

# The Association Between Current General Anxiety and Alcohol Use Among Those with Lifetime Generalized Anxiety Disorder

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## Introduction

- Anxiety levels in the U.S. are rising, yet few adults seek professional help: 43% reported increased anxiety in 2024, but only 24% spoke with a mental health professional (APA, 2024).
- Anxiety commonly co-occurs with alcohol use, and many individuals use alcohol as a self-medication strategy to manage emotional discomfort (Anker & Kushner, 2019).
- Alcohol has dual stimulant and sedative effects, creating an unclear relationship with anxiety—while moderate drinking may briefly reduce distress, heavier use worsens cognitive functioning and psychological symptoms (Hendler et al., 2011; Simon et al., 2023).
- Most prior research focuses on social anxiety, leaving less known about alcohol use among individuals with generalized anxiety disorder (GAD).
- Little evidence compares the effectiveness or risks of professional treatment versus self-medication with alcohol for managing anxiety symptoms.
- Existing studies often examine adults aged 20–35, leaving gaps in understanding how alcohol use and anxiety interact among both younger drinkers and older adults with long-term drinking histories.

## Methods

### Sample

- The study included 1,938 adults who reported a lifetime diagnosis of generalized anxiety disorder, drawn from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).
- NESARC is a nationally representative study conducted by the National Institute on Alcohol Abuse and Alcoholism in 2011. The survey included 43,093 non-institutionalized U.S. adults

### Measures

- Current generalized anxiety** was measured by whether participants met DSM-IV criteria for generalized anxiety disorder within the past 12 months.
- Alcohol consumption** was measured by classifying participants as current drinkers or current non-drinkers, with ex-drinkers and lifetime abstainers combined into the non-drinker category.
- Interaction terms were created to examine whether the link between current anxiety and alcohol consumption differed for individuals who self-medicate or who receive doctor-prescribed treatment.
  - Self-medication** with alcohol was measured by whether participants had ever used alcohol to avoid general anxiety.
  - Doctor-prescribed treatment** was measured by whether participants had ever received medication from a doctor to improve mood.

## Research Questions

- Among adults with a lifetime diagnosis of GAD, how is current generalized anxiety related to current alcohol use?
- Does this relationship differ depending on whether people self-medicate with alcohol and/or are treated with doctor-prescribed medication?

## Results

### Univariate

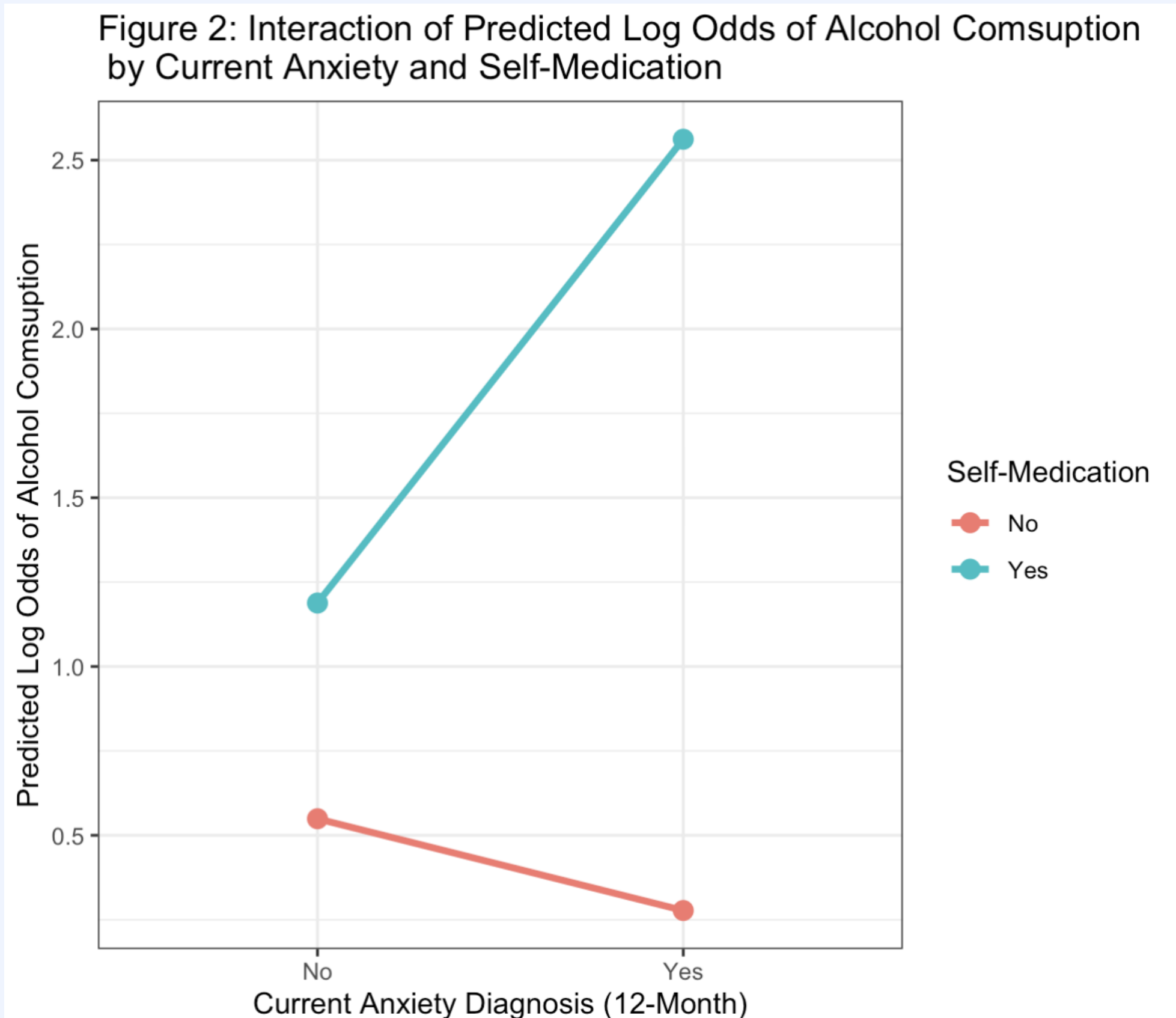
- Most adults with a lifetime diagnosis of generalized anxiety disorder were current drinkers, with 65% reporting current alcohol use.
- Among those treated for anxiety, 62% of the participants reported receiving doctor-prescribed medication for anxiety, 18% reported self-medication with alcohol, which was much less common.

### Bivariate

- Chi-square analyses showed that current generalized anxiety was not significantly related to current drinking, indicating similar drinking rates for those with and without current GAD ( $\chi^2 = 3.216$ , 1 df,  $p = 0.073$ ).
- Individuals who received doctor-prescribed medication were significantly less likely to be current drinkers than those who did not receive medication ( $\chi^2 = 8.053$ , 1 df,  $p = 0.005$ ).
- Individuals who used alcohol to avoid anxiety were much more likely to be current drinkers than those who did not self-medicate, demonstrating a strong and significant association between self-medication and alcohol use ( $\chi^2 = 66.906$ , 1 df,  $p < 0.001$ ).
- A bivariate comparison of mean alcohol use showed that self-medicating adults reported higher drinking levels than those who did not self-medicate, and this pattern was stronger among individuals with current anxiety (Figure 1).

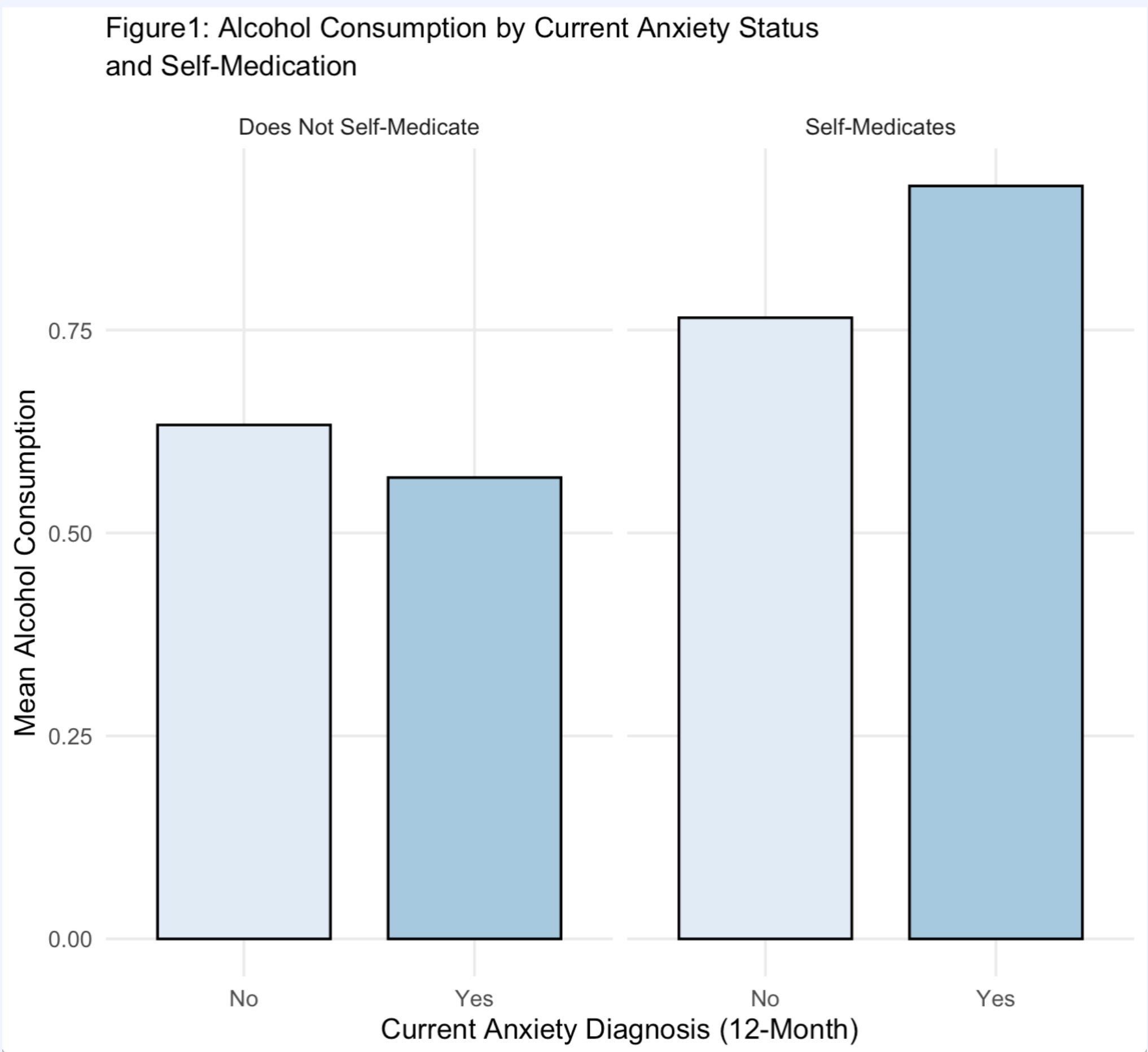
### Multivariate

- Logistic regression indicated that after accounting for coping behaviors, current generalized anxiety was not significantly associated with current alcohol consumption, suggesting that current GAD does not predict whether individuals with lifetime GAD are current drinkers (OR = 0.79, 95% CI 0.55–1.15,  $p = 0.221$ ).
- Self-medication with alcohol remained a strong and significant predictor of current drinking, indicating that individuals who use alcohol to cope with anxiety are substantially more likely to be current drinkers even when controlling for current GAD and prescribed medication (OR = 1.91, 95% CI 1.25–3.01,  $p = 0.004$ ).
- Doctor-prescribed medication showed an association with alcohol use, as individuals who received prescribed treatment were less likely to be current drinkers than those who did not receive medication (OR = 0.72, 95% CI 0.52–0.99,  $p = 0.047$ ).
- Interaction between Self-medication and current anxiety indicated that self-medication sharply increases the predicted likelihood of drinking among individuals with current generalized anxiety (OR = 5.19, 95% CI 2.42–12.01,  $p < .001$ ). Individuals who do not self-medicate show a decrease in drinking when they have current anxiety (Figure 2).



## Discussion

- Current generalized anxiety alone was not a strong predictor of drinking behavior once coping strategies were taken into account, indicating that how people manage their anxiety may be more influential than the presence of symptoms themselves.
- These findings underscore the importance of screening for alcohol-based coping among individuals with anxiety disorders and expanding access to mental health resources that provide alternatives to self-medication.
- Further research is needed to examine how age, drinking history, and early exposure to alcohol shape the relationship between anxiety and alcohol consumption.
- Future studies should incorporate longitudinal designs to track changes in drinking behavior and treatment outcomes over time, providing deeper insight into the long-term effects of alcohol use and professional treatment on generalized anxiety.



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