

Introduction

Studies have shown that mental illnesses have an impact on the expectations of outcomes from drinking, or alcohol outcome expectancies (AOEs; Goldman et al., 1999). Increased expectations of drinking outcomes such as social assertiveness, sexual enhancement, and tension reduction were found in college students endorsing psychological problems, such as depression and social anxiety. Although social anxiety and depression are highly comorbid, there is limited research examining how these individuals may differ in their positive AOE.

Studies have shown that alcohol use and social anxiety disorders are highly correlated, and that the presence of one disorder increases the likelihood that the other disorder will be present (e.g., Burns & Teeson, 2005; Merikangas & Angst, 1995). In the past decade, there has been increasing research into the relationship of AOE and alcohol use for individuals with social anxiety disorder. Socially anxious adults who drink have been found to have greater positive alcohol outcome expectancies for social situations than non-anxious adults (Ham, Carrigan, Moak, & Randall, 2005). In addition, participants with social anxiety have been found to have greater tension reduction and global positive change expectancies than normal controls (Ham, Hope, White, & Rivers, 2002).

Very little research has been done regarding the direct relationship between depression and alcohol outcome expectancies, but a study of the drinking behavior of a sample of Puerto Rican adults living in the U.S. indicated that alcohol expectancies strongly moderated the relationship between depression and drinking problems (Johnson & Gurin, 1994). Ham and colleagues (2002) also found that dysthymic individuals had greater tension reduction and global positive change expectancies than normal controls.

To our knowledge, no studies have examined the association of comorbid depression and social anxiety with AOE. Because mental illnesses such as social anxiety and depression appear to influence AOE, it is likely that individuals with comorbid diagnoses would endorse unique AOE. The present study evaluates how individuals classified as social anxiety only, depression only, and comorbid social anxiety and depression differ in their endorsement of four positive alcohol expectancies: assertion, sexual enhancement, cognitive change, and tension reduction.

Method

Participants

Participants ($N = 610$; 69% female M age = 19.1, $SD = 1.8$, range 18 – 30) were drawn from the undergraduate research pool at Florida International University during the 2004-2005 academic year. Participants identified their ethnic background as Hispanic/Latino $n = 423$ (69%); White/Caucasian $n = 82$ (13%); African-American/Black $n = 39$ (6%); Asian/Pacific Islander $n = 34$ (6%); Other/Mixed $n = 30$ (5%); and no response $n = 2$.

Measures

Social Anxiety. The Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS; Mattick & Clarke, 1998) are self-report measures designed to assess anxiety related to social interactions and anxiety related to scrutiny by others.

Depression. The Beck Depression Inventory-2 (BDI-II; Beck et al., 1996) is a 21-item self-report questionnaire assessing somatic and cognitive symptoms of depression.

Alcohol Expectancies. The Drinking Expectancy Questionnaire (DEQ; Young & Knight, 1989) is a 43-item self-report questionnaire assessing four positive AOE (assertion, sexual enhancement, cognitive change, and tension reduction) and two negative AOE (affective change, dependence).

Individuals who endorsed clinical levels of either or both social anxiety (SIAS ≥ 34 and SPS ≥ 24 ; Heimberg, Mueller, Holt, Hope, & Liebowitz, 1992) and depression (BDI-II ≥ 14 ; Beck et al., 1996) were divided into the following diagnostic groups for the purpose of analyses: *Comorbid social anxiety and depression* ($n = 56$); *Social Anxiety only* ($n = 23$); *Depression only* ($n = 92$); and a *control* group that was low in both social anxiety and depression ($n = 337$).

Figure 1. Positive Expectancies by Diagnostic Group

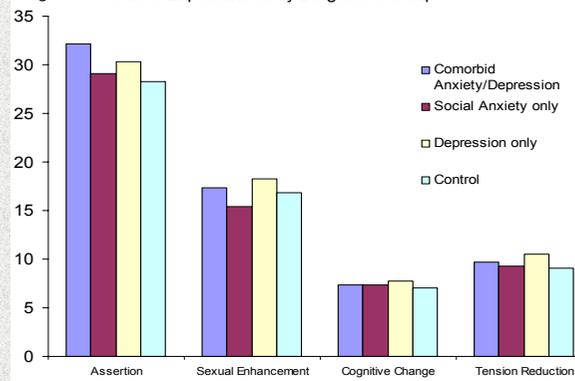


Table 1.

Mean (SD) Positive Expectancy Scores by Diagnostic Group

	Comorbid Anxiety/Depression (n = 56)	Social Anxiety (n = 23)	Depression (n = 92)	Control (n = 337)
Assertion (range: 10 – 50)	32.18 (1.21) ^a	29.09 (1.88)	30.34 (0.94)	28.25 (0.49) ^a
Sexual Enhancement (range: 5 – 25)	17.38 (0.46)	15.44 (0.72) ^a	18.28 (0.36) ^{a,b}	16.87 (0.19) ^b
Cognitive Change (range: 4 – 20)	7.38 (0.36)	7.30 (0.56)	7.79 (0.28)	7.07 (0.15)
Tension Reduction (range: 4 – 20)	9.66 (0.49)	9.26 (0.77)	10.53 (0.38) ^a	9.10 (0.20) ^a

Note. Same-letter superscripts indicate pair-wise comparisons that differ significantly at $p < .05$

Results

An initial between-subjects ANOVA found significant differences between diagnostic groups on overall positive expectancies, $F(3, 504) = 5.98, p = .001$. Follow-up analyses indicated that both the comorbid anxiety and depression group and the depression-only group reported greater positive alcohol expectancies than the control group.

A subsequent MANOVA tested group differences for each of the six positive alcohol expectancies. Significant group differences were observed for assertion ($F(3, 504) = 3.76, p = .01$), sexual enhancement ($F(3, 504) = 6.00, p = .001$), and tension reduction ($F(3, 504) = 3.78, p = .01$). Follow-up analyses revealed that the comorbid group endorsed greater assertion expectations than the control group. The depression-only group endorsed greater tension reduction than the control group, and greater sexual enhancement expectations than both the control group and the social anxiety-only group (see Figure 1; Table 1).

Discussion

Based on existing research finding different AOE patterns for individuals with social anxiety and depression, the present study sought to explore similarities and differences in positive AOE endorsed by individuals with comorbid social anxiety and depression, with depression only, with social anxiety only, and a control group.

Interestingly, the comorbid social anxiety/depression group reported only greater social assertiveness expectancies compared to the control group. The depression-only group endorsed greater tension reduction and sexual enhancement expectancies compared to the control group. Unfortunately, the small size of the social anxiety-only group in the present sample may have reduced our ability to detect any differences in positive AOE this group might have demonstrated. Previous research (Ham et al., 2005) has found that socially anxious adults endorse positive AOE for social situations, and perhaps this finding is reflected in our sample in the comorbid social anxiety/depression group.

It appears then that depressed individuals who have comorbid social anxiety endorse different expectations of the outcomes of alcohol use than individuals with depression alone. Because these individuals are more likely to anticipate that alcohol will increase social assertiveness and facilitate social interactions, individuals with comorbid social anxiety and depression may be more likely to drink when entering social situations than individuals with depression alone. Studies have found that problem drinkers held more positive AOE than non-problem drinkers (e.g., Lewis & O'Neill, 2000). Individuals with comorbid social anxiety and depression may hold positive expectations about alcohol outcomes in a wider variety of situations, which may increase their likelihood of developing hazardous drinking patterns compared to individuals with either depression or social anxiety alone.

The findings of this study suggest that individuals with comorbid social anxiety and depression express different patterns of positive AOE compared to a control group than do individuals with either social anxiety or depression alone. Future research with utilization of larger sample sizes and a more comprehensive assessment of diagnosis could clarify the present results. Additionally, future studies may assess the degree to which different positive AOE predict variations in hazardous drinking behaviors in comorbid samples.