

# Reasons for Drinking in the College Student Context: The Differential Role and Risk of the Social Motivator\*

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**ABSTRACT. Objective:** The present study examines the relationships among reasons for drinking, alcohol consumption, and alcohol-related consequences in two college-aged samples. Personal motivators such as mood enhancement and coping (tension reduction) have consistently been shown to predict problematic alcohol use, but because of the salient nature of social drinking in college, we hypothesized that social reasons for drinking would be most frequently endorsed and, in turn, predict negative consequences. **Method:** Two distinct samples—119 co-ed adjudicated students sanctioned by the university for violating campus alcohol policy and 106 co-ed volunteer students—completed measures assessing alcohol consumption, reasons for drinking, and consequences. Differential effects between genders were examined. **Results:** Social camaraderie (SC) was the most frequently endorsed reason for

drinking. Regression analyses controlling for previous drinking revealed that social reasons for drinking predicted alcohol-related problems among female students in both samples. Additionally, SC was significantly correlated with every drinking measure and problem measure at 1 month for females in both the adjudicated and the volunteer groups. Total drinks, drinking days, and heavy episodic drinking events correlated with SC for males in the adjudicated sample. **Conclusions:** For females, these results suggest a relationship between social reasons for drinking and alcohol-related consequences, which previous research has not identified. More research is needed to explore females' reasons for drinking, accompanying problems, and the underlying psychosocial traits associated with these reasons. (*J. Stud. Alcohol Drugs* 68: 393-398, 2007)

**E**XCESSIVE DRINKING IN THE COLLEGE context is associated with damaged property, poor class attendance, hangovers, trouble with authorities, injuries, and fatalities (Hingson et al., 2005; Wechsler et al., 1994, 2000; Wechsler and Isaac, 1992). Additionally, the National Institute on Alcohol Abuse and Alcoholism (Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, 2002) has called for targeted interventions with college students to reduce risky levels of consumption. Before designing interventions with students, it is important to identify the reasons behind these heavy levels of consumption. Although peer influence, alcohol accessibility, and pressure to be accepted all affect students' alcohol use (Hanson, 1974), early research with reasons for drinking, or drinking motives, found two main reasons why college students drink: social purposes and emotional escape or relief (Brennan et al., 1986). However, research has been inconsistent regarding the most salient reasons for student drinking and their consequential effects on drinking outcomes.

Cooper and colleagues (1992) developed a measure for drinking motives that identified three factors: mood enhancement, tension reduction (or coping), and social motives. They posited that each motive is associated with unique characteristics of drinking behavior and related outcomes. Enhancement and coping motives were predictive of excessive consumption levels and alcohol-related consequences, whereas social reasons failed to predict excessive drinking levels or alcohol problems (Cooper, 1994; Cooper et al., 1992). Cronin (1997) developed the Reasons for Drinking Scale that included three subscales: social camaraderie, mood enhancement, and tension reduction. In a college student sample, social camaraderie motives predicted drinking rates but, as in the Cooper studies, did not predict alcohol-related problems (Cronin, 1997).

Personal motivations, such as the enhancement of internal affective states, have typically been found to predict drinking rates and alcohol-related problems (Billingham et al., 1993; Cronin, 1997; McCarty and Kaye, 1984; Wood et al., 1992). For example, mood enhancement, an internal motive based on positive reinforcement seeking to increase positive internal states, is associated with patterns of frequent and heavy drinking (Colder and O'Conner, 2002; Stewart and Chambers, 2000). Tension reduction or coping is also an internal motive for drinking, but it is based on negative reinforcement, as its aim is to decrease negative internal states. Coping motives predict heavy drinking, social

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and occupational problems, and greater tolerance and withdrawal symptoms (Cooper et al., 1992).

Social motivators for drinking, or social camaraderie, are external motives based on positive reinforcement (Colder and O'Conner, 2002). Social factors have been shown to play a strong role in college drinking (Simons et al., 2000; Stewart et al., 1996; Wood et al., 2001), and drinking in college is done primarily in social contexts (Harford and Grant, 1987; O'Hare, 1990). Further, the social context of college environments has been associated with heavy alcohol use (Carey, 1993, 1995), creating a culture where such use is relatively normative (Gotham et al., 1997; Wechsler et al., 2000). A study by Carey and Correia (1997) found that both positive reinforcement and negative reinforcement motives were associated with resultant alcohol-related problems. However, when the authors controlled for consumption levels, only negative reinforcement variables predicted negative consequences.

Similarly, several other studies among college students have found that social motivations predict frequent but nonproblematic drinking (Goodwin, 1990; Haden and Edmundson, 1991; Klein, 1992; Wood et al., 1992). Following an extensive review of the drinking motives literature, Baer (2002) found that stress- or anxiety-based drinking is associated with increased drinking rates and increased negative consequences. He concluded that drinking motives associated with management of negative affect are associated with greater problems than social motives. Ham and Hope (2003) reached a similar conclusion in their review when they noted that although all motives have been associated with higher levels of drinking, social motives were the only motives that have been associated with nonproblematic drinking.

This failure to find a direct link between socially motivated drinking and subsequent problems seems counterintuitive given the strong social role alcohol plays within the college context. However, much of the aforementioned research neglected to partition out gender differences when conducting predictive analyses. This has become increasingly important, as rates of frequent heavy episodic drinking among undergraduate females have increased (O'Malley and Johnston, 2002; Wechsler et al., 2002). Further, males and females may use and abuse alcohol for different reasons and with different results (Gleason, 1994). A difference between young males' and females' reasons for drinking may be that young females are more likely to drink to fulfill a desire for intimate relationships (Vince-Whitman and Cretella, 1999).

The strong perceived relationship between alcohol and intimacy in females may place them more at risk for negative consequences that typically do not affect males. The Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism (2002) estimates that each year 70,000 cases of sexual assault or date rape and 400,000

unprotected sex events occur on American college campuses and predominately involve drinking. The potential differences in how male and female students may use alcohol, as well as in differential consequences, warrant closer examination.

Although much research focuses on personal motivators as the precursor to problematic drinking among all students, the relationship between social reasons and drinking-related consequences among genders needs further exploration. Thus, the present study examines the relationships among reasons for drinking, specifically targeting social reasons; alcohol consumption; and alcohol-related consequences in two college-aged samples: adjudicated students and volunteer participants. Adjudicated students are disproportionately heavy drinkers who are at increased risk for alcohol-related consequences (Caldwell, 2002; Larimer and Crouce, 2002) and, therefore, are an important inclusion in this study. Including both a volunteer sample and an adjudicated sample with both males and females will help generalize results across a wider array of college student drinkers. We hypothesize that social reasons for drinking will be more frequently endorsed and more predictive of drinking than enhancement or coping reasons. An emphasis is placed on the social reasons for drinking, as drinking in college is done particularly in the social context with peer influence to drink. Contrary to previous research and consistent with notable risky drinking behavior and the salient nature of sociability among college students, we further hypothesize that social motives will predict problems associated with drinking over and above actual drinking behavior. Finally, to investigate possible variations in reasons for drinking between males and females, the differential effects between genders will be examined as well.

## Method

### *Participants*

The current study used two samples of student drinkers assessed over the course of the 2004-2005 academic year. Sample one contained 106 student drinkers (35 males and 71 females) recruited through the university's psychology subject pool to participate in an alcohol survey for class credit. Initial recruitment consisted of 130 student volunteers, but to examine drinking motives among student drinkers, the data from abstainers were not used in analyses. Volunteers averaged (SD) 19.14 (2.40) years of age and varied in ethnicity, with 59% white, 15% Hispanic, 15% Asian, 2% black, and 9% classified as "other." The class standings for this group were 75% freshmen, 17% sophomores, 4% juniors, and 4% seniors.

The second sample consisted of 119 adjudicated students (71 males and 48 females) sanctioned by the university for violating campus alcohol policy. Violations ranged in severity from underage intoxication to dangerous and

destructive activity while intoxicated. Adjudicated students were referred to the study as a deferral of judicial sanction, and although they were given an alternate option, nearly all sanctioned students chose to participate in the study. The students were predominantly white (82%) and averaged 18.55 (2.43) years of age, with 50% freshmen, 40% sophomores, 8% juniors, and 1% seniors.

### Measures

The university institutional review board approved the studies, and all participants gave informed consent regardless of volunteer or adjudicated status. Participants completed an assessment questionnaire that included demographic information, followed by measures of consequences, reasons for drinking, and consumption. The Rutgers Alcohol Problem Index (RAPI; White and Labouvie, 1989) assessed alcohol-related consequences during the prior month. The Reason for Drinking Scale (RFD; Cronin, 1997) assessed three separate subscales of individual reasons for drinking: mood enhancement (ME; 8 items), social camaraderie (SC; 8 items), and tension reduction (TR; 9 items). Participants rated these reasons for drinking on a three-point scale ("not a reason," "a minor reason," and "a major reason"), and each subscale's score was examined separately. Each subscale displayed adequate reliability with  $\alpha$  levels of .828 (ME), .726 (SC), and .799 (TR) for the volunteer samples and levels of .810 (ME), .778 (SC), and .854 (TR) for the adjudicated samples.

In the group, participants also completed a Timeline Followback (TLFB; Sobell and Sobell, 1992), individually indicating on a calendar all the days they drank and how much they drank in the past month. Although usually performed in one-on-one interviews, a group-administered TLFB yields equivalent data to individual interview TLFB (LaBrie et al., 2005; Pedersen and LaBrie, 2006). Variables assessed included total drinks, drinking days, average drinks per event, and heavy episodic drinking events in the past month.

## Results

Means and SDs for drinking, motives, and alcohol-related problems variables—for males and for females in both samples—are contained in Table 1.

### Endorsement of social reasons

In both samples, SC was the most endorsed reason for drinking. Bivariate comparisons among SC and the other two factors were all significantly different at  $p < .001$  (volunteers: SC vs ME,  $t = 8.63$ , 104 df; SC vs TR,  $t = 5.67$ , 105 df; adjudicated students: SC vs ME,  $t = 6.42$ , 117 df; SC vs TR,  $t = 11.02$ , 117 df). When divided by gender, SC was still the most endorsed reason for drinking in both samples for males and females, with SC motives significantly more endorsed than either ME or TR motives (see Table 1).

### Association between motives and drinking variables

Correlations for the reasons for drinking factors with drinking variables among the samples and by gender are displayed in Table 2. SC significantly correlated with every drinking variable assessed (total drinks [drinks/month], drinking days, average drinks, and heavy episodic drinking events) for females in both samples. Total drinks, drinking days, and heavy episodic drinking events correlated with SC for males in the adjudicated sample. In both samples, neither ME nor TR significantly correlated with any drinking variable for either males or females.

### Association between motives and consequences

Correlations for the reasons for drinking factors with composite RAPI scores among samples and by gender are displayed in Table 2. All three reasons for drinking correlated with problems for both males and females in the volunteer sample. A Fisher's  $R$  to  $Z$  transformation revealed

TABLE 1. Means and SDs of key variables, by sample and gender

Variable	Volunteers Mean (SD) ( $n = 106$ ; 71 females)		Adjudicated Mean (SD) ( $n = 119$ ; 48 females)	
	Males	Females	Males	Females
Total drinks	39.37 (46.76)	29.40 (31.74)	72.81 (53.83)	30.06 (30.94)
RAPI composite	5.06 (4.93)	5.51 (5.67)	7.09 (6.72)	6.06 (6.51)
Mood enhancement	4.66 (4.23) <sup>‡</sup>	4.63 (3.28) <sup>‡</sup>	8.23 (2.77) <sup>‡</sup>	7.21 (3.13) <sup>‡</sup>
Social camaraderie	8.06 (3.51) <sup>‡</sup>	7.06 (3.18) <sup>‡</sup>	10.04 (2.94) <sup>‡</sup>	9.37 (3.85) <sup>‡</sup>
Tension reduction	3.66 (3.26) <sup>‡</sup>	2.73 (2.37) <sup>‡</sup>	6.56 (3.39) <sup>‡</sup>	5.70 (5.01) <sup>‡</sup>

Notes: There were no differences between males and females within samples on any variables, except total drinks in the adjudicated sample. RAPI = Rutgers Alcohol Problem Index.

<sup>‡</sup>Difference between social camaraderie and other drinking motives at  $p < .001$  within sample and within gender.

TABLE 2. Correlations between reasons for drinking factors and variables of drinking and consequences, by sample and gender

Variable	Mood enhancement		Social camaraderie		Tension reduction	
	Males	Females	Males	Females	Males	Females
Correlations for volunteers						
Total drinks	.18	.20	.29	.35†	.14	.01
Drinking days	.19	.17	.26	.26*	.11	-.05
Average drinks	.18	.19	.20	.33†	.16	.13
Heavy drinking events	.20	.14	.27	.27*	.16	.01
RAPI composite	.40*	.43†	.50†	.60†	.42*	.36†
Correlations for adjudicated participants						
Total drinks	-.14	-.04	.33†	.38†	.11	.19
Drinking days	-.03	.04	.43†	.36*	.19	.24
Average drinks	-.12	-.12	.15	.33*	-.01	.09
Heavy drinking events	-.08	.06	.40†	.43†	.11	.28
RAPI composite	-.14	.15	.12	.52†	.19	.34*

Notes: Heavy drinking events signifies five or more (four or more for females) drinks in a row during one sitting. RAPI = Rutgers Alcohol Problem Index.

\*Correlation significant at  $p < .05$ ; † $p < .01$ .

that, for males, no differences in correlations existed between SC and ME ( $z = 0.50, p = .31$ ) and between SC and TR ( $z = 0.41, p = .34$ ). For females in the volunteer sample, however, differences in correlations between SC and ME approached significance ( $z = 1.33, p = .09$ ) and were significant between SC and TR ( $z = 1.81, p < .05$ ). In the adjudicated sample, both SC and TR were significantly correlated with problems for females, and although the correlation between SC and problems was larger than the correlation between TR and problems, this difference was not significant ( $z = 1.03, p = .15$ ). No reason for drinking correlated with problems for males in the adjudicated sample.

#### Regression analyses predicting consequences from motives

To test the hypothesis that social motives predict alcohol problems in college students, we conducted regression equations predicting problems from reasons for drinking. We controlled for alcohol consumption levels by entering drinking in the past month (total drinks consumed) in Step 1 of a hierarchical regression model. We entered all three reasons for drinking subscales in Step 2. In the volunteer sample, after controlling for previous drinking on Step 1 ( $R^2 = .20$ ), SC was the only significant predictor of problems for the composite RAPI ( $\beta = .35, t = 3.43, p < .01$ ; change in  $R^2 = .20, p < .001$ ). In the adjudicated sample, after controlling for previous drinking ( $R^2 = .15$ ), none of the reasons for drinking significantly predicted problems (change in  $R^2 = .07, p < .05$ ).

We further analyzed the data, splitting the output by gender using the same analysis model. For females in both samples, after controlling for drinking in the past month ( $R^2 = .37$  for volunteers;  $R^2 = .25$  for adjudicated females), SC significantly predicted RAPI problems ( $\beta = .31, t =$

$3.10, p < .01$ , change in  $R^2 = .22, p < .001$  for volunteers;  $\beta = .42, t = 2.12, p < .05$ , change in  $R^2 = .13, p < .05$  for adjudicated females). No reasons for drinking significantly predicted problems for males.

#### Discussion

The current study reaffirms the influence of social reasons for drinking on alcohol consumption in college students. It further provides evidence for a direct relationship between social reasons for drinking and alcohol-related consequences in female students. In two samples of college students, social camaraderie emerged as the most endorsed reason for drinking, and this social motivator was associated with alcohol consumption levels more strongly than enhancement or coping motives. In females, similar to the results of Carey and Correia (1997), the impact of motives on problems appears mediated by consumption level. However in females, even after controlling for previous consumption, social motives were a significant predictor of alcohol consequences in both samples.

Social motives have typically been thought of as normative and less associated with negative consequences, partially owing to prior studies reporting that drinking for internal or personal reasons was associated with more alcohol problems (Cooper, 1994; Cooper et al., 1992; Cronin, 1997). Importantly, in two distinct samples, the relationships between social reasons for drinking and both drinking variables and consequences were consistent. For females, these results suggest a relationship between social reasons for drinking and alcohol-related consequences, which previous research has not identified. It has typically been thought that social motives predicted increased consumption and that higher consumption levels led to consequences. Something different appears to be the case for females.

Although consumption does predict consequences, social motives predict consequences over and above alcohol use.

The implications for females experiencing negative consequences as a result of socially motivated drinking can be readily understood and include acts such as forced sexual encounters or regrettable intercourse. For college females, if drinking is often a way of making friends, establishing more intimate relationships, and lubricating social interactions, then resulting consequences may be endured to be successful in these relational goals. The direct relationship between social motives and consequences in females may be reflective of the failure of females to experience the outcomes desired from social goal-directed drinking (problems with friends, failure to find adequate intimacy, etc.).

The ability to generalize the results is limited, as the samples came from a single site. Future research into college drinking motivators should use diverse samples across multiple sites. It may be helpful to replicate the current findings using alternative scales as well, such as Cooper's (1994) modified Drinking Motives Questionnaire, which had added a fourth motive labeled "conformity." Conformity could also be viewed as a subscale of social reasons for drinking, reflecting implicit or explicit social pressure.

Attempting to replicate these results using different motives constructs may help in explaining varying results within the drinking motives research surrounding associated consequences. Using Cronin's Reasons for Drinking Scale (1997), we have discrepant results from other similar studies. This discrepancy may be due to the failure of other studies to look at gender differences in the relationship between social motives and consequences. It may also be the case that females are experiencing more socially related alcohol consequences, such as relationship disruption and interpersonal hurt feelings.

But discrepant findings may also be due to construct issues in the drinking motive literature, evidenced by various definition-related problems. For example, the same item—"drinking to get high"—is placed by Cooper on the "enhancement motives" subscale in the Drinking Motives Questionnaire (Cooper, 1992) and on the "social camaraderie" subscale in Cronin's measure (1997). Kuntsche and colleagues (2005) support this idea and attribute gaps in the research to the use of different theoretically and empirically based measures in various studies.

A potentially new direction building on the current research would be to more deeply understand females' reasons for engaging in social drinking (e.g., low self-esteem, need for affiliation, desire for intimate relationships). Future research could also address this issue with a more contextual focus, as students probably do not drink uniformly for one reason alone. Reasons for drinking likely change with varying circumstances and in different situations and appear to be moderated by context (Kairouz et al., 2002). When individuals change their drinking motives, any re-

sulting negative consequences could likely change as well. More research is needed to explore females' reasons for drinking, accompanying problems, and the underlying psychosocial traits associated with these reasons.

The findings of this study highlight the importance of a deeper understanding of students' social motives for drinking and point to a unique and potentially important gender difference in the relationships among motives, drinking, and negative consequences. The social facilitation effect of drinking motives appears to affect young adults through increasing the frequency of their drinking (Hussong, 2003), and drinking is related to negative consequences. But beyond this mediated link between social motives and consequences, a direct link exists among female students. Although mood enhancement and tension reduction reasons are still important to examine, the factor of drinking to be social with friends, especially in female students, appears to have more of a detrimental effect than previously considered. A deeper understanding of this outcome could add to the effectiveness of designing and implementing preventative intervention programs on college campuses.

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