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Difficulties in emotion regulation in treatment-seeking alcoholics with and without co-occurring mood and anxiety disorders

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HIGHLIGHTS

- Participants with two or more comorbid disorders reported significantly greater emotion regulation difficulties.
- They also reported greater alcohol consumption and drinking in response to negative affect situations.
- They reported greater psychiatric distress, interference from negative emotions and less use of mindfulness skills.

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ABSTRACT

Emotion regulation difficulties (ERD) are known to underlie mental health conditions including anxiety and depressive disorders and alcohol use disorder (AUD). Although AUD, mood, and anxiety disorders commonly co-occur, no study has examined the association between these disorders and ERD among AUD outpatients. In the current study, emotion regulation (ER) scores of AUD individuals with no co-occurring mental health condition were compared to the ER scores of individuals who met diagnostic criteria for co-occurring mood and/or anxiety disorders. Treatment-seeking AUD individuals (N = 77) completed measures of emotion regulation, alcohol use and psychological functioning prior to beginning a 12-week outpatient cognitive-behaviorally oriented alcohol treatment program. Individuals were classified as having no co-occurring mood or anxiety disorder (AUD-0, n = 24), one co-occurring disorder (AUD-1, n = 34), or two or more co-occurring disorders (AUD-2, n = 19). Between-group differences in emotion regulation, quantity/frequency of alcohol consumption, positive and negative affect, affective drinking situations, negative mood regulation expectancies, distress tolerance, alexithymia, trait mindfulness, and psychological symptom severity were examined. Compared with the AUD-0 group, the AUD-2 group reported significantly greater ERD, psychiatric distress and alcohol consumption, more frequent drinking in response to negative affect situations, greater interference from negative emotions, and less use of mindfulness skills. The AUD-1 group differed from AUD-0 group only on the DERS lack of emotional awareness (Aware) subscale. Emotion regulation scores in the AUD-0 group were comparable to those previously reported for general community samples, whereas levels of ERD in the AUD-1 and AUD-2 were similar to those found in other clinical samples. Implications for the inclusion of ER interventions among AUD patients who might most benefit from such an intervention are discussed.

1. Introduction

Both theory and research indicate that the desire to regulate one's emotional experience is an important motive underlying alcohol use among individuals with alcohol problems (Baker, Piper, McCarthy, Majeskie, & Fiore, 2004; Cooper, Frone, Russell, & Mudar, 1995; Cooper, Russell, Skinner, Frone, & Mudar, 1992; Cummings, Gordon, & Marlatt, 1980; Lowman, Allen, & Stout, 1996; Stasiewicz & Maisto, 1993). Difficulties in emotion regulation are defined by the absence of adaptive strategies (e.g., problem solving) coupled with the use of maladaptive strategies (e.g., emotional suppression) for regulating emotional responses (Aldao, Nolen-Hoeksema, & Schweizer, 2010). The assessment of emotion regulation among individuals diagnosed with an alcohol use disorder (AUD) yields important information because poor emotion regulation increases the risk for relapse to substance use in situations involving negative affect (Bandura, Caprara, Barbaranelli,

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Table 1
Descriptive statistics for participants with AUD by disorder group, $N = 77$.

	AUD-0 ($n = 24$)	AUD-1 ($n = 34$)	AUD-2 ($n = 19$)	Total sample	*d.f.*	F	*p*-Value[a]
Age, mean (SD)	47.8 (11.8)	44.3 (12.4)	45.4 (7.0)	45.7 (11.1)	(2, 74)	0.72	0.49
					d.f.	*p*	*p*-Value[b]
Gender, *n* (%)							
Male	13 (54.2)	20 (58.8)	6 (31.6)	39 (49.4)	2	0.007	0.16
Female	11 (45.8)	14 (41.2)	13 (68.4)	38 (50.7)			
Race, *n* (%)							
European-American	20 (83.3)	29 (85.3)	16 (84.2)	65 (84.4)	4	0.03	0.87
African-American	3 (12.5)	5 (14.7)	3 (15.8)	11 (14.3)			
Other	1 (4.2)	0	0	1 (1.3)			
Education, *n* (%)							
< High school	1 (4.2)	0	3 (15.8)	4 (5.2)	4	0.0006	0.18
High school graduate	11 (45.8)	13 (38.2)	6 (31.6)	30 (39.0)			
College graduate	12 (50.0)	21 (61.8)	10 (52.6)	43 (55.8)			
Income, *n* (%)							
< $20,000	7 (33.3)	7 (20.6)	5 (27.8)	19 (26.0)	6	0.0001	0.61
> $20,000–40,000	5 (23.8)	11 (32.4)	2 (11.1)	18 (24.7)			
> $40,000–60,000	4 (19.1)	5 (14.7)	5 (27.8)	14 (19.2)			
> $60,000	5 (23.8)	11 (32.4)	6 (33.3)	22 (30.1)			
Employment, *n* (%)							
Currently employed	9 (37.5)	17 (50.0)	7 (36.8)	33 (42.9)	2	0.02	0.58
Not employed	15 (62.5)	17 (50.0)	12 (63.2)	44 (57.1)			
Marital status, *n* (%)							
Single/divorced	15 (62.5)	17 (50.0)	12 (63.2)	44 (57.1)	2	0.02	0.58
Married/living with partner	9 (37.5)	17 (50.0)	7 (36.8)	33 (42.9)			

Note: AUD = Alcohol use disorder; SD = Standard deviation.
[a] *p*-Value from one-way ANOVA.
[b] *p*-Value from Fisher's exact test.

Gerbino, & Pastorelli, 2003). Yet, despite the growing interest in emotion regulation as a possible mechanism underlying problematic alcohol use and relapse (Barlow, Allen, & Choate, 2004), little is known about the association of individual difference factors and emotion regulation difficulties among individuals with an AUD.

One important individual difference factor often associated with greater AUD severity and an increased risk for relapse is the presence of a co-occurring mood or anxiety disorder. Epidemiological evidence indicates that among individuals diagnosed with an AUD, 18.9% are diagnosed with a mood disorder and 17.1% with an anxiety disorder (Grant et al., 2004). These two diagnostic categories, which are defined, in part, by chronic emotion regulation difficulties (Gross & Levenson, 1997; Kring & Werner, 2004; Lynch, Robins, Morse, & Krause, 2001), share high rates of comorbidity with AUDs. In separate literatures, individuals with alcohol use disorders and those with affective disorders have been shown to demonstrate greater deficiencies on multiple indices of emotional functioning (Joormann & Stanton, 2016; Witkiewitz & Marlatt, 2004).

As greater attention is paid to the assessment and treatment of emotion regulation difficulties in AUD (Stasiewicz et al., 2013), it will be important to understand the interrelationship between co-occurring mood and anxiety disorders and emotion regulation difficulties. For some AUD patients, targeting emotion regulation difficulties may be an effective and efficient strategy for improving treatment outcomes and decreasing relapse risk (Barlow et al., 2004; Stasiewicz et al., 2013).

Emotion regulation has demonstrated relationships with a number of psychological variables known to impact drinking and relapse to alcohol use during and following treatment. These include negative mood regulation expectancies (Kassel, Bornovalova, & Mehta, 2006), distress tolerance (Jeffries, McLeish, Kraemer, Avallone, & Fleming, 2016), alexithymia (Stasiewicz et al., 2012), mindfulness (Stasiewicz et al., 2013) and psychiatric symptom severity (Aldao et al., 2010). Thus, in addition to examining differences between the co-morbidity groups on emotion regulation, we were interested in exploring differences between co-morbidity groups on psychological variables relevant to both emotion regulation and alcohol relapse.

To date, few studies have assessed emotion regulation among alcohol use disorder patients (Fox, Hong, & Sinha, 2008; Lagerberg et al., 2017), and no known studies have examined emotion regulation difficulties and psychological functioning in treatment-seeking AUD patients with and without co-occurring mood and/or anxiety disorders. A greater understanding of emotion regulation difficulties among AUD individuals may lead to the identification of subgroups that are more likely to report such difficulties and therefore more likely to benefit from the addition of an emotion regulation intervention into existing alcohol treatment.

This exploratory study utilized data from a previously published parent study that reported on the development and initial efficacy of an affective intervention for alcohol use disorders (Stasiewicz et al., 2013). The purpose of the present analyses was to examine potential differences: (1) in emotion regulation difficulties between individuals without co-morbid mood and/or anxiety disorders (AUD-0) and individuals with either one comorbid mood or anxiety disorder (AUD-1) or two or more comorbid mood or anxiety disorder (AUD-2) diagnoses, and also (2) on psychological variables relevant to emotion regulation and alcohol use and relapse including baseline alcohol use and functioning, high-risk alcohol use situations involving positive and negative affect, current negative and positive affect, negative mood regulation expectancies, distress tolerance, alexithymia, mindfulness, and psychological distress among the 3 comorbidity groups. We hypothesized that compared with the AUD-0 group, both the AUD-1 and AUD-2 groups would demonstrate poorer emotion regulation, greater endorsement of high-risk situations involving negative affect, greater levels of negative affect, greater negative mood regulation expectancies, poorer distress tolerance, greater alexithymia, lower levels of mindfulness, and greater psychological distress. No specific hypotheses were proposed for positive affect and high-risk situations involving positive affect.

2. Method

2.1. Participants

Participants were 77 adults (i.e., 18 years or older; 38 women, 39 men) seeking outpatient treatment for alcohol-related problems who