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Fitting in and feeling fine: Conformity and coping motives differentially mediate the relationship between social anxiety and drinking problems for men and women

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Abstract

Social anxiety nearly quintuples the risk of developing an alcohol use disorder. Although accumulating data suggest that socially anxious persons drink to manage negative effect, socially anxious persons suffer from elevations in both anxiety and depression. Thus, the present study sought to determine whether social anxiety was related to drinking to cope with anxiety or depression and whether drinking motives accounted for the relation of social anxiety to drinking problems among 461 (74% female, 48% with clinically elevated social anxiety) undergraduate drinkers. Compared to women with more normative levels of social anxiety, women with clinically elevated social anxiety endorsed more drinking to cope with anxiety and conformity motives. Drinking to cope with anxiety uniquely mediated the relation of social anxiety and drinking problems among women. Among men, social anxiety was uniquely related to conformity motives, which mediated the social anxiety-drinking problems relationship. Findings support prior work indicating that socially anxious men and women may use alcohol differently and provide unique data on the importance of drinking to cope with anxiety specifically among socially anxious women.

Keywords

Drinking problems; drinking motives; gender; social anxiety

Introduction

Individuals with elevated social anxiety experience high rates of alcohol-related problems (e.g. Buckner, Eggleston, & Schmidt, 2006; Buckner & Heimberg, 2010; Buckner & Matthews, 2012; Cludius, Stevens, Bantin, Gerlach, & Hermann, 2013; Gilles, Turk, & Fresco, 2006; Stewart, Morris, Mellings, & Komar, 2006), including alcohol use disorders (AUDs) (e.g. Buckner et al., 2006; Buckner & Schmidt, 2009; Buckner, Timpano, Zvolensky, Sachs-Ericsson, & Schmidt, 2008b; Schneier et al., 2010). In fact, approximately 48.2% of adults with lifetime social anxiety disorder (SAD) also meet criteria for an AUD (Grant et al., 2005). Prospective studies suggest that social anxiety may be a risk factor for development of alcohol use disorders (e.g. Buckner et al., 2008a; Buckner & Turner, 2009).

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The cooccurrence of these disorders is clinically significant, as it is associated with greater impairment than either condition alone (Buckner et al., 2008b; Schneier et al., 2010) and elevated social anxiety is related to poorer alcohol treatment outcomes (Terlecki, Buckner, Larimer, & Copeland, 2011). Thus, elucidation of factors that contribute to social anxiety's relation to drinking problems could inform efforts to improve treatment outcomes among this high-risk group.

Consistent with tension reduction-based models of drinking (Conger, 1956), it follows that socially anxious persons may be vulnerable to drinking-related impairment if they come to rely on alcohol to help them manage their chronically elevated negative effect. Such reliance may result in continued use of alcohol, despite alcohol-related impairment. In partial support of this hypothesis, social anxiety is related to drinking in situations involving negative effect (Buckner et al., 2006) and socially anxious persons report drinking to cope in social situations (Buckner & Heimberg, 2010; Thomas, Randall, & Carrigan, 2003). Further, the majority of research on this topic has found social anxiety to be related to coping motives (Blumenthal, Leen-Felder, Frala, Badour, & Ham, 2010; Clerkin & Barnett, 2012; Lewis et al., 2008; Stewart et al., 2006; Windle & Windle, 2012).

One possible limitation to this corpus of work is a lack of attention to type of negative effect. Individuals with elevated social anxiety suffer not only from anxiety but from depression (Stein & Kean, 2000). Yet, measures of drinking motives used in prior work do not differentiate whether participants drink to cope specifically with anxiety or whether they also drink to cope with depression. This distinction is not trivial given that drinking to cope with anxiety, but not drinking to cope with depression, is directly related to more drinking problems whereas drinking to cope with depression is indirectly predictive of greater drinking problems through greater alcohol consumption (Grant, Stewart, O'Connor, Blackwell, & Conrod, 2007). Also, AUD patients reported that their most common drinking motives were coping-anxiety motives, followed, fourthly, by coping-depression motives (Mezquita et al., 2011). Thus, delineating whether socially anxious persons drink to manage anxiety and/or depression could have important implications for efforts to improve treatment outcomes for patients suffering from co-occurring SAD and AUD.

Another factor that could contribute to disparate findings regarding social anxiety's relation to drinking motives is little attention to gender. Some data suggest that women with social anxiety are especially vulnerable to alcohol-related impairment (Buckner & Turner, 2009; Norberg, Norton, & Olivier, 2009). Further, women with co-occurring SAD and AUD display greater psychological distress than men with comorbid SAD and AUD (Randall, Thomas, & Thevos, 2001). The relation between drinking motives also appears to differ between women and men. Norberg, Norton, Olivier, and Zvolensky (2010) found that coping motives mediated the relationship between social anxiety and alcohol-related impairment for women, but not men.

The current study sought to further understanding of the role of drinking motives and gender in the relationship between social anxiety and alcohol-related impairment in several ways. First, we sought to extend the finding that social anxiety tends to be related to coping and conformity motives (Lewis et al., 2008) by testing whether social anxiety was related to

drinking to cope with anxiety, drinking to cope with depression, and conformity motives separately by gender. Given that socially anxious women, but not men, report greater coping- and conformity-motivated drinking (Norberg et al., 2010), it was expected that socially anxious women would report greater drinking to cope with anxiety and conform to their peers. Second, we tested whether drinking to cope with anxiety and conformity motives would mediate the relationship between social anxiety and drinking problems among socially anxious women. Third, given that the relation between social anxiety and coping motives (Norberg et al., 2010) tends to be stronger than that of conformity motives, it was predicted that drinking to cope with anxiety and conformity motives were simultaneously entered into a single model, drinking to cope with anxiety would uniquely mediate the relationship between social anxiety and drinking problems among socially anxious women.

Methods

Participant selection and procedures

Participants were undergraduate students who were recruited through the psychology department undergraduate participant pool. Of the 969 participants that began the survey, some were excluded from the present study for being under 18 years of age ($n = 2$), denial of current (past three months) alcohol consumption ($n = 18$), incomplete responses ($n = 18$), and questionable validity ($n = 4$; detailed below). Age range was restricted to students under 25 years old to more accurately reflect factors related to use among more traditional undergraduates, excluding an additional 20 participants. In light of data suggesting that clinically elevated social anxiety is more strongly associated with substance-related problems than continuously assessed social anxiety (Buckner, Heimberg, Matthews, & Silgado, 2012), participants scoring 1 SD above the Heimberg et al.'s community mean on either the *Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale (SPS;* Mattick & Clarke, 1998) were identified as having higher social anxiety ($n = 221$). Participants scoring below the Heimberg et al.'s community means comprised the lower social anxiety (LSA) group ($n = 240$). Thus, the final sample consisted of 461 participants aged 18–24 ($M = 19.6$, $SD = 1.4$). Consistent with the demographics of psychology students at this University more broadly that year, the final sample was 74.2% female. The majority (95.4%) was non-Hispanic/Latino and the racial composition was 7.8% African American/Black, 0.9% Native American, 2.6% Asian or Asian/American, 85.5% Caucasian/White, 1.7% "mixed", and 1.5% "other". Participants reported drinking an average of six drinks on a typical drinking occasion in the past month and an average of seven drinks per heaviest drinking occasion in the past month.

This study was approved by the university's Institutional Review Board and informed consent was obtained prior to data collection. Participants completed computerized versions of study measures using a secure, on-line data collection website (surveymonkey.com). Computerized and paper-and-pencil versions of self-report measures are highly correlated (Gwaltney, Shields, & Shiffman, 2008). The last page of the survey contained contact information for university-affiliated outpatient clinics that provide psychosocial treatment for substance use and/or mental health disorders. Participants received research credit for completion of the survey.

Measures

Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale—(*SPS;* Mattick & Clarke, 1998) were used to assess social anxiety. The SIAS assesses social interaction fears (e.g. "when mixing socially, I am uncomfortable") and performance/observational (e.g. "I get nervous that people are staring at me as I walk down the street") fears. These scales were developed as companion measures and when used together, assess the two general categories of feared social situations, interactional and observational situations (Heimberg, Mueller, Holt, Hope, & Liebowitz, 1992). These measures demonstrate high levels of internal consistency and test–retest reliability across clinical, community and student samples (Mattick & Clarke, 1998; Osman, Gutierrez, Barrios, Kopper, & Chiros, 1998). Individuals with SAD score higher than individuals with other anxiety disorders and non-anxious individuals on these measures (Brown et al., 1997). In the present sample, the SIAS-SPS demonstrated adequate internal consistency in our clinical analogue sample ($\alpha = 0.95$).

Rutgers Alcohol Problems Index (RAPI; White & Labouvie, 1989)—To assess current problems associated with alcohol use, participants completed the past-month version of the RAPI, a 23-question self-report measure that assesses the frequency of alcohol-related problems in social and health functioning in adolescents and young adults. Examples of problems assessed include not being able to do homework or study for a test, getting into fights, acting bad or doing mean things, and causing shame or embarrassment for someone. Each item score ranges from 0 (*never*) to 4 (*more than 10 times*) with a maximum score of 92. The past-month version of the RAPI has demonstrated adequate internal consistency and convergent validity with measures of drinking behaviors and drinking problems (Buckner et al., 2006; Ginzler, Garrett, Baer, & Peterson, 2007; Neal & Carey, 2004). Consistent with prior work (Morean & Corbin, 2008; Neal, Corbin, & Fromme, 2006), each item was recoded into a dichotomous response (0 = item not endorsed, 1 = item endorsed) in response to elevated kurtosis in the total severity score. Recoded items were then summed to provide a total count of alcohol-related problems experienced in the past month. In the present sample, the recoded RAPI demonstrated an adequate internal consistency in our clinical analogue sample ($\alpha = 0.82$).

Modified Drinking Motives Questionnaire-Revised (MDMQ-R; Grant et al., 2007)—The MDMQ-R is a 28-item self-report measure that was adapted from Cooper's drinking motives measures (1994; Cooper, Russell, Skinner, & Windle, 1992) to include two distinct coping motives scales: drinking to cope with anxiety (coping-anxiety) and drinking to cope with depression (coping-depression). Thus, it assesses frequency of drinking for the following motives: coping-anxiety (e.g. "Because it helps me when I am feeling nervous"), coping-depression (e.g. "Because it helps me when I am feeling depressed"), social (e.g. "Because it is what most of my friends do when we get together", enhancement (e.g. "Because it's fun"), and conformity (e.g. "So that others won't kid me about not using") motives. Participants specified how frequently they are motivated to drink for the reason provided on a scale ranging from 1 (*almost never/never*) to 5 (*almost always/always*). Each subscale score is computed as the mean of its comprised items. The MDMQ-R subscales have exhibited adequate psychometric properties and each of the five drinking motives has

been found to be prospectively related to distinct patterns of alcohol consumption and alcohol-related problems (Grant et al., 2007). In the present study, internal consistency was adequate for the coping-anxiety ($\alpha = 0.69$), coping-depression ($\alpha = 0.87$), social ($\alpha = 0.82$), enhancement ($\alpha = 0.87$) and conformity ($\alpha = 0.81$) motives scales.

Daily Drinking Questionnaire (DDQ; Collins et al., 1985)—The DDQ assessed drinking quantity (number of drinks consumed on typical and peak drinking occasions) and weekly drinking frequency. The DDQ has demonstrated good convergent validity (Collins, Parks, & Marlatt, 1985) and test–retest reliability (Collins, Carey, & Sliwinski, 2002). Quantity of drinks during peak drinking occasions was used as a covariate in study analyses.

Infrequency Scale—To identify responders who provided random or grossly invalid responses, we included four questions from the *Infrequency Scale* (Chapman & Chapman, 1983). As in similar studies (e.g. Buckner, Ecker, & Cohen, 2010; Cohen, Iglesias, & Minor, 2009), those who endorsed three or more infrequency items were excluded ($n = 4$).

Results

Correlations among study variables

After controlling for quantity of alcohol consumed during a past-month heavy drinking episode, HSA women ($M = 4.8$, $SD = 4.2$) reported more drinking problems than LSA women ($M = 3.7$, $SD = 3.2$), $F(1, 342) = 12.37$, $p < 0.001$, $d = 0.33$. HSA men ($M = 5.8$, $SD = 4.9$) also reported more drinking problems than LSA men ($M = 4.4$, $SD = 3.8$), $F(1, 119) = 4.39$, $p = 0.038$, $d = 034$. Among women, drinking problems and quantity were significantly correlated with coping with anxiety ($r = 0.38$, $p < 0.001$; $r = 0.17$, $p = 0.002$), drinking to cope with depression ($r = 0.42$, $p < 0.001$; $r = 0.17$, $p = 0.001$), social motives ($r = 0.39$, $p < 0.001$; $r = 0.38$, $p < 0.001$), and enhancement motives ($r = 0.36$, $p < 0.001$; $r = 0.39$, $p < 0.001$). Drinking problems ($r = 0.18$, $p < 0.001$), but not quantity ($r = 0.03$, $p = 0.623$), were correlated with conformity motives. Among men, drinking problems and quantity were significantly correlated with coping with anxiety ($r = 0.35$, $p < 0.001$; $r = 0.25$, $p = 0.006$), social motives ($r = 0.31$, $p < 0.001$; $r = 0.43$, $p < 0.001$), and enhancement motives ($r = 0.43$, $p < 0.001$; $r = 0.52$, $p < 0.001$). Drinking problems, but not quantity, were correlated with drinking to cope with depression ($r = 0.43$, $p < 0.001$; $r = 0.11$, $p = 0.257$) and conformity motives ($r = 0.33$, $p < 0.001$; $r = –0.10$, $p = 0.278$).

Relation of social anxiety to drinking motives and problems

A multivariate analysis of covariance (MANCOVA) was conducted to determine whether HSA and LSA participants differ on drinking motives after controlling for drinking quantity. Separate models were run for women and men. The model was significant for women (Wilks' $\lambda = 0.81$, $F(5, 335) = 16.44$, $p < 0.001$) and men (Wilks' $\lambda = 0.75$, $F(5, 112) = 7.49$, $p < 0.001$). As evidenced in Table 1, HSA participants reported greater endorsement of all five motives for both women and men.

To determine the relations of social anxiety to specific drinking motives, all five motives were simultaneously entered into a hierarchical logistic regression model in which number

of alcohol-related problems was the dependent variable (Table 2).[1] To address multicollinearity, variables were standardized. As predicted, HSA women were approximately two times more likely to endorse drinking to cope with anxiety than LSA women. They were also four times more likely to endorse drinking for conformity motives. Among men, HSA participants were approximately four times more likely to drink for conformity motives.

Mediation analyses

We tested whether relevant drinking motives mediated the relation between social anxiety group and drinking problems separately by gender using maximum likelihood bootstrapping (5000 samples were drawn) within the structural equation modeling program AMOS 21. Estimated standard errors and confidence intervals (90%) were calculated for all indirect, direct and total effects. Given that social anxiety group was related to drinking to manage anxiety and for conformity motives among women, three fully mediated models were tested among women (Figure 1): the mediational effects of drinking to manage anxiety (Model A), conformity motives (Model B), and the two proposed mediators simultaneously (Model C). In Model C, the situations' error terms were co-varied. For each model, three measures of model fit were calculated; χ^2, Comparative Fit Index (CFI), and Standardized Root Mean Square Residual (SRMR). A non-significant χ^2 indicates good model fit; however, χ^2 is sensitive to sample size. A CFI value of 0.95 or higher and an SRMR value of 0.08 or lower are indicative of good model fit (Hu & Bentler, 1999). Using these criteria, Models A, B and C demonstrated acceptable fit. Standardized regression weights are reported for each model (Figure 1). In Model A, social anxiety group was significantly indirectly (via drinking to manage anxiety) related to drinking problems, with an unstandardized indirect effect of 1.05 ($SE = 0.22$), $p < 0.001$. In Model B, social anxiety group was significantly indirectly (via conformity motives) related to alcohol-related problems, with an unstandardized indirect effect of 0.46 ($SE = 0.16$), $p = 0.001$. Consistent with hypothesis, when these two mediators were combined in Model C, only drinking to manage anxiety demonstrated a significant direct effect on drinking problems. Social anxiety group was significantly indirectly (via drinking to manage anxiety) related to drinking problems, with an unstandardized indirect effect of 1.01 ($SE = 0.23$), $p < 0.001$. The indirect effect of social anxiety via conformity motives was not significant, 0.86 ($SE = 0.15$), $p = 0.518$. These results suggest that the primary mediational effect was via drinking to manage anxiety.

Given that social anxiety group was only uniquely related to conformity motives among men, one fully mediated model was tested among men (Model D, Figure 2). This model demonstrated acceptable fit. Social anxiety group was significantly indirectly (via conformity motives) related to alcohol-related problems, with an unstandardized indirect effect of 1.42 ($SE = 0.51$), $p = 0.001$.

Given the limitations of conducting mediational analyses using cross-sectional data, one method of increasing confidence in the observed effects is to conduct additional analyses

[1] A similar pattern was obtained using the continuous measure of SIAS-SPS in the entire sample of current drinkers ($n = 664$). Specifically, social anxiety was significantly related to only conformity ($\beta = 0.24$, $p < 0.001$) and anxiety coping ($\beta = 0.27$, $p < 0.001$) motives among women and only to conformity motives ($\beta = 0.40$, $p < 0.001$) among men.

after reversing the proposed mediator with the criterion variable (Sheets & Braver, 1999). First, we tested whether alcohol-related problems mediated the association between social anxiety group classification and anxiety coping and conformity motives among women. This model was not a good fit, χ^2 =61.85, $p < 0.001$, CFI = 0.67, SRMR = 0.14. Next, we tested whether alcohol-related problems mediated the association between social anxiety group classification and conformity motives among men. This model was also not a good fit, χ^2 =40.02, $p < 0.001$, CFI = 0.32, SRMR = 0.13. In other words, there was no support for the alternate hypothesis that drinking problems mediated the relationship of social anxiety group status to these drinking motives.

Discussion

The present study set out to examine whether more drinking to cope specifically with anxiety may be related to more alcohol-related problems among HSA individuals, a group at particular risk for alcohol-related problems and AUD (Buckner & Schmidt, 2009; Buckner et al., 2008a; Buckner & Turner, 2009). We replicated the finding (e.g. Clerkin & Barnett, 2012; Lewis et al., 2008; Stewart et al., 2006) that individuals with higher social anxiety report greater rates of drinking for conformity motives. We also replicated the finding that socially anxious women, but not men, report greater rates of drinking to cope (Norberg et al., 2010). We extended prior work by determining that socially anxious women drink to cope specifically with anxiety (i.e. not depression) and that drinking in this way uniquely mediated the relationship between social anxiety and drinking problems among socially anxious women.

We also extended prior work (Lewis et al., 2008; Norberg et al., 2010) by determining that among both men and women, social anxiety was related to conformity motives and this motive mediated the relation of social anxiety and drinking problems. This is contrary to Norberg et al. (2010), who found social anxiety to be unrelated to conformity motives among men. This discrepancy could reflect differences in methodology between our two studies. For example, Norberg et al. assessed social anxiety continuously whereas we utilized a clinical analogue sample. Prior work suggests that clinical levels of social anxiety are more strongly related to substance use behaviours (e.g. Terlecki, Ecker, & Buckner, 2014) and thus it may be that conformity motives play a more important role in drinking behaviours among men who experience clinically elevated social anxiety. Given that social anxiety is characterised by fear of negative evaluation, it may be that men and women with clinically elevated social anxiety are especially vulnerable to drinking to avoid being judged negatively for not drinking. Conformity-motivated drinking tends to be related to more alcohol-related problems (Cooper, 1994).

The question arises as to why socially anxious women, but not men, engage in coping-motivated drinking. Drinking tends to occur in social situations (Mohr et al., 2001). However, men are more likely to engage in social avoidance than women (Johnson, LaVoie, & Mahoney, 2001). Thus, it may be that socially anxious women are more likely to attend social events that involve alcohol than socially anxious men. These women may be more likely to therefore drink to help them cope with the elevated negative affectivity they experience in these situations. Women are more likely to engage in prosocial, support-

seeking coping than men (Hobfoll, Dunahoo, Ben-Porath, & Monnier, 1994). Thus, socially anxious women may be more likely to seek social support when they experience negative affectivity and such social interactions may involve drinking to cope with the negative affectivity. Socially anxious men, on the other hand, may find alternative ways to cope with their negative affectivity. For instance, social avoidance, especially among men, is associated with more cannabis-related impairment (Buckner, Heimberg, & Schmidt, 2011) and socially anxious men are more likely to use cannabis to cope than socially anxious women (Buckner, Zvolensky, & Schmidt, 2012).

Notably, some studies have found that coping and conformity motives mediate the relation between social anxiety and alcohol-related problems (Lewis et al., 2008; Stewart et al., 2006), others have found only coping motives to mediate this relationship (Ham, Bonin, & Hope, 2007; Ham, Zamboanga, Bacon, & Garcia, 2009), whereas another found that enhancement motives account for the social anxiety-drinking problems relation (Buckner et al., 2006). It appears that discrepancies between past work and the present findings may be partially explained as a result of examining the relationships separately for men and women.

Because the cross-sectional nature of the present study precludes the drawing of causal inferences, we tested an alternate hypothesis – that alcohol-related problems accounted for the relationship between social anxiety and conformity and/or anxiety coping motives. However, these meditational models were not significant, providing some support for the specificity of the directionality of the observed relationships between study variables. Prospective work will be an important next step in delineating the temporal relationships between social anxiety, drinking motives and alcohol-related problems.

Consistent with prior work (Goldstein, Flett, & Wekerle, 2010), all five drinking motives were significantly correlated with drinking problems for both men and women. Consistent with prior work, examining past-year alcohol consumption (Goldstein et al., 2010), among women past-month drinking quantity during heaviest drinking situation was significantly correlated with coping with anxiety, drinking to cope with depression, social motives and enhancement motives (although the effect sizes for quantity's relation to coping with anxiety and depression were small). Among men, drinking quantity was significantly correlated with social motives and enhancement motives (with large effect sizes) and coping with anxiety (although this effect size was small). Drinking quantity was unrelated to drinking to cope with depression. These results differ somewhat from prior work with men with a history of child maltreatment (Goldstein et al., 2010) in which all drinking motives except conformity motives were significantly correlated with past-year alcohol consumption. Taken together, results suggest that drinking to cope with anxiety but not depression is more strongly related to recent heavy drinking.

The present findings should be considered in light of limitations that suggest the need for additional research in this area. First, as noted above, the cross-sectional nature of the design precludes delineation of causal relationships, and future prospective work is needed. Second, the sample was comprised of undergraduate students, allowing for the examination of the relations between social anxiety and drinking behaviours among a population at particular risk for alcohol-related problems (for review, see Ham & Hope, 2003). Yet replication with

other populations is necessary to determine the generalisability of results. Third, although we utilised a clinical analogue sample using a clinical cut score that has been found to be a conservative predictor of SAD among undergraduates (Rodebaugh, Woods, Heimberg, Liebowitz, & Schneier, 2006), replication with treatment-seeking individuals with clinically diagnosed SAD will be an important next step. Fourth, although the revised coping measure assesses drinking to cope specifically with anxiety, future work could provide an even more specific assessment of anxiety. For instance, do socially anxious persons drink to cope with anticipatory anxiety prior to a social event, during the event to manage fears of evaluation, or after an event to manage anxiety associated with post-event processing, or a detailed review of their performance during a social event (Brozovich & Heimberg, 2008).

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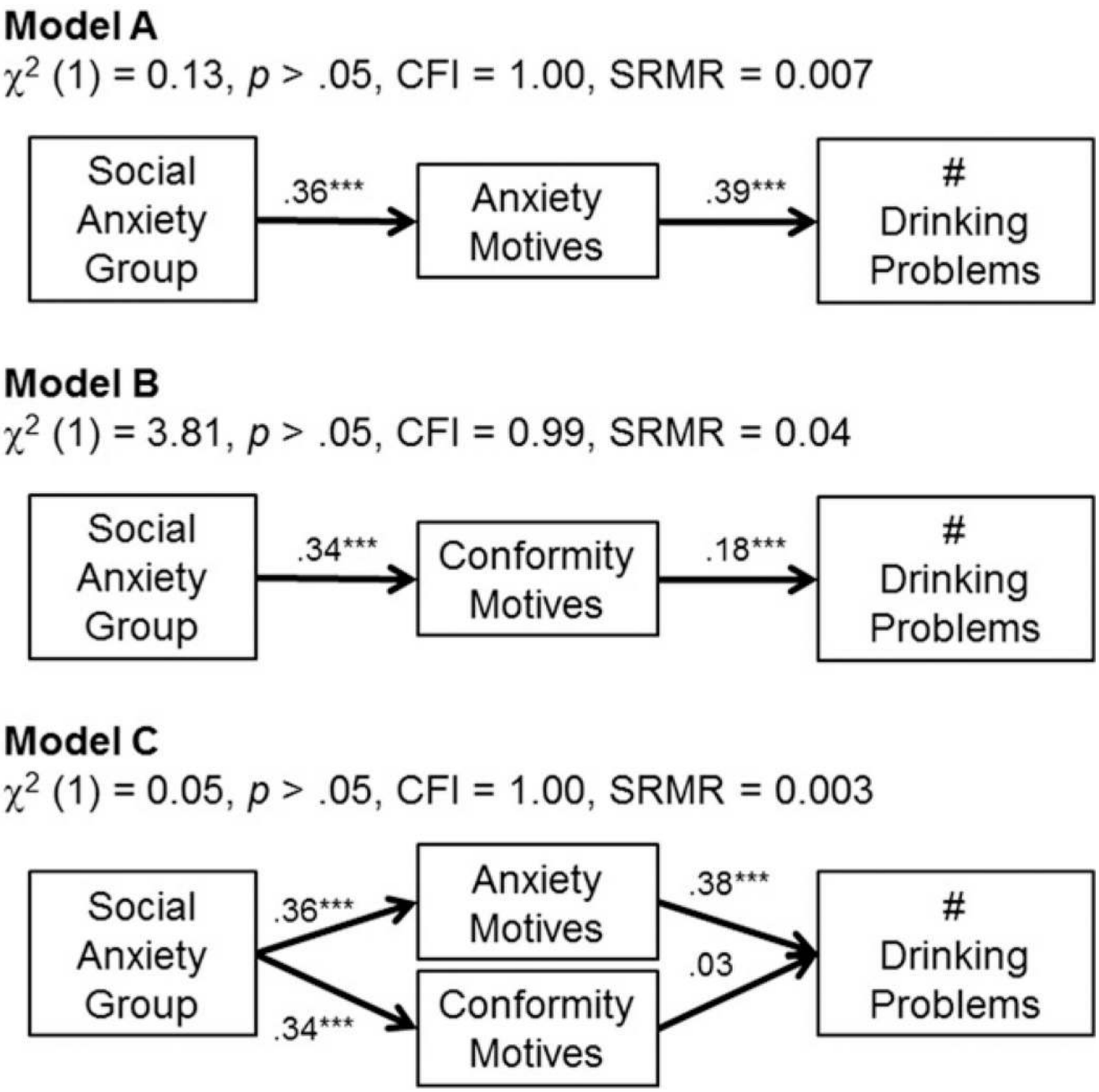

Figure 1.
Direct effects and fit statistic information for proposed mediational models among women for drinking to cope with anxiety (Model A), conformity motives (Model B), and drinking to cope with anxiety and conformity motives (Model C).

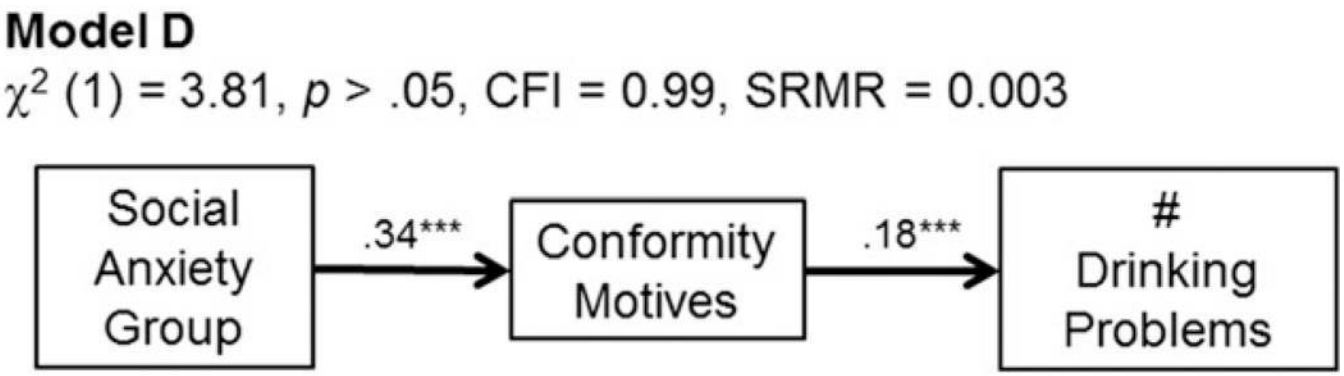

Figure 2.
Direct effects and fit statistic information for proposed mediational models among men for conformity motives (Model D).

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Table 1

Differences between college drinkers with high social anxiety (HSA) versus those with lower social anxiety (LSA) on drinking motives by gender.

Motive	HAS *M* (*SD*)	LSA *M* (*SD*)	*F*	*p*	*d*
Women					
Social	3.15 (0.99)	2.90 (0.85)	10.22	0.002	0.27
Anxiety	2.04 (0.85)	1.53 (0.49)	54.24	<0.001	0.76
Depression	1.50 (0.58)	1.21 (0.32)	37.37	<0.001	0.63
Enhancement	2.65 (1.06)	2.42 (0.93)	8.01	0.005	0.23
Conformity	1.31 (0.50)	1.05 (0.16)	46.78	<0.001	0.71
Men					
Social	3.36 (0.87)	2.99 (0.90)	7.99	0.006	0.41
Anxiety	2.17 (0.75)	1.74 (0.74)	11.82	<0.001	0.58
Depression	1.57 (0.62)	1.27 (0.38)	11.36	0.001	0.60
Enhancement	2.89 (1.02)	2.54 (1.15)	6.35	0.013	0.33
Conformity	1.66 (0.63)	1.13 (0.29)	33.96	<0.001	1.09

HSA women $n = 162$; LSA women $n = 180$; HSA men $n = 59$; LSA men $n = 60$.

Table 2

Hierarchical logistic regression models predicting social anxiety group status by gender.

						95% C.I.		
		B	***S.E.***	**Wald**	**OR**	**Lower**	**Upper**	***p***
Women								
Step 1	Heavy drinking quantity	-0.03	0.03	1.43	0.97	0.92	1.02	0.232
Step 2	Social motives	0.00	0.17	0.00	1.00	0.71	1.41	1.000
	Anxiety coping motives	**0.78**	**0.23**	**11.60**	**2.17**	**1.39**	**3.40**	**<0.001**
	Depression coping motives	0.46	0.27	2.97	1.59	0.94	2.69	0.085
	Enhancement motives	-0.32	0.20	2.68	0.72	0.49	1.07	0.102
	Conformity motives	**1.47**	**0.35**	**17.92**	**4.36**	**2.20**	**8.61**	**<0.001**
Men								
Step 1	Heavy drinking quantity	-0.02	0.03	0.51	0.980	0.93	1.04	0.477
Step 2	Social motives	0.16	0.31	0.26	1.17	0.64	2.15	0.608
	Anxiety coping motives	0.12	0.35	0.11	1.12	0.56	2.24	0.742
	Depression coping motives	-0.21	0.49	0.18	0.81	0.31	2.12	0.673
	Enhancement motives	0.29	0.29	1.02	1.34	0.76	2.37	0.312
	Conformity motives	**1.39**	**0.38**	**13.40**	**4.03**	**1.91**	**8.51**	**<0.001**

Significant relations are bolded.