

# The Relationship between Parental and Spousal Alcoholism and Generalized Anxiety Disorder



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## Introduction

- Alcohol misuse remains one of the most prevalent and impactful health issues in the United States, with an estimated 43% of U.S. adults reporting having at least one close family member with alcohol related problems (Schoenborn, 1988).
- Parental alcoholism is linked to more than twice the odds of developing a wide range of mental health disorders in offspring compared to those without parental alcoholism (Marmorstein et al., 2008).
- Dysfunctional family environments shaped by alcohol use disorder (AUD) increase susceptibility to adverse developmental conditions (Haugland et al., 2021). These environments are linked to a higher risk of internalizing symptoms, including depression and anxiety, and changes in brain structure (Jensen et al., 2016).
- Much existing evidence relies on young adult or adolescent samples from non U.S. populations, leaving uncertainty about whether parental AUD is associated specifically with generalized anxiety disorder (GAD) in the broader U.S. adult population. Even less work has examined how spousal problematic drinking relates to anxiety outcomes.

## Methods

### Sample

- The sample was drawn from Wave 1 of NESARC, a nationally representative survey of U.S. noninstitutionalized adults (2001 to 2002), with 43,093 respondents aged 18 and older. Young adults and key minority groups were oversampled, and all data were collected through structured in-person interviews using the AUDADIS IV.
- The sample was restricted to respondents with complete data on parental and spousal alcohol misuse indicators and all required GAD-related items.

### Measures

- Parental and spousal AUD was measured via a binary response variable where respondents answered "yes" and "no", identifying whether parents or partners were ever alcoholics or problem drinkers.
- GAD variable following DSM criteria constructed by combining NESARC items that measured chronic worry duration, difficulty controlling worry, a count of associated symptoms, reported impairment, and exclusion of substance or medical causes. Respondents meeting all required components were coded as having GAD.

## Research Questions

- Is problematic alcohol use in family members or spouses associated with GAD in adults?
- Does the prevalence of GAD vary across regions or between men and women?

## Results

### Univariate

- 2.79% of the survey participants met the DSM-based criteria for a GAD diagnosis.
- 21.53% of survey participants had one parent or spouse with AUD in their lives, 5.71% had two, and .91% had 3. This totals to 28.16% of participants having had exposure to AUD. (Fig 1)

### Bivariate

- A chi squared test was used to determine that individuals had a higher prevalence of GAD (4.99% vs 1.93%) when they had exposure to problematic alcohol use compared to those with no exposure. The difference was statistically significant ( $\chi^2(1) = 301.53, p < 0.001$ ).
- A logistic regression using a binary variable showed individuals with any exposure to problematic alcohol use had significantly higher odds of GAD compared to someone with no exposure ( $OR = 2.67, p < 0.001$ ).
- A logistic regression using the total number of individuals with AUD showed that each additional individual in the respondent's life increased the odds of GAD ( $OR = 1.92, p < 0.001$ ).

### Multivariate

- When controlling for region, age, and sex while examining each relationship (parental and spousal), the OR for father (1.53), mother (1.78), and spouse (2.27) were all significant ( $p < .001$ ).
- With the same controls, the relationship between each additional individual with AUD and the likelihood of GAD was still significant and positive ( $OR = 1.82, p < .001$ ). (Fig 2)
- When controlling for each relationship type, sex was also associated with a significant difference in likelihood of GAD, with females being significantly more likely to have it ( $OR = 1.77, p < .001$ ). (Fig 3)
- Out of four regions examined, only the Midwest showed a significant difference in GAD likelihood ( $OR = 1.23, p < .02$ ). Respondents there also had a smaller increase in GAD risk per additional family member with AUD ( $OR = 0.78, p < .023$ ). (Fig 4)

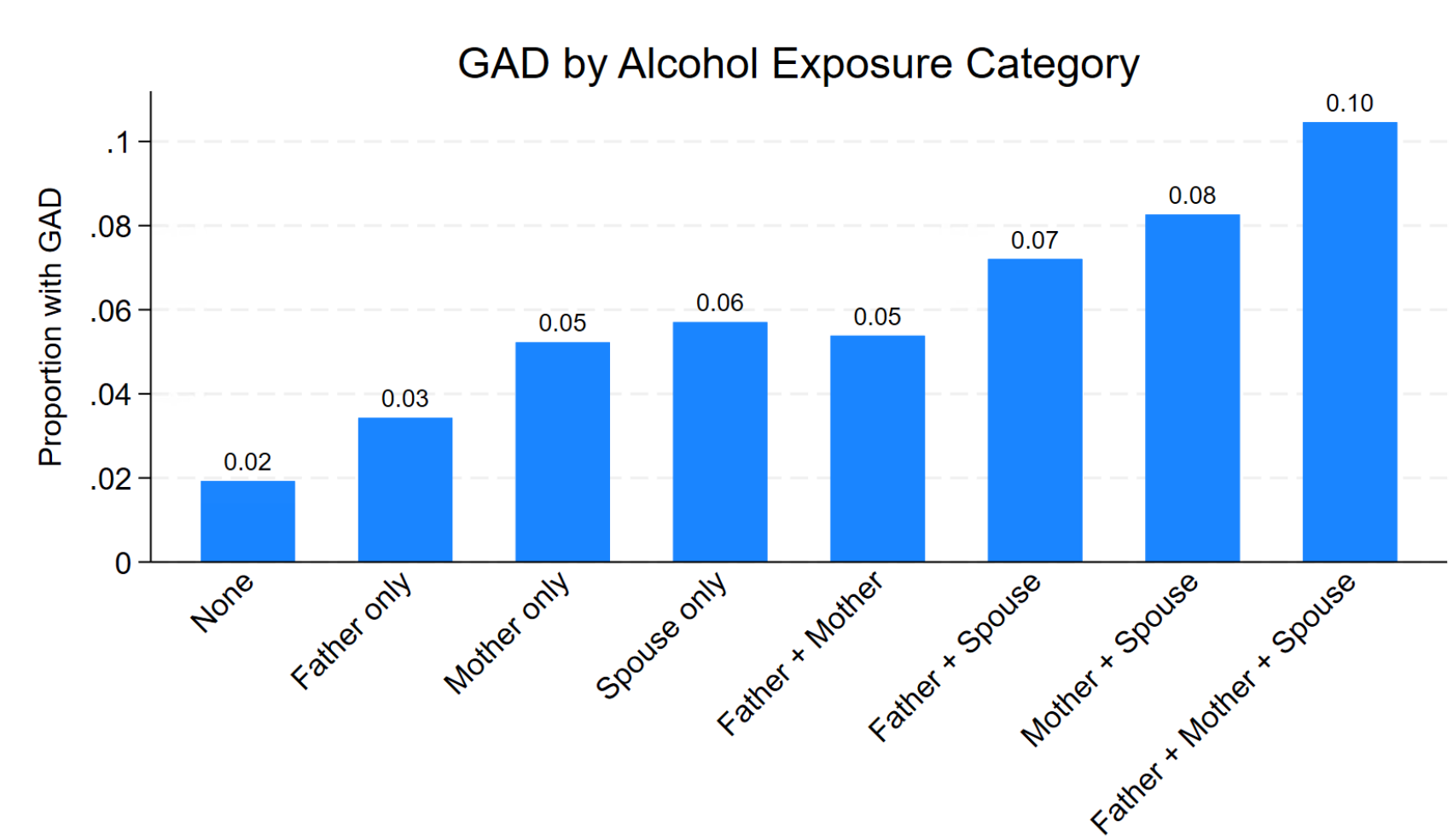


Figure 1

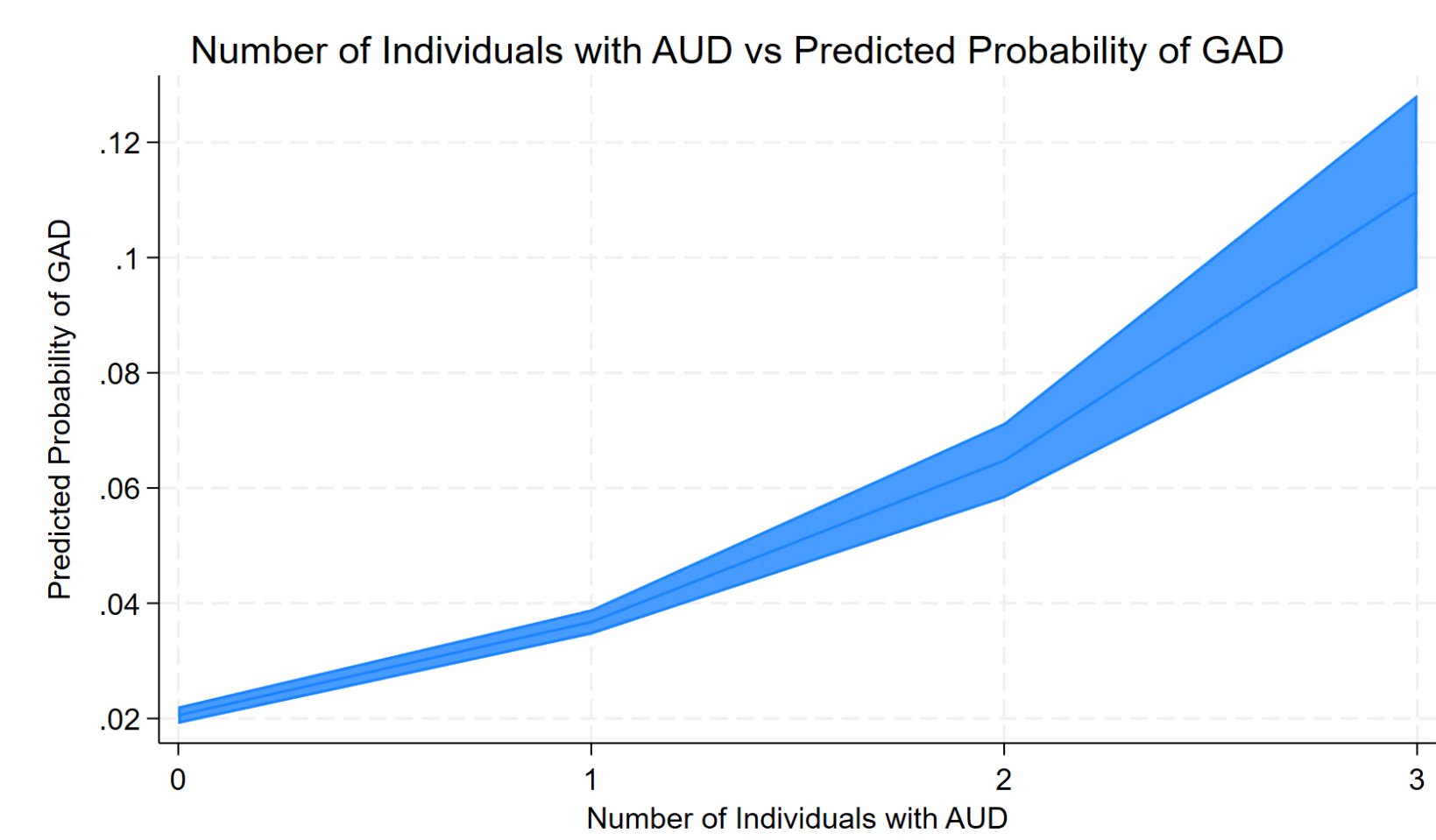


Figure 2

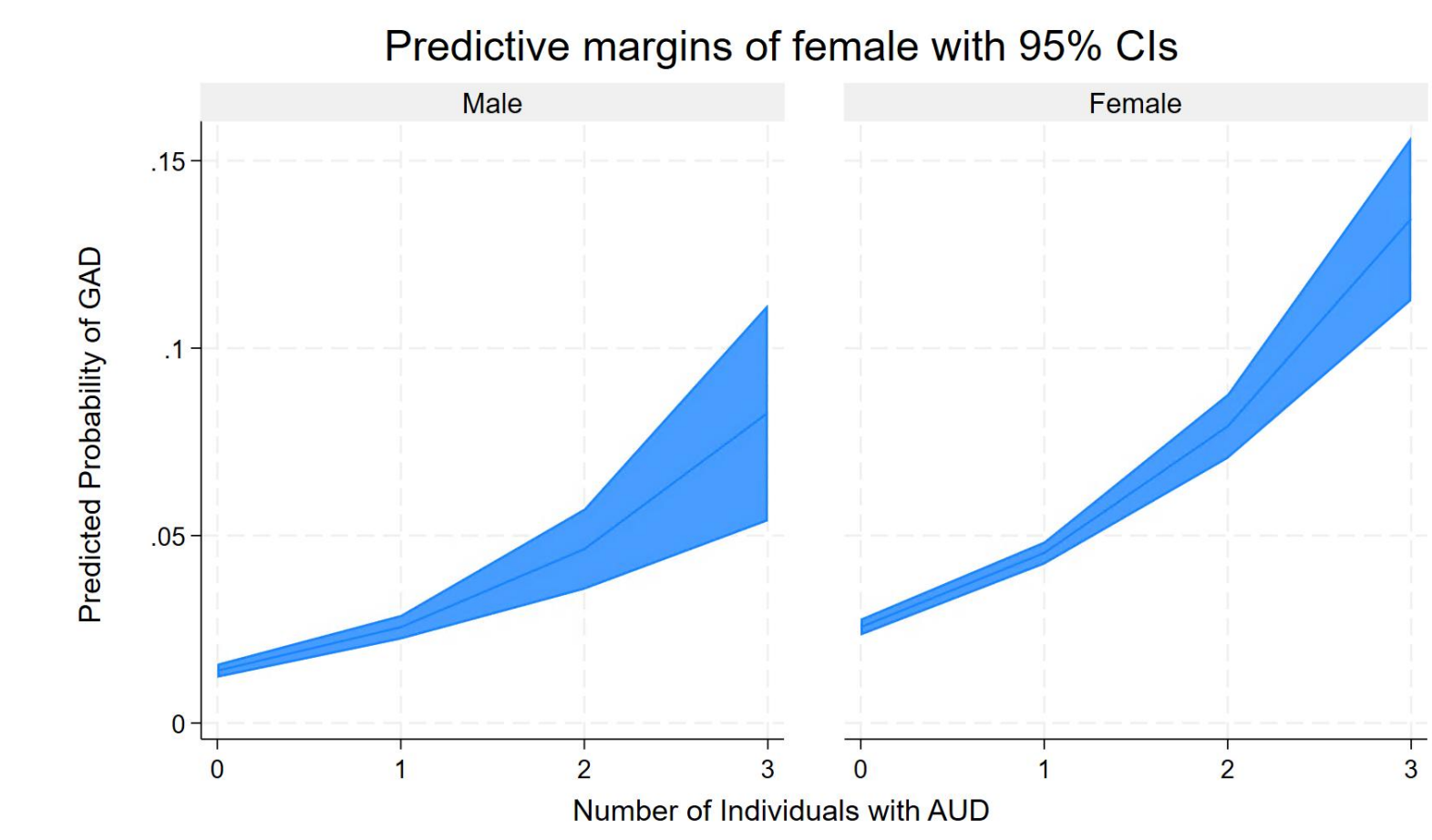


Figure 3

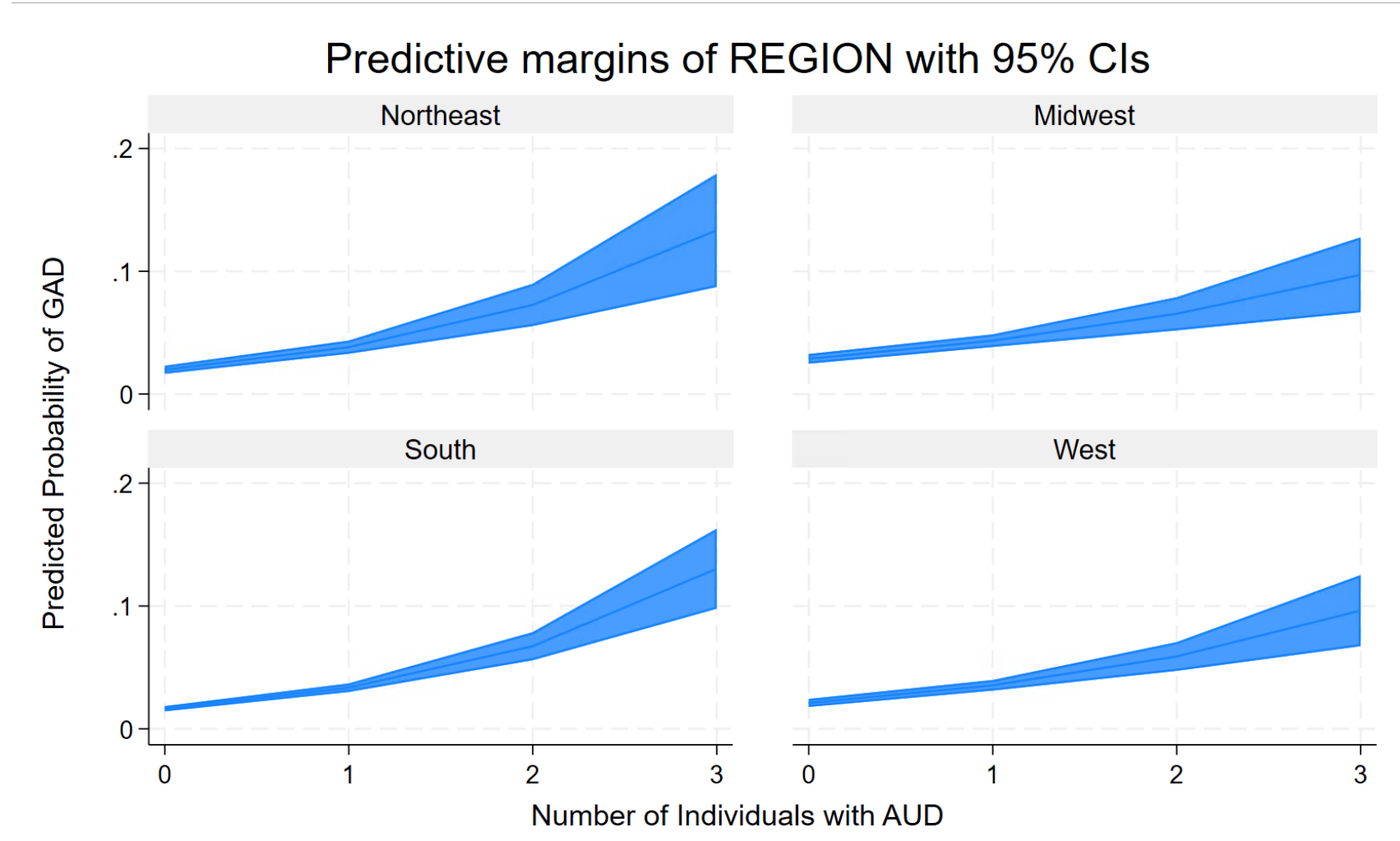


Figure 4

## Discussion

- Adults exposed to AUD in parents or spouses showed significantly higher likelihood of meeting DSM criteria for GAD. This held across all models and when examining multiple different possible moderating variables. The models also suggest the relationship between an additional parent or spouse with AUD and an increased likelihood of GAD.
- Participants whose spouses had AUD showed the strongest association, possibly reflecting the immediate trauma and symptoms of living with a partner with AUD in adulthood. Each parent with AUD also had a significant increase in the likelihood of GAD, which may reflect the long-lasting effects of growing up in an environment affected by AUD.
- Both sex and region had a significant impact on the likelihood of GAD, with females being more likely to meet the criteria, as also reflected in those from the Midwest. Neither changed the direction of association.
- Future work would be useful in examining the impacts of other variables, such as socioeconomic status, severity of AUD, and timing of exposure. If also significant and correlated, additional studies would highlight the need for further research to explore interventions that may mitigate these effects and reduce anxiety symptoms following exposure.

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