

¹ University of Wisconsin – Madison
² Mount Mary University

Manner of Drinking as a Mediator of Emotional Impulsivity and Alcohol-Related Problems



Grace Bujan,¹ Grace Kidd,² Ariana Williams,¹ Anuj H. P. Mehta, BS¹ Stephanie B. Ward, MS¹ Kate Walsh, PhD¹

Background

Deficits in emotional self-regulation have been associated with rates of alcohol consumption and related consequences (Dvorak et al., 2014).

Prior research has also examined links between emotion regulation strategies and protective behavioral strategies for alcohol and cannabis use. For example, individuals with deficits in emotional self-regulation who favor maladaptive “suppression” strategies may engage in riskier substance use behaviors and, in turn, experience more consequences than those who use adaptive “appraisal” strategies (Blanchard et al., 2018).

When implemented, alcohol protective behaviors have been linked to decreases in consumption and related harms (e.g., Benton et al., 2004; Martens et al., 2005). Thus, recent studies have examined the use of interventions targeting these protective behaviors among college students, as heavy drinking has been recognized as a public health problem on American college campuses.

Study Aims

The current study seeks to build on prior work by testing our hypothesis that, besides the use of maladaptive (suppression) vs. adaptive (appraisal) strategies, other aspects of emotion dysregulation would be associated with alcohol-related problems through alcohol protective behaviors.

Procedure

Data were drawn from an online Qualtrics survey completed by undergraduates in the Psychology subject pool who reported any alcohol consumption in the past 12 months. Participants completed a baseline survey and 28 daily follow-up surveys with measures of attitudes, beliefs, and behaviors in the contexts of alcohol use, sex, and mental health.

Participants (N = 374)

- 68% White
- 17% Asian
- 9% Hispanic or Latino/a/x
- 3% Black
- 63% Women
- 34% Men
- 10% Non-binary*
- 87% Hetero
- 7% Bisexual
- 6% Other**

*incl. Gender non-conforming, **incl. Gay, lesbian, pan, trans, two-spirit, & gender-fluid queer, & questioning

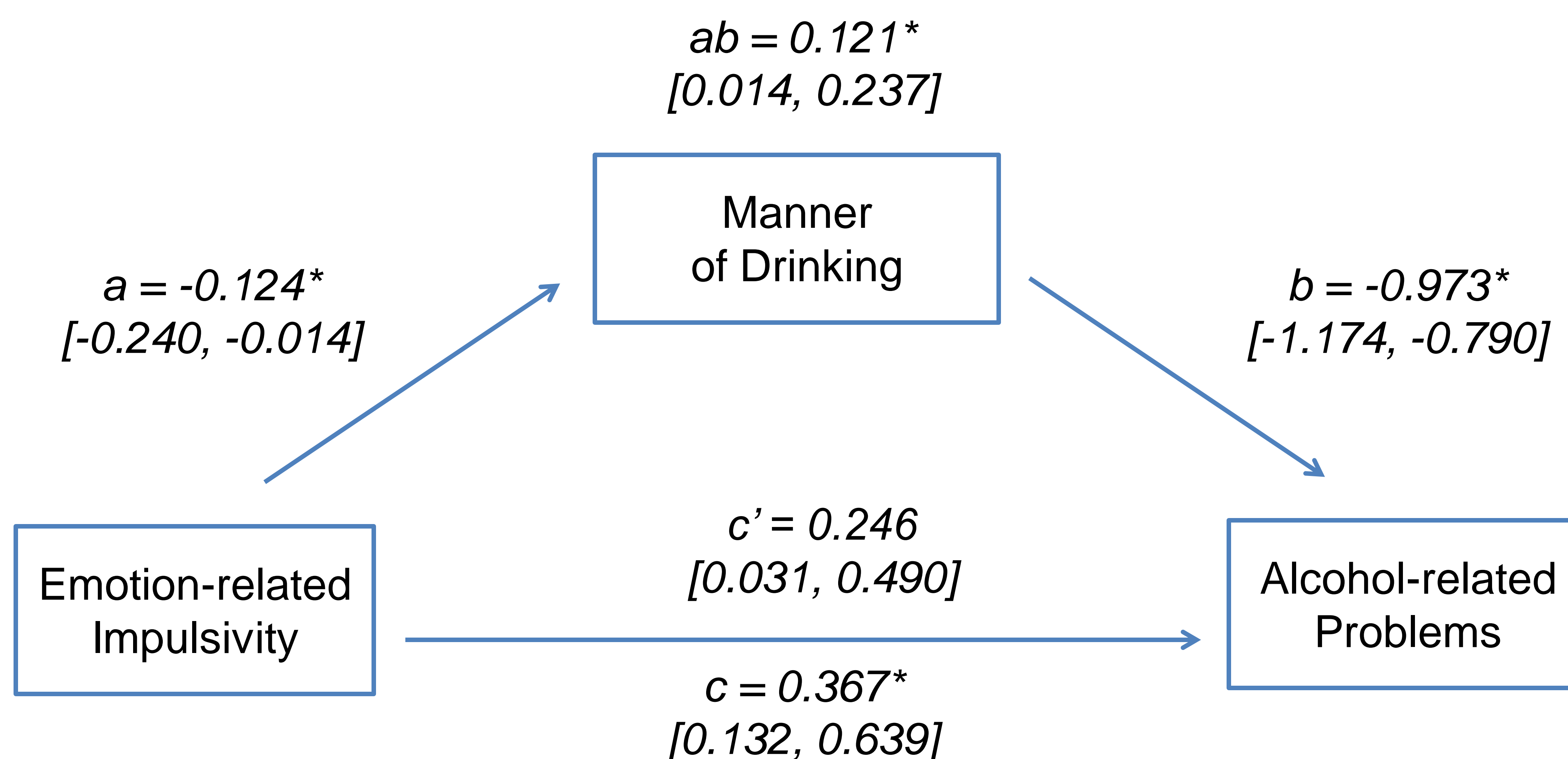


Figure 1: Effect of emotion-related impulsivity on alcohol-related problems, mediated by manner of drinking. Confidence intervals not containing zero indicate a significant effect (* $p < .05$).

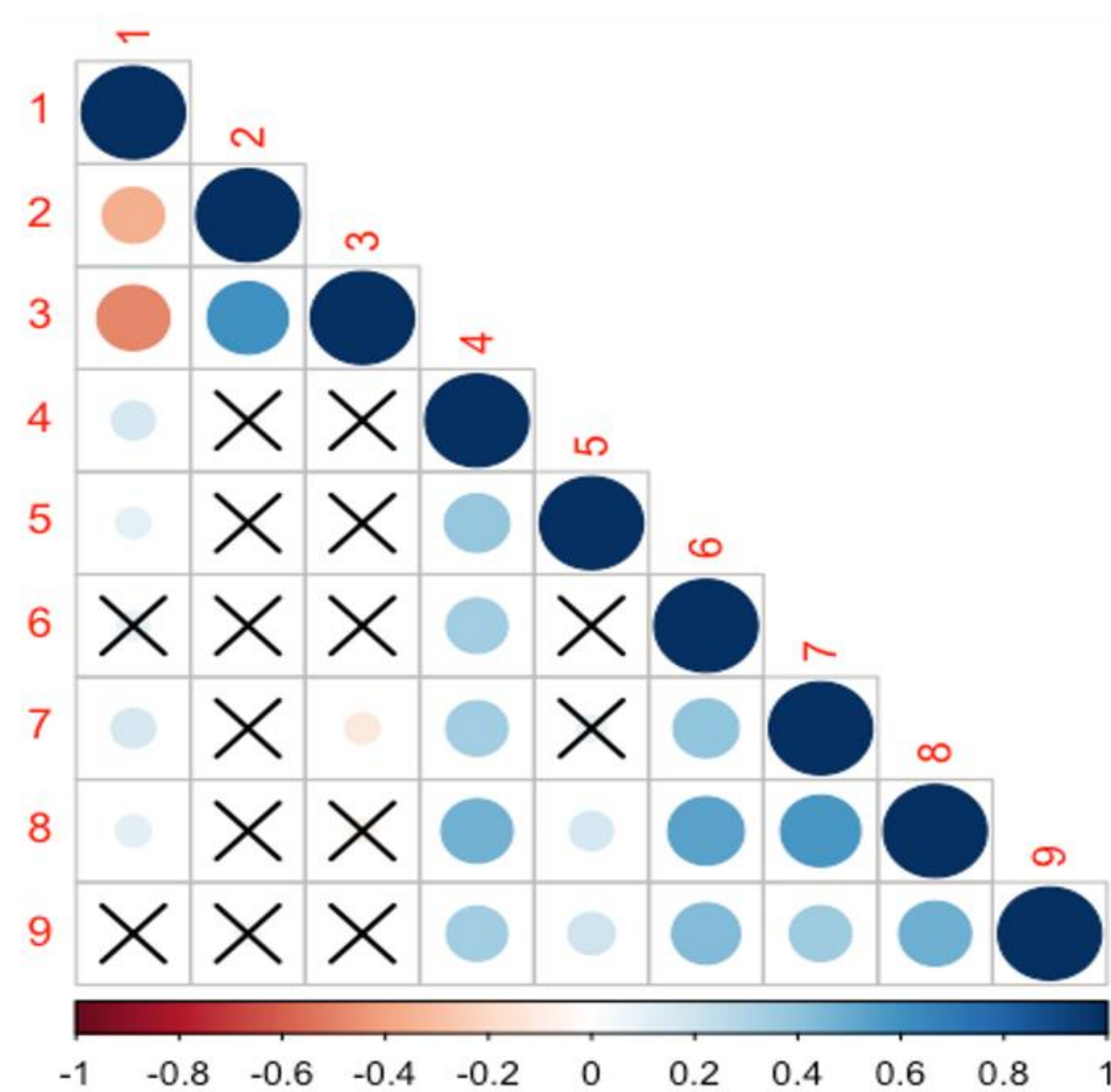


Figure 2: Correlogram. Blue and red circles indicate significant + and - correlation coefficients, respectively.

Measures

Alcohol Use Disorders Identification Test AUDIT ($\alpha = .79$): Saunders et al., 1993

1. Alcohol-related problems

Alcohol Protective Behavioral Strategies

APBS Scale: Martens et al., 2005

2. Limiting Drinking ($\alpha = .66$)
3. Manner of Drinking ($\alpha = .63$)

Difficulties in Emotion Regulation Scale

DERS-18: ($\alpha = .89$) Victor et al., 2016

4. Emotional Clarity
5. Emotional Awareness
6. Emotional Goal-interference
7. Emotional Impulsivity
8. Emotional Regulation Strategies
9. Emotional Nonacceptance

Methods

After examining bivariate associations, PROCESS macro for SPSS was used to run mediation analyses with the DERS and APBS subscales predicting a significant correlation with the AUDIT scores.

Results

Mediation analyses revealed an indirect effect of emotional impulsivity on hazardous alcohol consumption through manner of drinking, such that difficulty with emotion-driven impulses was negatively associated with protective behaviors for how one drinks (e.g., not mixing alcohol types or alcohol with other drugs), suggesting emotion-related impulsivity can lead to hazardous consumption of alcohol and consequent problems. Interestingly, this effect was not observed for other emotion regulation deficits.

Significance

Our findings reinforce the need for basic and applied research in the affective, behavioral, and addiction sciences to investigate the mechanisms underpinning complex pathways between emotion dysregulation and hazardous substance use.

The findings suggest that targeting emotional awareness and reactivity through psychoeducation and mindfulness interventions may be beneficial for college students, especially those who consume alcohol

Limitations

This research was conducted at a university in the midwestern U.S., limiting the generalizability of our findings to diverse and non-college-educated samples. Data were drawn from our cross-sectional baseline assessment, precluding conclusions related to temporality.

Next Steps

Analyses will be replicated and extended using longitudinal daily diary data to examine event-level associations between state- and trait-level emotions, dysregulation, protective behavioral strategies, substance use, and related harms.