

Does Anxiety Moderate the Effect of Peer Drinking Norms on Past-Month Alcohol-Induced Blackouts? An Observational Study Among College Students

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BACKGROUND

Social anxiety may increase college students' susceptibility to peer drinking norms, which, in turn, may lead to heavy alcohol consumption among those drinking to conform.¹

Emotion dysregulation, peer influence, and drinking for anxiety-coping have also been linked to alcohol misuse.²

It remains unclear how these risk factors relate to the incidence of alcohol-induced blackouts, a critical gap in the literature given their dire consequences (e.g., sexual assault).³

HYPOTHESES

1. Generalized anxiety and peer drinking norms would interact such that students with greater anxiety would be **more** susceptible to higher peer drinking norms, resulting in more past-month alcohol induced blackouts.
2. When controlling for the effects of emotion dysregulation and alcohol dependence symptomatology, the interaction between generalized anxiety and peer drinking norms will explain unique variance in blackout frequency.

DATA COLLECTION

Data were sourced through the SONA subject pool of undergraduates taking intro psychology courses. Students ≥ 18 years of age who reported consuming ≥ 1 alcoholic beverage in the past year were invited to complete a survey.

MEASURES

- **AIB:** Alcohol-Induced Blackout Measure ($\alpha = .89$)⁴
- **PDN:** Peer Drinking Norms ($\alpha = .70$)⁵
- **GAD:** Generalized Anxiety Disorder-7 ($\alpha = .92$)⁶
- **DER:** Difficulties in Emotion Regulation Scale ($\alpha = .89$)⁷
- **AUD:** Alcohol Use Disorders Identification Test ($\alpha = .79$)⁸

PARTICIPANTS (N = 386)

- 63% Women
- 68% white
- 87% Hetero
- 34% Men
- 17% Asian
- 7% Bisexual
- 10% Nonbinary or gender-fluid
- 9% Hispanic
- 6% Gay, lesbian, pansexual, or queer
- 3% Black

Figure 1

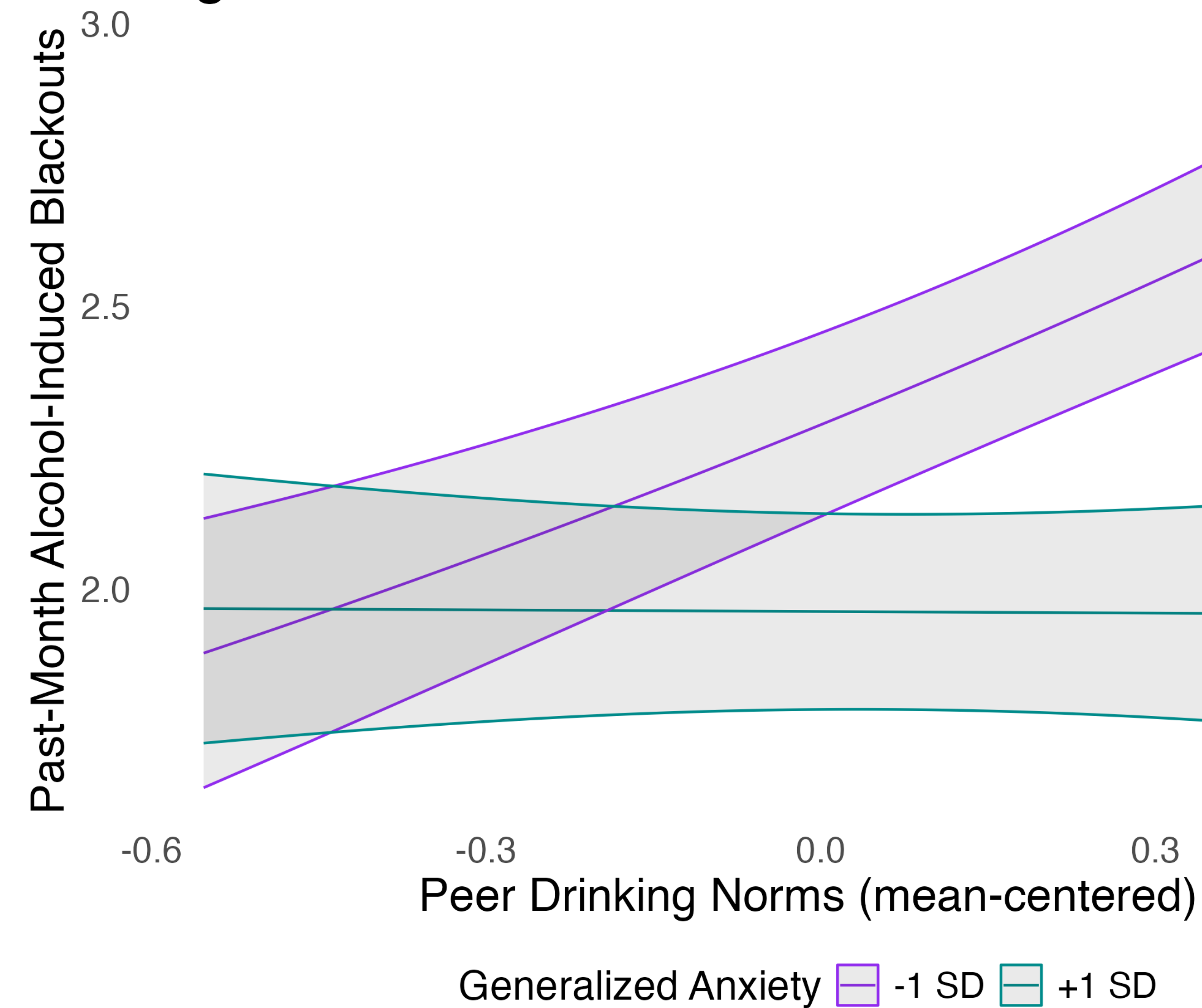
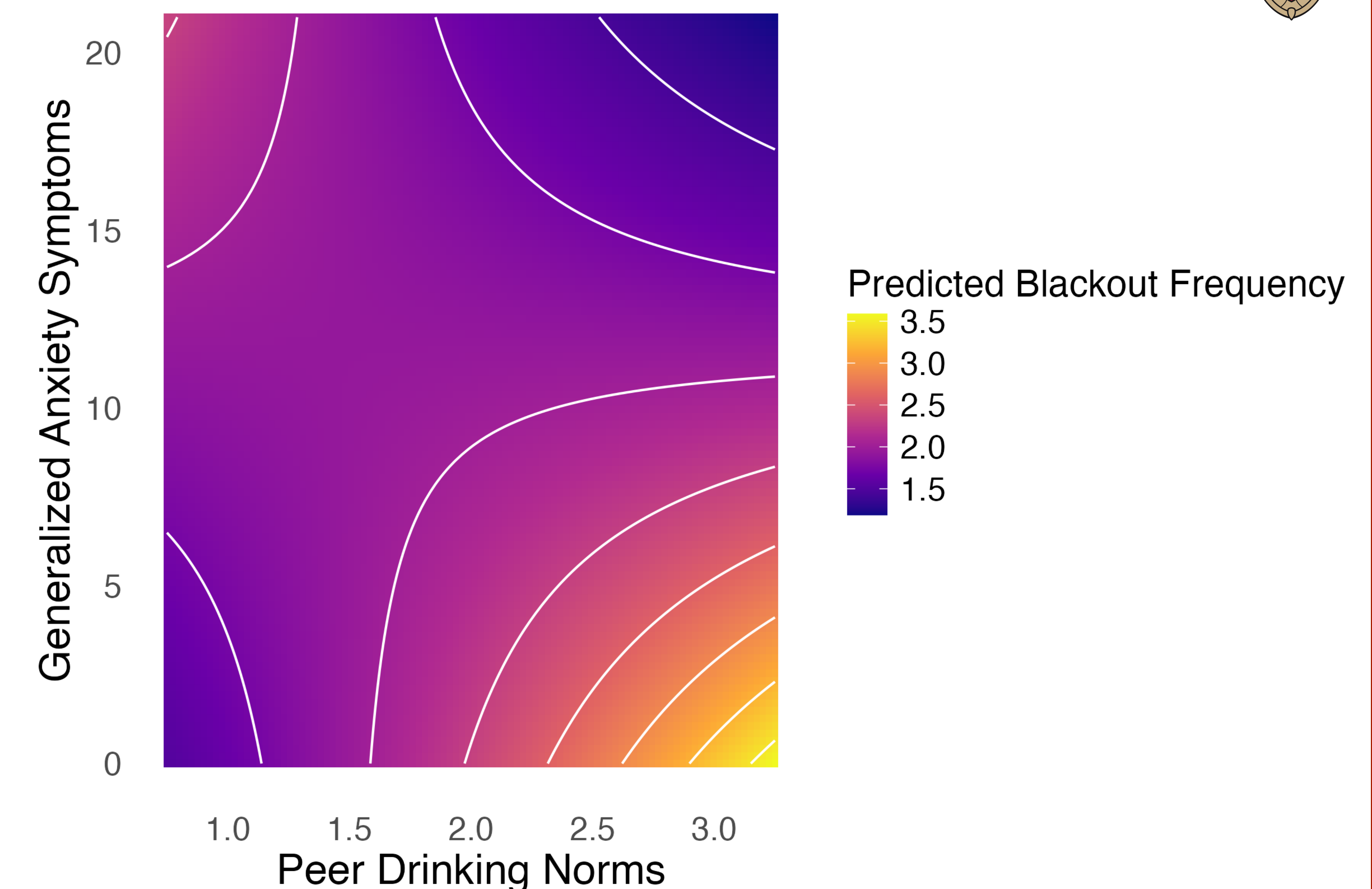


Figure 2



Generalized anxiety symptoms buffered the influence of peer drinking norms on alcohol-induced blackout frequency

ANALYSES

We managed missing data with multiple imputation⁹ and assessed for multicollinearity by calculating VIFs for main effects (all were < 2.5).¹⁰ Overdispersed data—with variance (12.32) much larger than the mean (2.77)—prompted quasi-Poisson regressions.

RESULTS

H1: **✗** → The significant interaction between peer drinking norms and generalized anxiety ($\beta = -0.006$, $SE = 0.003$, $z = -2.207$, $p = .027$) indicated that the impact of peer drinking norms on blackout frequency was moderated by anxiety level, with more severe anxiety associated with a reduced influence of peer drinking norms on AIB frequency.

H2: **✓** → The interaction remained significant after adjusting for covariates, and its magnitude increased ($\beta = -0.031$, $SE = 0.012$, $z = -2.628$, $p = .009$), which suggests that our consideration of these variables together added meaningful information to the model beyond what was contributed by the main effects alone. Still, all main effects were significant.

IMPLICATIONS

Prevention programs and clinical service providers seeing patients in college counseling centers should consider the complex role of anxiety, as our results suggest that addressing anxiety could inadvertently decrease resilience to peer pressure to drink in excess.

Group-based interventions for alcohol misuse and/or emotion dysregulation may want to consider the utility of providing corrective normative feedback.

LIMITATIONS

Most of the students in our sample were 18-22 years old and the majority identified as white, cisgender, and heterosexual, so findings cannot be generalized to students of other racial backgrounds, gender identities, or sexual identities.

FUTURE DIRECTIONS

The current study drew data from a cross-sectional baseline assessment, precluding inferences related to temporality. We intend to test whether these findings replicate in our longitudinal daily report data.