College Drinking Problems and Social Anxiety: The Importance of Drinking Context

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Abstract

Social anxiety more than quadruples the risk of developing an alcohol use disorder, yet it is inconsistently linked to heavy alcohol use. Elucidation of the relation between social anxiety and alcohol use is an important next step in treating and preventing risky drinking. College students routinely face potentially anxiety-provoking social situations (e.g., meeting new people) and socially anxious undergraduates are especially vulnerable to alcohol-related impairment. Drinking to cope with social anxiety is thought to reinforce alcohol use, yet research on coping-motivated drinking among socially anxious students has yielded inconsistent findings. Further, undergraduate drinking varies by drinking context, yet the role of context in drinking behaviors among socially anxious individuals remains unclear. The current study sought to examine the relationship of social anxiety and drinking quantity in specific drinking contexts among undergraduates ($N = 611$). We also evaluated whether relevant drinking contexts mediated the relationship between social anxiety and alcohol-related problems. Clinically elevated social anxiety was related to heavier consumption in negative emotion (e.g., feeling sad or angry) and personal/intimate (e.g., before sexual intercourse) contexts, but not social/convivial contexts (e.g., parties, bars). Quantity of alcohol consumed in negative emotion and personal/intimate contexts mediated the relationship between social anxiety and drinking problem severity. Drinking in personal/intimate contexts demonstrated a unique mediational role. Findings suggest that heavy drinking in particular contexts (especially personal/intimate and negative emotion) may play an important role in drinking problems among socially anxious individuals.

Keywords

social anxiety; drinking contexts; drinking problems; alcohol; college students

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College students are routinely faced with novel and potentially anxiety-provoking social situations (e.g., living with roommates, group projects). Drinking to cope with symptoms of social anxiety (SA; physiologically or psychologically) is thought to reinforce regular use of alcohol (Sher & Levenson, 1982), resulting in elevated blood alcohol levels and alcohol tolerance (Weiss & Porrino, 2002), a symptom of alcohol use disorder (American Psychiatric Association, 2013). In fact, SA more than quadruples the risk of developing an alcohol use disorder (Buckner et al., 2008; Kushner, Abrams, & Borchardt, 2000). Further elucidation of the mechanisms underlying heavy drinking among socially anxious students will be critical to inform alcohol intervention efforts, given that highly socially anxious students appear vulnerable to heavy drinking even after undergoing alcohol treatment (Terlecki, Buckner, Larimer, & Copeland, 2011).

There is accumulating evidence that SA is related to drinking problems. Despite the relation between SA and alcohol problems, the literature is mixed regarding whether SA is related to greater quantity or frequency of drinking. Some work has observed a positive relation between SA and drinking quantity and frequency (e.g., Neighbors et al., 2007; Stewart, Morris, Mellings, & Komar, 2006). However other studies found SA to be inversely related to alcohol use (e.g., Ham & Hope, 2005; Meade Eggleston, Woolaway-Bickel, & Schmidt, 2004) or unrelated to alcohol use quantity and frequency (e.g., Bruch, Heimberg, Harvey, & Mc-Cann, 1992; Bruch, Rivet, Heimberg, & Levin, 1997; Buckner, Ecker, & Proctor, 2011; Buckner, Mallott, Schmidt, & Taylor, 2006; Ham & Hope, 2006; O'Grady, Cullum, Armeli, & Tennan, 2011).

One possible explanation for the mixed findings is that college drinking behavior varies in different social and contextual situations (O'Hare, 1997). Thus, socially anxious students may be especially vulnerable to drink in situations in which they believe drinking will help them manage their SA. SA has been linked to heavier self-reported alcohol use in defined contexts, including drinking to cope with unpleasant emotions, in response to conflict with others, to socialize (Buckner, Meade Eggleston, & Schmidt, 2006) and to avoid social scrutiny (Stewart et al., 2006). Further, SA is related to drinking to cope in social situations specifically and avoidance of social situations if alcohol is unavailable (Buckner & Heimberg, 2010). Despite these findings, it remains unclear which specific drinking contexts are associated with heavy drinking among socially anxious undergraduates. Identification of specific types of social situations in which socially anxious undergraduates are vulnerable to drinking heavily could inform theoretical models of the SA–drinking relationship as well as inform treatment and prevention efforts. In addition, given that heavy drinking frequency is correlated with elevated alcohol problems (Wechsler, Lee, Kuo, & Lee, 2000), assessing drinking quantity rather than drinking frequency (Buckner, Meade Eggleston, & Schmidt, 2006) could further elucidate the relation between SA and heavy drinking in particular contexts.

The current study sought to elucidate the role of drinking context on the relation between SA and college drinking behaviors in several ways. First, we explored whether SA was related to alcohol consumption in three empirically derived subscales of the Drinking Context Scale-Revised (O'Hare, 1997): Social/Convivial, Personal/Intimate, and Negative Emotion drinking. Given that socially anxious students report drinking to cope in social situations

(Buckner & Heimberg, 2010), to facilitate social impressions of gregariousness and sexuality (Buckner & Matthews, 2012), and in response to negative affect (Buckner, Meade Eggleston, & Schmidt, 2006) it was hypothesized that SA would be positively related to drinking in all three drinking context subscales. Second, we tested whether alcohol consumption in specific drinking contexts mediated the relation between SA and drinking problems. It was hypothesized that contextual drinking would mediate the relation between SA and problem drinking.

Method

Participants

The sample consisted of undergraduates ($N = 664$) recruited through the Department of Psychology research participant pool at a large public university in the southern United States from April to May of 2011. Of the 664 participants who began the survey, 20 had incomplete responses and were excluded. Item responses greater than 3.29 standard deviations above respective means (Tabachnick & Fidell, 2007) were considered outliers and excluded from analyses ($n = 33$; 5%). The final sample ($N = 611$; 68.0% female) reported a mean age of 19.96 ($SD = 1.62$) years. The majority (95.1%) was non-Hispanic/Latino and the racial composition was 7.4% African American/Black, 2.6% Asian/Asian American, 85.6% Caucasian/White, 0.3% American Indian, 2.0% "biracial," and 2.1% "other." Half were employed part time (54.3%), 3.8% were employed full time, and 39.3% were unemployed. The majority (73.6%) were not members of a fraternity or sorority. Most endorsed lifetime (91.5%) and current (past month; 85.2%) alcohol use.

Measures

The Daily Drinking Questionnaire (DDQ; R. L. Collins, Parks, & Marlatt, 1985) assessed drinking quantity (number of drinks consumed on typical and peak drinking occasions) and weekly drinking frequency. The DDQ has demonstrated good convergent validity (R. L. Collins et al., 1985) and test–retest reliability (S. E. Collins, Carey, & Sliwinski, 2002). Participants are asked to rate the drinking quantity on a scale of 0 drinks to more than 30 drinks.

The Drinking Context Scale–Revised (DCS-R) is a revised version of the Drinking Context Scale (DCS; O'Hare, 1997). This scale assessed participant drinking in a variety of situations (e.g., at a party, after school/work), interpersonal circumstances (e.g., on a date, with a close friend), and negative emotional situations (e.g., when angry at others, after a fight). Items on the DCS-R were consistent with items on the original DCS, which assesses likelihood of excessive drinking on a 5-point Likert scale ranging from 0 (*extremely low*) to 5 (*extremely high*). However, for the current study, we were interested in assessing self-reported drinking quantity in these situations over the past month. Thus, DCS items were assessed using the DDQ scale (i.e., 0 to 30 or more drinks). In addition, three new drinking context items were included in the revised measure: drinking games, pregaming or drinking before going out, and tailgating. Participants were asked to report the average number of drinks typically consumed in each specific context. An exploratory factor analysis was conducted to establish factors on the revised measure. The measure produced three distinct

subscales: Social/Convivial Drinking (e.g., drinking at a club, bar, or party); Personal/ Intimate Drinking (e.g., drinking after work/school, at a restaurant/concert, on a date); and Negative Emotion Drinking (e.g., drinking when feeling sad, angry, lonely, or having trouble relaxing). The subscales of the revised measure were similar to the original DCS subscales, with minor deviations on factor loadings. Additional items each loaded into the Social/ Convivial subscale.[1] Internal consistency for the drinking situations was as follows: Social/ Convivial (α = .94); Personal/Intimate (α = .80); and Negative Emotion (α = .85).

The Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998) assessed SA. Each measure is comprised of 20 items scored from 0 (*not at all characteristic or true of me*) to 4 (*extremely characteristic or true of me*). Total scores range from 0 to 80. Prior research indicates that a score of one standard deviation above the mean of a community sample on the SIAS (M = 19.9, SD = 14.2) and SPS (M = 12.5, SD = 11.5) correctly classified 82% and 73%, respectively, of patients with SA disorder (Heimberg, Mueller, Holt, Hope, & Leibowitz, 1992). Individuals scoring above the cutoff scores on either measure comprised the high SA group (HSA; n = 116). A random sample of 116 undergraduates scoring below the Heimberg et al. cutoff comprised the low SA (LSA) group. This strategy facilitated the comparison of those with clinically elevated SA with students with more normative SA levels. These widely used measures have demonstrated good internal consistency in both community and have been shown to be specific for SA (E. J. Brown et al., 1997) relative to other forms of anxiety (i.e., trait anxiety). Internal consistency of the SIAS-SPS was adequate in the current sample (α = .95).

The Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ; Kahler, Strong, & Read, 2005) assessed alcohol problems. The B-YAACQ lists 24 alcohol-related problems, and participants indicate whether or not the problem has occurred in the past year. Answers were summed to create a total score. The B-YAACQ has excellent psychometric properties, including adequate internal consistency among college student samples in prior work (Kahler et al., 2005) and in the current sample (α = .93).

Procedure

Participants enrolled in the study through the university's secure online study participation system, and data were collected using SurveyMonkey (www.surveymonkey.com). Scores on computerized and paper-and-pencil versions of self-report measures are highly correlated (Gwaltney, Shields, & Shiffman, 2008). The benefits of computerized assessments include ease of data entry, given that no data are entered manually, improved data management, and protection against "missing" data as participants are prompted to answer questions that may have been unintentionally unanswered (Gwaltney et al., 2008). Participants received psychology research credit upon completion of the survey. All study procedures received institutional review board-approval, and informed consent was obtained prior to data collection.

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[1]Exploratory factor analysis results for the DDQ-R measure are available from the first author on request.

Results

Table 1 presented bivariate correlations, means, and standard deviations of study variables. Among all current drinkers, SA was positively correlated with alcohol problems and negative coping drinking. However, the magnitude of the correlations remained small. The magnitude of the relation between SA and drinking problems was larger in our clinical analogue sample (see Table 2). The clinical sample ($n = 232$; 69.4% female) reported a mean age of 19.32 ($SD = 1.34$) years. The majority of participants (97.4%) were non-Hispanic/Latino, and the racial composition was 7.3% African American/Black, 3.4% Asian/Asian American, 87.1% Caucasian/White, 0.4% Native American, and 1.8% "other." Half were employed part time, 3.0% were employed full time, and 44.4% were unemployed. The majority (77.6%) were not members of a fraternity or sorority. Most participants endorsed lifetime (89.1%) and current (past month; 81%) alcohol use. LSA participants were more likely to be unemployed (53.4%) than HSA participants (35.3%), $\chi^2(2) = 6.93$, $p < .01$. Gender (LSA, 71.6% female; HSA, 67.2% female; $\chi^2[1] = 0.51$, $p = .48$), race (LSA, 84.5% Caucasian; HSA, 89.7% Caucasian; $\chi^2[5] = 1.38$, $p = .24$), and Greek system membership (LSA, 25% members; HSA, 19.8% members; $\chi^2[1] = 0.89$, $p = .35$) were not significantly different between the groups. HSA participants reported significantly more drinking problems after controlling for employment and gender (see Table 2). SA was unrelated to drinking quantity and frequency among all current drinkers (see Table 1) and in the clinical analogue sample (see Table 2).

SA and Drinking Situations

Given that the relation between SA and drinking problems was larger in our clinical analogue sample, a multivariate analysis of covariance (MANCOVA) was conducted to evaluate drinking quantity in specific situations (Social/Convivial, Personal/Intimate, and Negative Emotion) by SA group (HSA vs. LSA). Given that prior research found gender to influence the relation between SA and drinking behavior (e.g., Buckner & Turner, 2009; Norberg, Norton, & Olivier, 2009; Norberg, Olivier, Alperstein, Zvolensky, & Norton, 2011), the main effect of gender and the SA Group × Gender interaction were included in the model. Employment was a covariate. There was a significant main effect of SA group, $F(3, 226) = 5.793$, $p < .001$, $d = .54$. The main effect of gender, $F(3, 226) = 0.845$, $p = .471$, $d = .21$, and the SA Group × Gender interaction, $F(3, 226) = 0.400$, $p = .753$, $d = .16$, were not significant. As predicted, the HSA group reported significantly heavier drinking relative to the LSA group in Negative Emotion situations and Personal/Intimate situations (see Table 2). Contrary to expectation, the HSA group did not drink significantly more in Social/Convivial situations.

To gain a more refined understanding of the specific situations in which socially anxious students are vulnerable to heavy drinking, we also examined whether HSA and LSA students differed on alcohol use in each specific situation (see Table 2). The HSA group reported significantly heavier drinking relative to the LSA group in the following situations: after school or school assignments have been completed; before engaging in sexual intercourse; when feeling lonely; after having a fight with someone close; when having

trouble relaxing or winding down; when feeling sad or depressed; and when angry at self or at others.

Mediation Analyses

We tested whether DCS-R subscales mediated the relation between SA group and drinking problem severity using maximum likelihood bootstrapping (5,000 samples were drawn) within the structural equation modeling program AMOS 20 (Arbuckle, 2011). Estimated standard errors and confidence intervals (90%) were calculated for all indirect, direct, and total effects. Given that SA was related to heavier drinking in Negative Emotion situations and Personal/Intimate (but not Social/Convivial) situations, three fully mediated models were tested (see Figure 1): the mediational effects of Personal/Intimate situations (Model A), Negative Emotion situations (Model B), and the two proposed mediators simultaneously (Model C). In Model C, the situations' error terms were covaried. For each model, three measures of model fit were calculated: the chi square, the comparative fit index (CFI), and the standardized root mean square residual (SRMR). A nonsignificant chi square indicates good model fit; however, chi square is sensitive to sample size. A CFI value of .95 or higher and an SRMR value of .08 or lower are indicative of good model fit (Hu & Bentler, 1999). Using these criteria, Models A, B, and C demonstrated acceptable fit. Standardized path estimates are reported for each model (see Figure 1). In Model A, SA group was significantly indirectly (via drinking in Personal/Intimate situations) related to alcohol-related problems, with an unstandardized indirect effect of 1.09 ($SE = .50$), $p = .021$, suggesting that when SA group goes up by 1 (from LSA to HSA), alcohol-related problems goes up by 1.09. In Model B, SA group was significantly indirectly (via drinking in Negative Emotion situations) related to alcohol-related problems, with an unstandardized indirect effect of 1.23 ($SE = .41$), $p < .001$. When these two mediators were combined in Model C, only Personal/Intimate situations demonstrated a significant direct effect on severity of drinking problem severity. SA group demonstrated a significant indirect effect (via Personal/Intimate situations) on alcohol-related problems, with an unstandardized indirect effect of 0.96 ($SE = .32$), $p = .021$. The indirect effect of SA via Negative Emotion drinking situations was not significant, 0.36 ($SE = .46$), $p = .192$. These results suggest that the primary mediational effect was via drinking in Personal/Intimate situations.[2]

Discussion

The present study contributes to our understanding of the relation of SA to drinking behaviors in several ways. First, consistent with prior work (e.g., Bruch et al., 1992, 1997; Buckner et al., 2011; Buckner, Mallott, et al., 2006; O'Grady et al., 2011), SA was not significantly related to quantity of typical or peak drinking when assessed broadly. Rather, SA was related to heavier drinking in particular situations. Second, consistent with prior work (e.g., Buckner, Meade Eggleston, et al., 2006; Buckner, Eggleston, et al., 2006; Buckner & Heimberg, 2010; Gilles, Turk, & Fresco, 2006; Grant et al., 2005; Lewis & O'Neill, 2000; Terra et al., 2006), SA was related to more drinking-related problems. The

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[2]A similar pattern of findings emerged when analyses were conducted with the entire sample using continuous SIAS-SPS scores, $\chi^2 = 0.91$, $p = .339$, CFI = 1.00, SRMR = .02. When both mediators entered simultaneously, only personal/intimate situations demonstrated a significant direct effect on alcohol-related problems.

current study extends this knowledge base by identifying two mediators of the relation between SA and drinking problems: quantity of drinking in personal/intimate situations and in negative emotion situations. Importantly, quantity of drinking in personal/intimate situations uniquely mediated this relation.

Drinking Context

The finding that HSA participants did not drink more in the majority of situations is consistent with prior work (e.g., Bruch et al., 1992, 1997; Buckner et al., 2011; Buckner, Mallott, et al., 2006; Ham & Hope, 2006; O'Grady et al., 2011). However, our data reveal that HSA undergraduates are at greater risk for drinking in select specific situations—in situations involving negative emotions (e.g., when angry or sad) and in personal or intimate situations (especially after school, before sexual intercourse). In fact, the HSA group reported nearly twice the amount of drinking in negative emotional situations than did the LSA group. The largest effects were observed for being angry (at themselves or others) and when lonely.

Contrary to expectation, HSA participants were not more likely to drink in social or convivial situations. This finding seems somewhat in contrast to Buckner and Heimberg's (2010) finding that socially anxious persons are more likely to drink to cope in social situations. Several factors may contribute to these seemingly disparate findings. First, in the Buckner and Heimberg study, social situations included a wide range of social situations, including going to/throwing parties (a social/convivial situation) as well as school/work situations (situations not assessed in the current study) and personal/intimate situations (e.g., going on dates, eating in public). Thus, the current study may provide more fine-grained understanding of the types of situations in which socially anxious persons are vulnerable to drinking. Second, the Buckner and Heimberg measure assessed frequency of drinking to cope in social situations, whereas the current study measured quantity of drinks in social situations. Thus, socially anxious persons may use alcohol to cope in social situations more frequently, but they may not drink more heavily in social situations, perhaps for fear of engaging in embarrassing behaviors if intoxicated in public. In fact, it may be that socially anxious individuals are more likely to drink heavily alone. For example, they may drink following a social situation to manage negative affect associated with postevent processing (PEP; i.e., negative rumination about one's performance during a social event). Socially anxious individuals engage in more PEP, and PEP increases negative affect among socially anxious persons (for review, see Brozovich & Heimberg, 2008). Presumably, PEP occurs when individuals are alone (i.e., after social encounters), and college students who drink heavily when alone report more alcohol problems (e.g., Gonzalez & Skewes, 2013). Drinking to manage negative affect associated with PEP may play an important role in the development of alcohol-related problems among socially anxious individuals. Although there is a link between PEP and drinking among socially anxious individuals (Battista & Kocovski, 2010), additional research is necessary to determine whether socially anxious individuals drink to manage negative PEP-related emotions.

Given that SA is unique among the anxiety disorders, in that it is characterized not only by chronically elevated negative affect but also by low positive affect (T. A. Brown, Chorpita, &

Barlow, 1998), it has therefore been proposed that socially anxious persons may use alcohol to increase positive affect in situations where experiencing positive affect is considered socially desirable or acceptable (Buckner, Heimberg, Ecker, & Vinci, 2013). However, this hypothesis does not appear to be supported by the current data, given that, contrary to expectation, HSA participants did not report significantly heavier drinking in social or celebratory situations (e.g., at a party). That HSA participants did not drink more in situations typically characterized by positive affect suggests that they may not be using alcohol to increase their positive affect in these situations. Future work is necessary to determine whether the desire to increase positive affect plays a role in drinking behaviors among socially anxious individuals.

Mediational Analyses

Quantity of drinking in Personal/Intimate and Negative Emotion situations mediated the relation between SA and drinking problem severity. Thus, HSA undergraduates who drink more alcohol in Personal/Intimate and Negative Emotion situations experienced more drinking-related problems. When both mediators were entered simultaneously, only drinking in Personal/Intimate situations mediated the association with drinking problems. Examination of item-level responses may shed light on this unexpected finding. Among the Personal/Intimate situation items, the largest item-level difference was drinking before engaging in sexual intercourse. Heavy drinking might occur to attenuate sexual performance anxiety and/or improve sexual performance. In partial support of this hypothesis, socially anxious adults report greater fear of intimacy (Montesi et al., 2013), greater sexual performance anxiety (Bodinger et al., 2002), greater sexual dysfunction (e.g., premature ejaculation; Figueira, Possidente, Marques, & Hayes, 2001), and lower physiological arousal (Bodinger et al., 2002). Yet heavier drinking before sex might lead to negative alcohol-related consequences such as decreased inhibition for risky sexual behavior, impaired self-control (e.g., unplanned or unsafe sex), or social/interpersonal problems. In fact, SA is associated with lower male condom use (Fontenelle et al., 2007) and having unprotected sexual intercourse among young gay men (Hart & Heimberg, 2005). Taken together, these findings suggest the need to examine the relation of risky sexual behavior and drinking among socially anxious students.

Limitations and Future Directions

The present study should be considered in light of limitations. First, the cross-sectional nature of the data limits our ability to draw conclusions regarding causal relations. Second, the data were collected via self-report, which is subject to measurement error. Third, future work is necessary to determine whether our results generalize to treatment-seeking samples of socially anxious undergraduate drinkers or to nonundergraduate samples. Fourth, our sample was predominantly Caucasian. Fifth, future work could benefit from assessing how frequently undergraduates drink in each specific situation. This information could help determine whether personal or intimate drinking occurs more frequently than convivial or negative emotion drinking.

Despite the limitations, findings suggest that heavy drinking in particular contexts (especially Personal/Intimate and Negative Emotion) plays an important role in drinking

problems among socially anxious individuals. These findings have the potential to impact future prevention and intervention studies by identifying specific situations in which socially anxious students are especially vulnerable to engaging in risky drinking, as well as mechanisms of problematic drinking among high SA undergraduates. Treatment with socially anxious patients could benefit from thorough assessment of the situations in which socially anxious persons drink heavily, as our data suggest that they may be especially vulnerable to drinking in personal or intimate situations and situations involving negative affect (and less vulnerable to drinking heavily at bars, parties, and other celebratory social situations). Treatment could then focus on teaching patients skills that will help them better manage anxiety in high-risk drinking situations.

Acknowledgments

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Model A

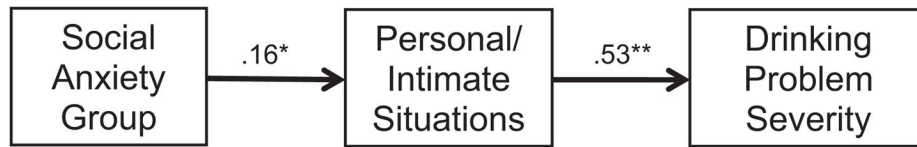$\chi^2(1) = 1.96$, $p > .05$, CFI = 0.99, SRMR = 0.03

Model B

$\chi^2(1) = 1.28$, $p > .05$, CFI = 0.99, SRMR = 0.03
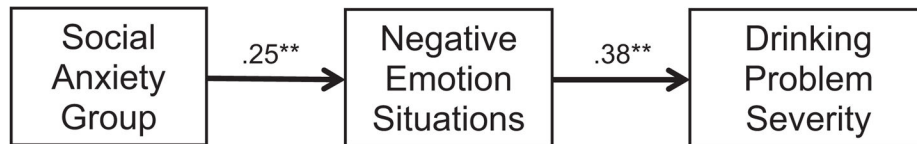
Model C

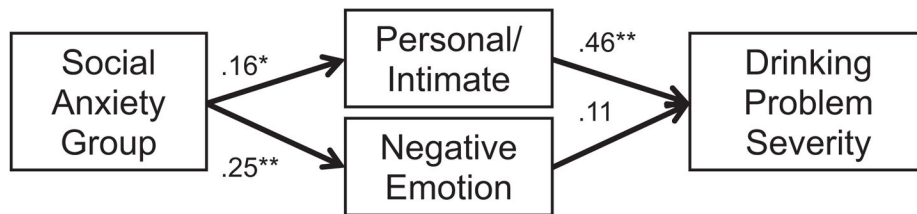$\chi^2(1) = 1.24$, $p > .05$, CFI = 1.00, SRMR = 0.02

Figure 1.
Standardized direct effects and fit statistics for mediational models for Personal/Intimate situations (Model A), Negative Emotion situations (Model B), and Personal/Intimate and Negative Emotion situations combined (Model C). *$p < .05$. ** $p < .001$.

Table 1

Bivariate Correlations, Means, and Standard Deviations of Social Anxiety, Drinking Context Scale–Revised Subscales, Alcohol Use, and Alcohol Problems

	1	2	3	4	5	6	7	8	9
1. Social Anxiety	—								
2. Social/Convivial Drinking	−.05	—							
3. Personal/Intimate Drinking	−.01	.71***	—						
4. Negative Emotion Drinking	.11**	.44***	.65***	—					
5. Typical quantity	−.03	.78***	.56***	.33***	—				
6. Peak quantity	−.07	.78***	.52***	.30***	.76***	—			
7. Weekly quantity	−.02	.95***	.86***	.65***	.75***	.73***	—		
8. Weekly drinking frequency	−.03	.69***	.52***	.29***	.65***	.64***	.64***	—	
9. B-YAACQ score	.10*	.59***	.47***	.36***	.52***	.48***	.58***	.55***	—
Mean	31.54	57.12	17.40	9.13	4.84	6.68	14.22	2.24	7.90
SD	21.52	40.14	16.19	11.30	3.39	4.84	16.82	1.31	6.44

Note. Correlations and descriptive statistics are presented for the full sample ($N = 611$). Alcohol use variables were assessed with the Daily Drinking Questionnaire–Revised. B-YAACQ = Brief Young Adult Alcohol Consequences Questionnaire.

*
$p < .05$.

**
$p < .01$.

***
$p < .001$.

Table 2

Mean Scores, Standard Deviations, and Significance of Alcohol Use, Alcohol Problems, Situational Drinking Items, and Subscales by Social Anxiety Group, Controlling for Employment

Variable	Low social anxiety (n = 116)		High social anxiety (n = 116)				
	M	SD	M	SD	F	p	d
DDQ-R							
Typical quantity	4.28	2.93	4.77	3.78	1.18	.279	.15
Peak quantity	6.19	4.50	6.32	4.54	0.05	.828	.03
Weekly quantity	11.60	12.86	13.32	21.06	0.56	.455	.10
Weekly drinking frequency	1.96	1.32	2.19	1.29	1.84	.176	.13
B-YAACQ total score	6.77	5.50	8.86	7.28	6.11	.014	.33
DCS-R							
Social/Convivial Drinking	49.23	34.85	53.29	37.52	0.36	.550	.11
Bar	4.41	3.91	4.52	3.71	0.10	.747	.03
Party	5.07	4.26	5.54	5.14	0.41	.521	.10
With close friend	4.79	4.01	5.65	4.05	2.79	.096	.21
Holiday	5.24	4.56	4.94	4.67	0.03	.872	.07
Large group	3.71	3.83	4.28	4.00	0.99	.319	.15
Weekend	4.81	3.68	5.62	4.05	2.32	.129	.21
Celebration	3.48	4.18	4.41	4.57	1.27	.126	.21
Around others at a party	4.22	3.79	4.37	4.06	0.89	.345	.04
Drinking games	4.23	4.32	4.26	4.75	0.00	.990	.01
Pregame	3.64	3.36	3.23	3.35	0.99	.320	.12
Tailgating	4.13	4.19	4.37	4.06	0.18	.672	.06
Personal/Intimate Drinking	13.25	12.31	17.53	14.21	4.65	.032	.32
Concert	1.77	2.67	1.80	2.93	0.01	.909	.01
Lover	2.49	3.21	2.94	3.01	1.27	.261	.14
After work	1.17	1.99	1.78	1.76	1.91	.168	.32
Date	1.13	1.70	1.60	2.03	2.60	.108	.25
Weekday	1.68	2.76	2.43	3.10	2.94	.088	.26
After school	2.33	2.63	3.34	3.65	6.45	.012	.32

Variable	Low social anxiety (n = 116)		High social anxiety (n = 116)				
	M	SD	M	SD	F	p	d
Before sex	1.26	1.22	2.10	2.01	5.39	.021	.51
Recreation	1.47	1.89	1.82	1.19	1.69	.194	.22
Restaurant	1.42	1.39	1.52	1.40	0.01	.928	.07
Negative Emotion Drinking	6.60	6.78	11.39	11.47	14.75	<.001	.51
Lonely	0.89	1.36	1.53	1.25	6.66	.011	.49
Fight	1.16	1.83	1.76	1.75	4.64	.032	.34
Trouble relaxing	1.32	1.79	2.05	1.37	6.84	.009	.46
Sad	1.35	2.03	2.30	2.77	8.61	.004	.39
Angry at self	0.80	0.93	1.83	1.45	16.42	<.001	.85
Angry at others	1.09	1.35	1.91	1.52	9.95	.002	.57

Note. N = 232. d = Cohen's d; DDQ-R = Daily Drinking Questionnaire–Revised; B-YAACQ = Brief Young Adult Alcohol Consequences Questionnaire; DCS-R = Drinking Context Scale–Revised.