consuming 11.70 drinks per week (10.71). An independent sample *t* test revealed that men (mean = 14.15 [12.09]) consumed significantly more drinks than women (mean = 9.84 [9.12]) ( $t = 5.64, 770 \text{ df}, p < .001$ ). Participants in this sample reported an average score of 7.00 (7.84) on the RAPI. Men (mean = 7.79 [8.48]) reported significantly more alcohol-related problems than women (mean = 6.41 [7.28]) ( $t = 2.40, 752 \text{ df}, p < .05$ ).

More than half (57.31%) of the participants in this sample acknowledged committing some form of aggression against a partner. Men and women did not differ significantly with respect to the overall magnitude (i.e., mild, severe) of the violence they perpetrated. Neither did men

and women differ with respect to overall and severe physical violence. However, women (mean = 0.52 [1.30]) were significantly more likely than men (mean = 0.30 [1.17]) to report perpetrating mild physical aggression ( $t = -2.36$ , 770 df,  $p < .05$ ). Women (mean = 2.54 [2.72]) were also significantly more likely to report engaging in psychological aggression than men (mean = 1.83 [2.45]) ( $t = -3.77$ , 767 df,  $p < .001$ ). In contrast, men (mean = 0.21 [1.06]) reported that they caused more severe injuries to their partners than women (mean = 0.09 [0.58]) ( $t = 2.14$ , 768 df,  $p < .05$ ). Men (mean = 0.73 [2.06]) also reported committing significantly more acts of sexual aggression than women (mean = 0.42 [1.48]) ( $t = 2.37$ , 768 df,  $p < .05$ ).

### Multiple regression results

Regression results are presented in Table 2. At Step 1, results revealed that neither gender, alcohol consumption, nor alcohol aggression expectancies were uniquely associated with IPV perpetration. In contrast, alcohol-related problems and subjective evaluations of alcohol's effects on aggression were uniquely and positively associated with perpetration.

At Step 2, results revealed a significant two-way interaction between alcohol aggression expectancies and alcohol-related problems in predicting IPV perpetration. No other two-way interactions were significant. Figure 1 provides a graph of the significant two-way interaction and suggests that the relationship between alcohol-related problems and IPV perpetration was weaker among those who held stronger beliefs that alcohol use results in increased aggressive behavior. Simple slopes analyses indicated that, among those who reported lower alcohol aggression expectancies, alcohol-related problems were positively associated with IPV perpetration ( $\beta = .32$ ;  $t = 4.12$ , 752 df,  $p < .001$ ). In contrast, among those who reported higher alcohol aggression expectancies, the relationship between alcohol-related problems and IPV perpetration was not significant ( $\beta = .07$ ;  $t = .88$ , 752 df,  $p = \text{NS}$ ).

At Step 3, results revealed a significant three-way interaction among gender, alcohol-related problems, and subjective evaluations of alcohol's effects on aggression in predicting IPV perpetration (see Figure 2). No other three-way interactions were significant. Simple slopes analyses revealed that, among women, the relationship between alcohol-related problems and IPV perpetration was significant at less favorable subjective evaluations of alcohol's effects on aggression ( $\beta = .26$ ;  $t = 2.56$ , 742 df,  $p < .05$ ) and approached significance at more favorable subjective evaluations of alcohol's effects on aggression ( $\beta = .17$ ;  $t = 1.92$ , 742 df,  $p < .06$ ), but these slopes were not significantly different from each other ( $t = -.60$ , 742 df,  $p = \text{NS}$ ). Among men, the relationship between alcohol-related problems and IPV perpetration did not approach significance at less favorable subjective evaluations of alcohol's effects on aggression ( $\beta = .11$ ;  $t = 0.87$ , 742 df,  $p = \text{NS}$ ), but alcohol-related problems were strongly associated with IPV perpetration at more favorable subjective evaluations ( $\beta = .41$ ;  $t = 4.23$ , 742 df,  $p < .001$ ). Moreover, these slopes were significantly different from each other ( $t = 2.06$ , 742 df,  $p < .05$ ).

### Discussion

The present study examined the relationships among gender, alcohol use, alcohol-related problems, alcohol aggression expectancies, subjective evaluations of alcohol's effects on aggression, and perpetration of IPV. This study extends previous research in several ways. Previous research in college populations has focused primarily on the relationship between IPV and alcohol *consumption*, despite the fact that alcohol-related problems have been associated with IPV perpetration in other populations (Caetano et al., 2005; White and Chen, 2002; White and Widom, 2003). In addition, previous research has primarily focused on alcohol *expectancies* as a potential moderator of the relationship between IPV and drinking. Contrary to findings from the general population (Field et al., 2004), in this study expectancies had relatively little impact on the relationship between problem drinking and IPV perpetration among college students, with the exception that greater expectancies were associated with

less IPV perpetration. One possible explanation for this finding is that students who drink problematically and who engage in IPV perpetration may be less aware of the relationship between alcohol and aggression. Moreover, the current results suggest that whether one believes consuming alcohol leads to greater aggression may be less relevant than whether one believes alcohol's effects on aggression are good or bad. Furthermore, these results suggest that, for men but not women, subjective evaluations of alcohol's effects on aggression are associated with a stronger and positive relationship between alcohol-related problems and IPV perpetration.

Additional work is needed to clarify causal directions. Neither our data, nor previous literature, which has been inconsistent (Leonard, 2002), can rule out the possibility that men who drink problematically and who engage in IPV justify their behavior by attributing it to alcohol's effects on aggression. However, it is important to note that in this sample the belief that alcohol results in increased aggression was associated with a *weaker* rather than a *stronger* link between problem drinking and IPV perpetration. In addition, believing that alcohol's effects on aggression are a good thing seems less consistent with justification. Our data are consistent with the notion that men who have more favorable views toward alcohol's effects on aggression and who drink problematically are more likely to perpetrate IPV. Additional work examining individual differences (e.g., Antisocial Personality Disorder; Fals-Stewart et al., 2005) among men who view alcohol's effects on aggression more favorably might also help better elucidate the role beliefs about alcohol play in the alcohol-IPV relationship.

Results from prior studies suggest that there is a distinct need for the incorporation of alcohol treatment into clinical interventions for IPV (Stuart, 2005; Stuart et al., 2003). Results from the present study suggest that clinical interventions for IPV with men who drink problematically may need to incorporate strategies to modify the value placed on alcohol-related aggression. Given its utility in assessing goals and values to modify behaviors, motivational interviewing may be a useful type of intervention to consider for reducing IPV perpetration (Neighbors et al., in press). Motivational enhancement strategies have already been found to be useful as prevention strategies in college populations for reducing alcohol use (LaBrie et al., 2006; White et al., 2006), marijuana use (White et al., 2006), and gambling (Takushi et al., 2004) and may be worth considering for alcohol and IPV.

The present research also points to the importance of considering IPV perpetration among both men and women, as the role of alcohol in IPV may differ depending on gender. Our data are consistent with previous literature suggesting that men are more likely to perpetrate sexual violence and to cause more serious injuries to their partners. However, in these data, women were more likely than men to report engaging in mild physical aggression and psychological aggression. These findings are consistent with previous research examining the role of gender in relation to perpetration of IPV (Archer, 2002; Hines and Saudino, 2003).

Results from this research must be interpreted in the context of several limitations. Self-reported IPV perpetration is likely influenced to some extent by social desirability, and it is unknown whether this influence may vary as a function of gender in college student samples. However, results from general population research by Schafer et al. (2002) suggest that partners do not agree about the occurrence of violence. Their findings demonstrated that only half of the time partners agreed about the occurrence of violence in their relationship, with women reporting the occurrence of more male to female violence and more female to male violence. A related issue to consider is that in this study data were collected via the Internet rather than by paper and pencil measures, and it is not clear whether or how results might have differed if assessments had been completed using other methods (e.g., telephone, in person, mailed). However, past research has compared Web-based assessment with telephone assessment of alcohol use and problems and has found that completion rates were higher among those in the

Web assessment and participants were more forthcoming in the Web assessment regarding problems experienced (Parks et al., 2006).

Also of note, the screening recruitment rate, although comparable to other large studies in this population, was just above 50%, and it is important to consider how this might affect generalizability. The initial invitation to participate described the research as an investigation of social norms and alcohol consumption, and students were informed that they would be asked questions about these constructs as well as questions about their relationship and other health-related variables. Previous research suggests that students who found these topics to be less relevant (e.g., nondrinking students) or potentially threatening (e.g., very heavy drinking students) may have been less likely to participate (Neighbors et al., 2004). Thus, we would speculate that response bias may have resulted in less representation of students at either end of the continuum of problem drinking and, accordingly, at either end of the continuum of IPV perpetration. In addition, in this sample, relative to those who were invited to complete the initial survey, women were somewhat overrepresented. Of those invited, 56% of women completed the initial survey, whereas 45% of men completed the initial survey; thus, men were somewhat underrepresented.

The cross-sectional nature of the data further limits our ability to determine the temporal precedence of beliefs about alcohol, problem drinking, or IPV perpetration. In this study we chose to focus exclusively on IPV perpetration. Additional work examining subjective evaluations of alcohol's effects on aggression as a moderator of problem drinking and IPV victimization might help provide a more complete picture. Moreover, it is important to consider that our assessments did not examine the sequence of events during incidents of IPV or partner reports of violence. Some research suggests that female violence during incidents of IPV is often defensive in nature (Stuart et al., 2006). It is worth noting that in the present study there was relatively little severe IPV, and these results may not generalize to clinical samples. Instead, these results may be more applicable to understanding dating violence in young adults. Despite these limitations we believe that this research provides a valuable piece of the puzzle in considering how beliefs about alcohol influence the relationship between problem drinking and IPV perpetration among college students.

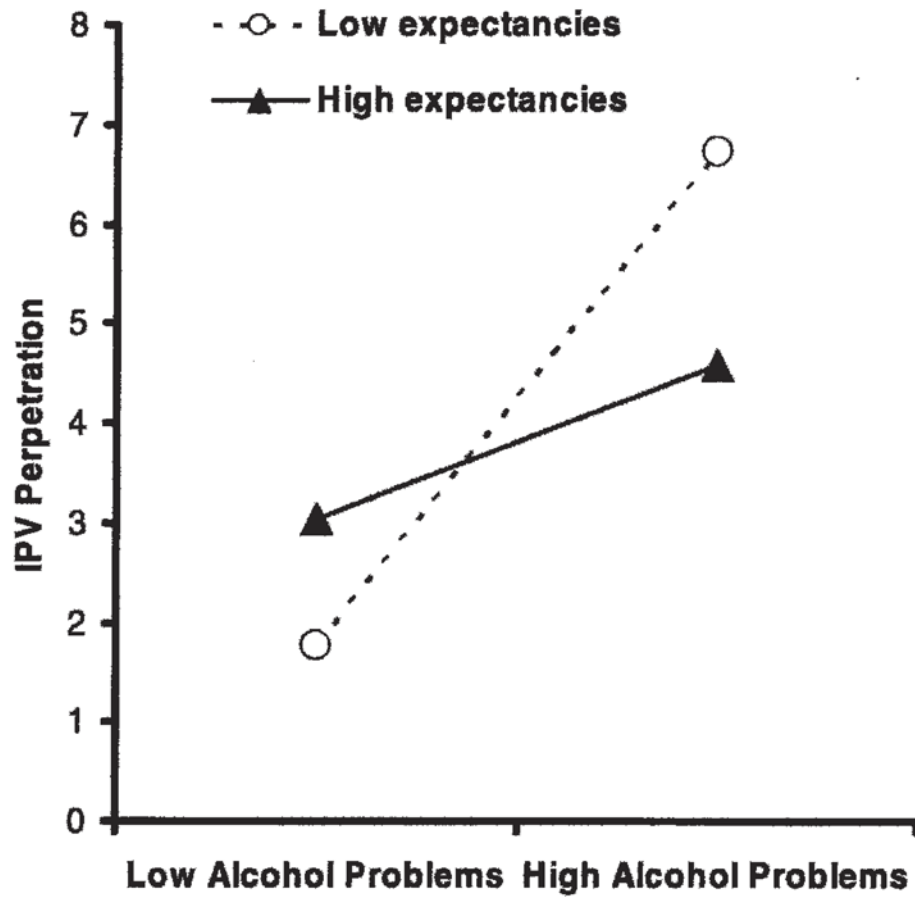
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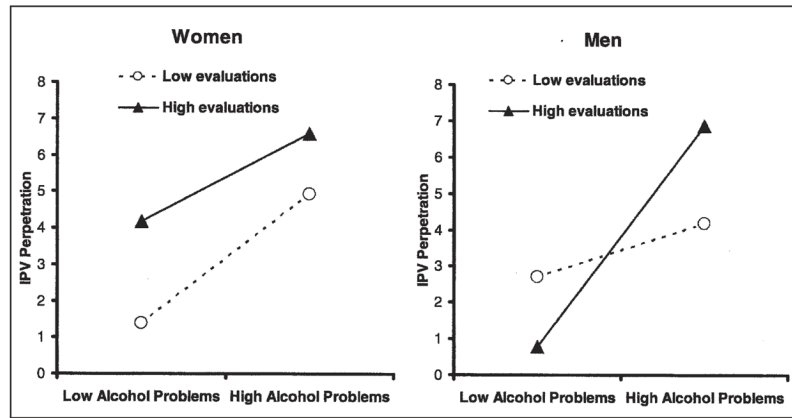


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**Figure 1.** Intimate partner violence (IPV) perpetration as a function of alcohol aggression expectancies and alcohol-related problems



**Figure 2.** Intimate partner violence (IPV) perpetration as a function of gender, subjective evaluations of alcohol's effects on aggression, and alcohol-related problems

**Table 1**  
Demographic characteristics and rates of intimate partner violence (IPV) perpetration, by subscale

Variable	Overall		Men		Women	
	N (%)	Mean (SD)	n (%)	Mean (SD)	n (%)	Mean (SD)
Gender	780 (100.00)		333 (42.69)		447 (57.31)	
Ethnicity						
White	514 (65.90)		210 (26.92)		304 (38.97)	
Asian/Asian American	184 (23.59)		86 (11.03)		98 (12.56)	
Hispanic/Latino	34 (4.36)		16 (2.05)		18 (2.31)	
Black	10 (1.28)		4 (0.51)		6 (0.77)	
Native American/American Indian	4 (0.51)		1 (0.13)		3 (0.38)	
Other	32 (4.10)		15 (1.92)		17 (2.18)	
Missing	2 (0.26)		1 (0.13)		1 (0.13)	
Overall IPV perpetration	447 (57.31)		168 (21.53)		279 (35.77)	
Mild perpetration	445 (57.05)		169 (21.67)		276 (35.38)	
Severe perpetration	69 (8.85)		19 (2.44)		50 (6.41)	
Psychological perpetration	437 (56.03)		163 (20.90)		274 (35.13)	
Injury	72 (9.23)		32 (4.10)		40 (5.13)	
Physical perpetration	105 (13.46)		27 (3.46)		78 (10.00)	
Sexual perpetration	99 (12.69)		55 (7.05)		44 (5.64)	
No perpetration	312 (40.00)		159 (20.38)		153 (19.62)	
Drinks per week		11.70 (10.71)		14.15 (12.09)		9.84 (9.12)
Alcohol-related problems <sup>a</sup>		7.00 (7.84)		7.79 (8.48)		6.41 (7.28)

Notes: Prevalence rates for IPV are for lifetime violence perpetration. Twenty-one participants did not complete one or more items on the Revised Conflict Tactics Scale.

<sup>a</sup> Rutgers Alcohol Problem Index score.

**Table 2**

Regression analysis: Perpetration of intimate partner violence as a function of gender, drinking, alcohol-related problems, alcohol aggression expectancies, and subjective evaluations of alcohol's effects on aggression

Step	Predictor	<i>B</i>	$\beta$	<i>t</i>
Step 1 ( <i>R</i> <sup>2</sup> = .050)	Gender	-0.51	-.04	-1.05
	Drinking	-0.02	-.03	-0.70
	Alc. Probs	0.18	.20	5.03 <sup>‡</sup>
	Alc. exp.	-0.33	-.03	-0.72
	Alc. eval.	0.88	.09	2.22 <sup>*</sup>
Step 2 ( <i>R</i> <sup>2</sup> = .068)	Gender × Drinking	0.01	.01	0.13
	Gender × Alc. Probs	0.09	.08	1.27
	Gender × Alc. Exp.	-0.16	-.01	-0.17
	Gender × Alc. Eval.	-1.06	-.08	-1.28
	Drinking × Alc. Probs	0.00	-.06	-1.13
	Drinking × Alc. Exp.	0.04	.04	0.78
	Drinking × Alc. Eval.	0.04	.04	0.85
	Alc. Probs × Alc. Exp.	-0.17	-.13	-2.72 <sup>‡</sup>
	Alc. Probs × Alc. Eval.	0.05	.04	0.85
	Alc. Exp. × Alc. Eval.	-0.12	-.01	-0.25
	Gender × Drinking × Alc. Probs	0.00	-.05	-0.50
	Gender × Drinking × Alc. Exp.	0.09	.08	0.92
	Gender × Drinking × Alc. Eval.	-0.12	-.11	-1.33
Step 3 ( <i>R</i> <sup>2</sup> = .078)	Gender × Alc. Probs × Alc. Exp.	-0.17	-.11	-1.16
	Gender × Alc. Probs × Alc. Eval.	0.25	.16	2.09 <sup>*</sup>
	Gender × Alc. Exp. × Alc. Eval.	0.63	.04	0.64
	Drinking × Alc. Probs × Alc. Exp.	0.00	.03	0.34
	Drinking × Alc. Probs × Alc. Eval.	0.00	-.03	-0.43
	Drinking × Alc. Exp. × Alc. Eval.	0.03	.03	0.51
	Alc. Probs × Alc. Exp. × Alc. Eval.	-0.04	-.03	-0.53

Notes: Gender was dummy coded (women = 0, men = 1).  $\beta$  = standardized regression coefficient. Alc. probs = alcohol-related problems; alc. exp. = expectancies of alcohol's effects on aggression; alc. eval. = evaluations of alcohol's effects on aggression.

\*  $p < .05$ ;

<sup>†</sup>  $p < .01$ ;

<sup>‡</sup>  $p < .001$ .