

2005

## Social anxiety and alcoholism

Carrie Randall  
*Medical University of South Carolina*

Follow this and additional works at: <https://digitalcommons.wustl.edu/guzepresentation2005>



Part of the [Medicine and Health Sciences Commons](#)

---

### Recommended Citation

Randall, Carrie, "Social anxiety and alcoholism" (2005). *Presentations*. Paper 4 Samuel B. Guze Symposium on Alcoholism.  
<https://digitalcommons.wustl.edu/guzepresentation2005/4>

This Presentation is brought to you for free and open access by the 2005: Alcoholism and Comorbidity at Digital Commons@Becker. It has been accepted for inclusion in Presentations by an authorized administrator of Digital Commons@Becker. For more information, please contact [vanam@wustl.edu](mailto:vanam@wustl.edu).



# Social Anxiety and Alcoholism

---

## A Complex Relationship

**Carrie Randall, Ph.D.**  
**Charleston Alcohol Research Center**  
**Medical University of South Carolina**



# Overview

---

- I. Social anxiety disorder (aka social phobia)
- II. Comorbidity of alcoholism and social anxiety disorder
- III. Self-medication/drinking to cope
- IV. Treating the comorbidity: Empirical data
- V. Future directions



# DSM-IV diagnostic criteria

## Social Anxiety Disorder

---

- ◆ Intense and persistent fear of scrutiny
- ◆ Extreme discomfort in social situations
- ◆ Interference with daily activities
- ◆ Recognition that the fear is excessive;  
marked distress about the condition



# Social anxiety disorder ≠ shyness

---

- More intense discomfort
- More avoidance of social situations
- More impairment in functioning

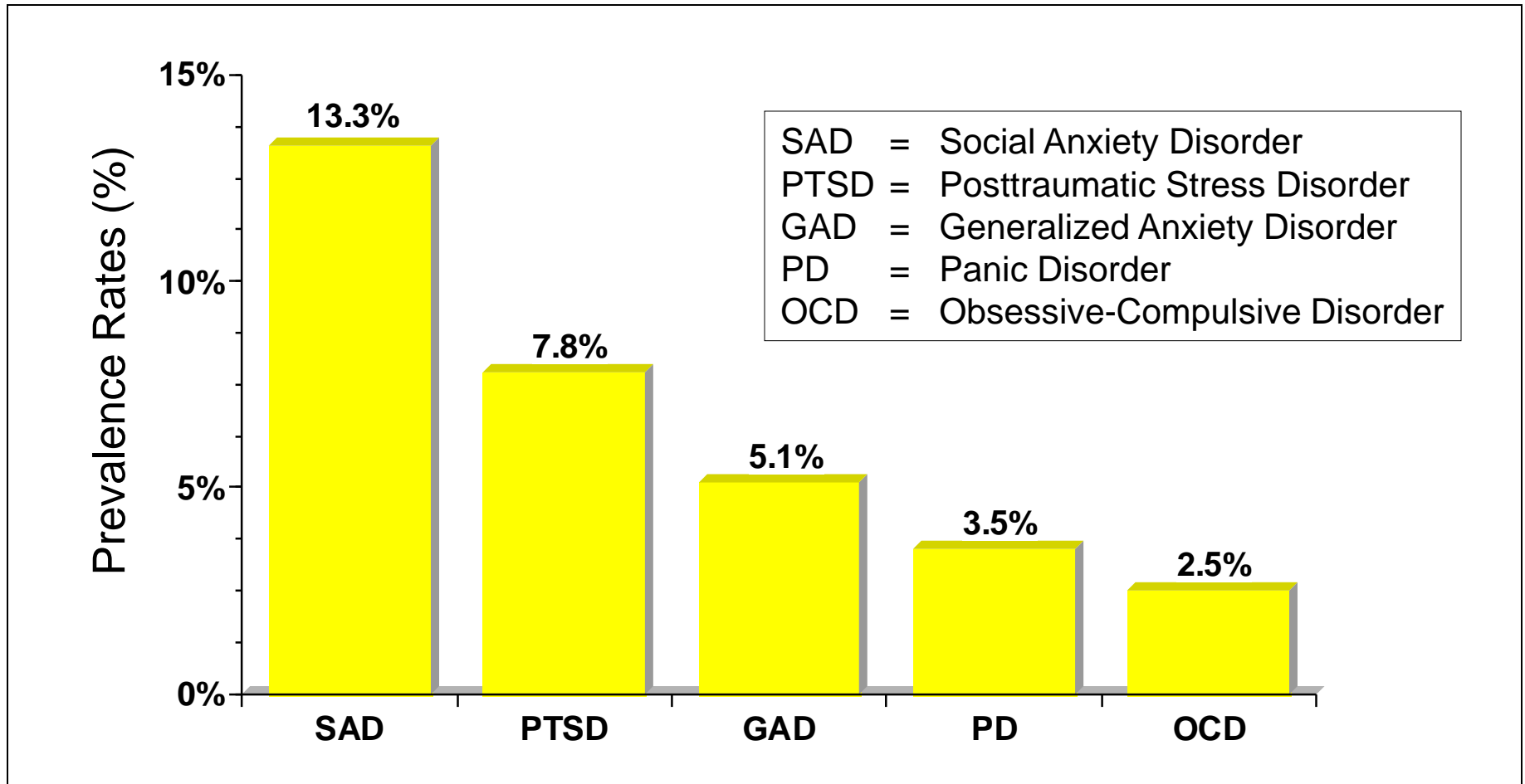


# Two types

---

- ◆ Non-generalized (limited)
- ◆ Generalized
  - Fear most social situations
  - Have more severe fears
  - Have an earlier age of onset

# Prevalence of Anxiety Disorders in Population Studies: The National Comorbidity Survey and the Epidemiological Catchment Area Study





# Features of social anxiety disorder

---

- Females are 2.5 times more likely than males to be affected
- More males than females seek treatment
- Onset is in early adolescence
- Unremitting without treatment
- Negatively impacts quality of life





# Comorbidity with Alcohol Dependence

---

- ◆ Lifetime prevalence is ~20% in clinical samples
- ◆ Social anxiety disorder almost always appears first

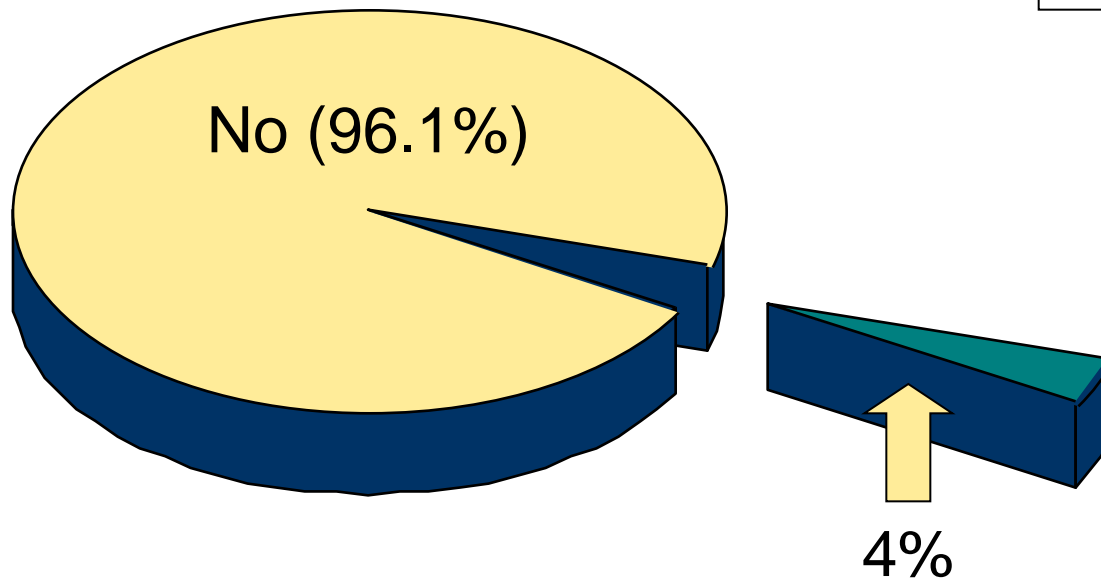
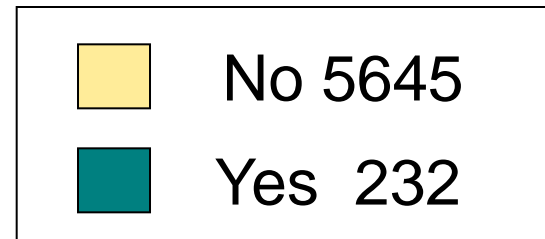
Does social anxiety disorder  
increase the risk of  
alcoholism?

# Self-medication hypothesis

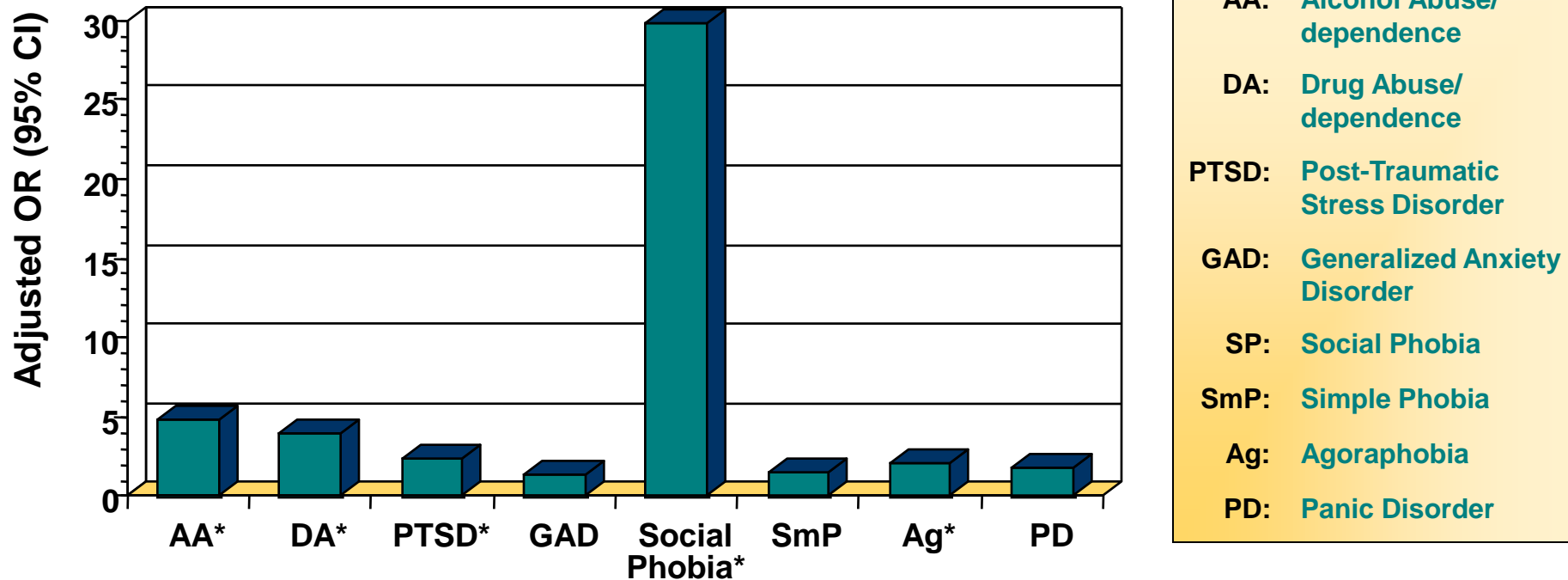


# Ever drink more than usual or use drugs not prescribed to help reduce fear or anxiety?

National Comorbidity Survey



# Adjusted odds ratios for association of DSM-III-R disorders with self-medication



# Drinking to cope in socially anxious individuals: A controlled study

Thomas, Randall & Carrigan, 2003 ACER 27:1937-1943.



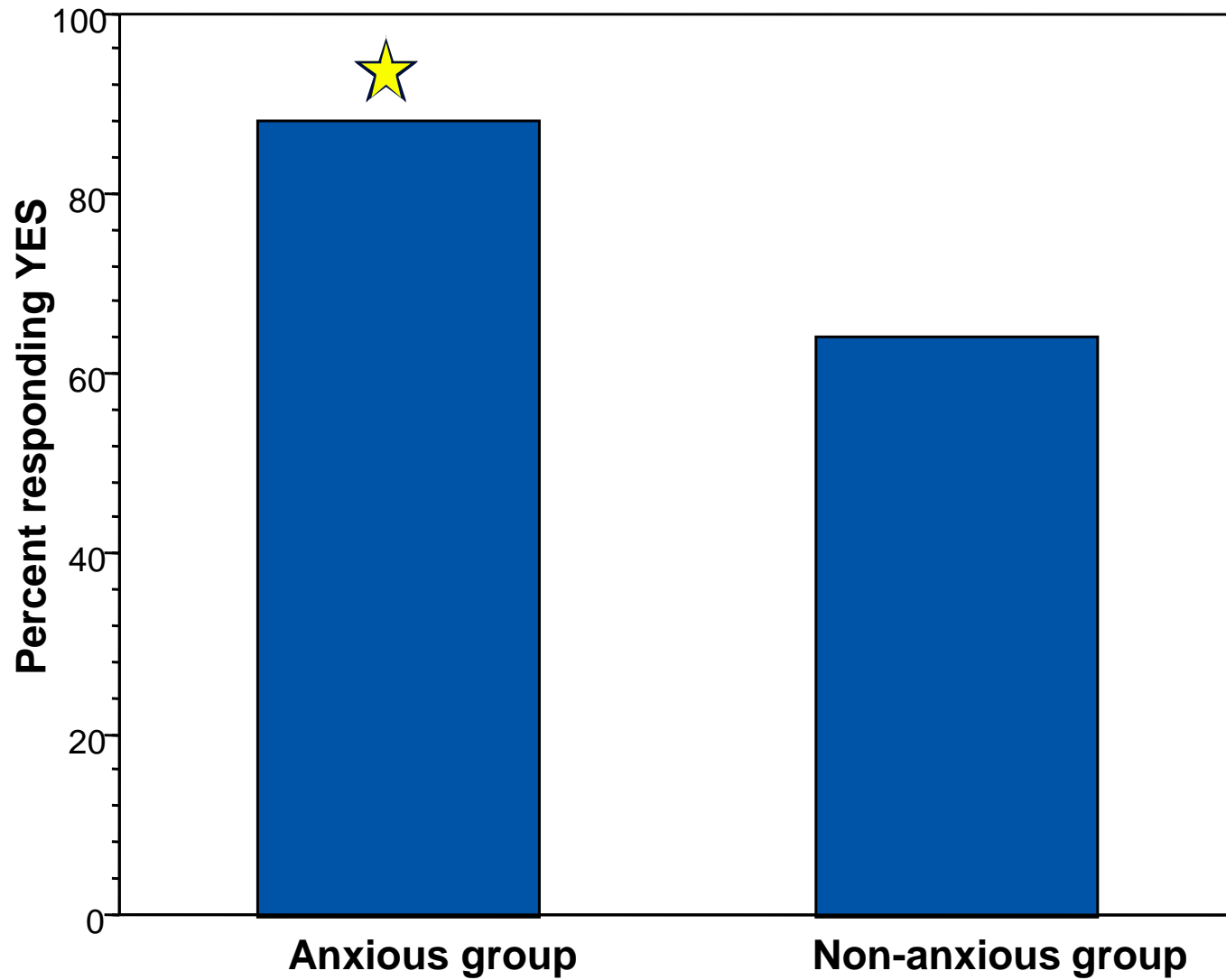
# Study description

---

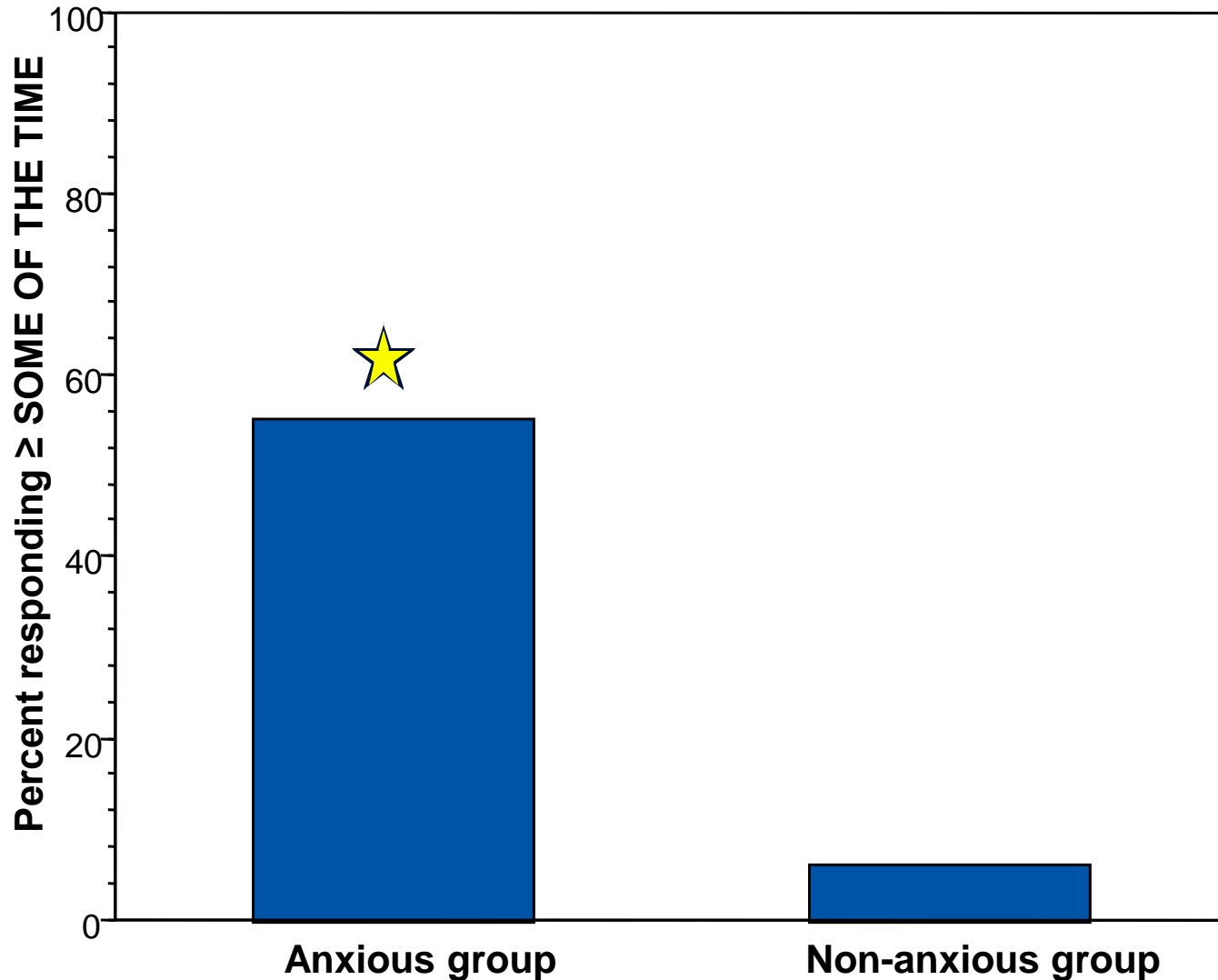
- Participants were involved in a larger project on attentional biases in socially anxious subjects who drink to cope
- Recruitment of participants via community ads
- Individuals were excluded who were currently receiving treatment for alcoholism or anxiety problems

“Do you ever drink alcohol to help you feel more comfortable or less anxious during social situations?”

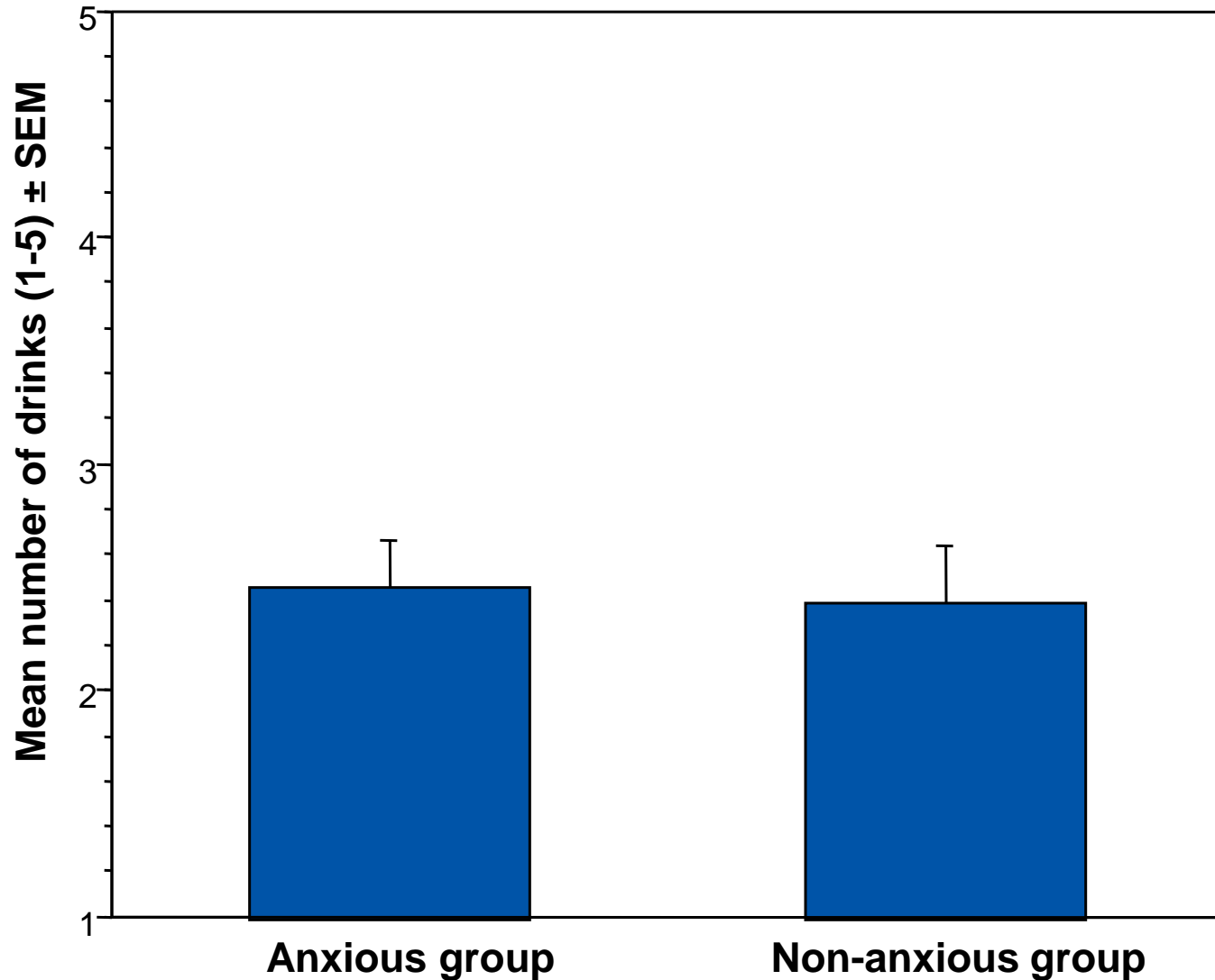




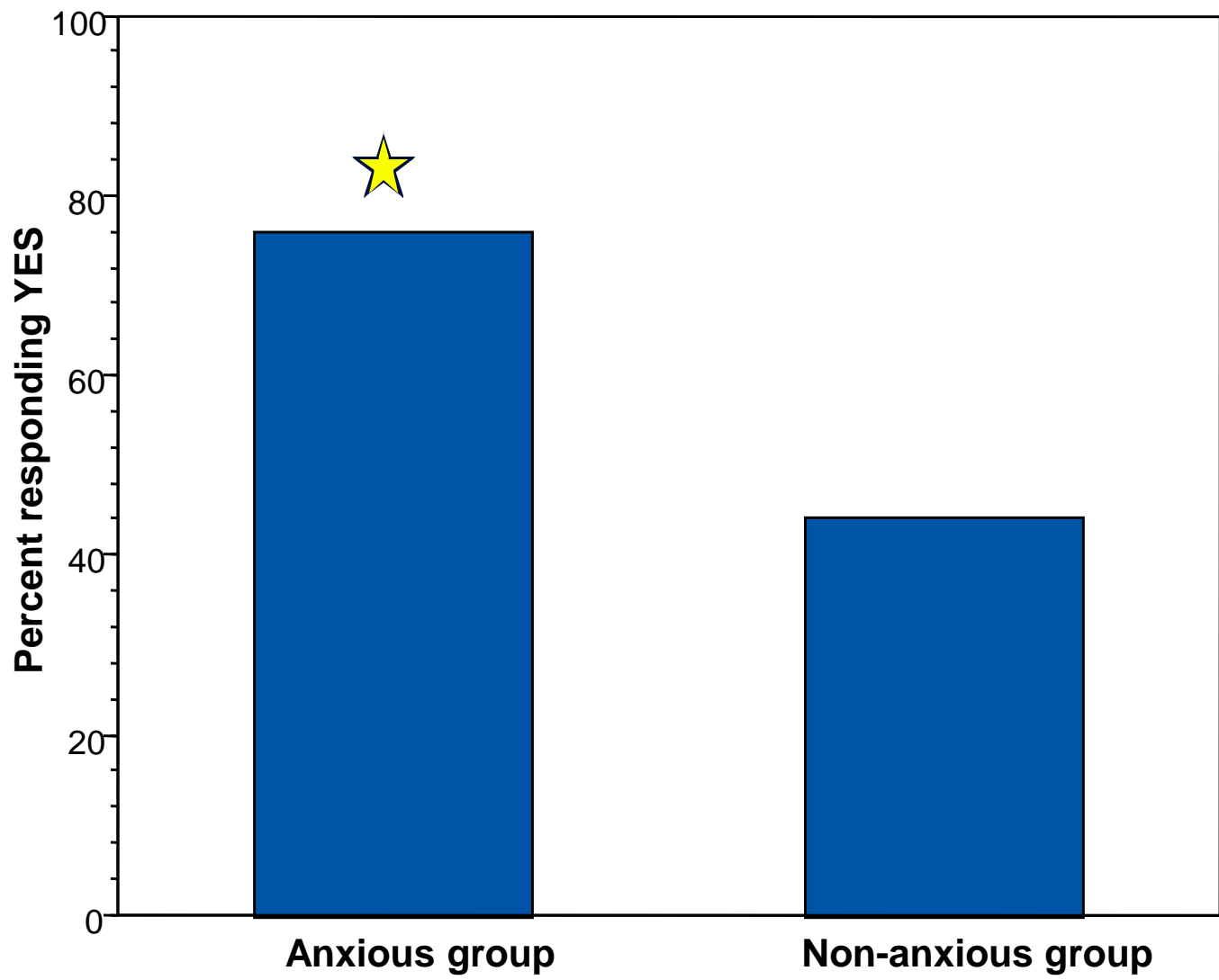
How often would you **AVOID** a social situation if you knew you would not be able to drink during it?



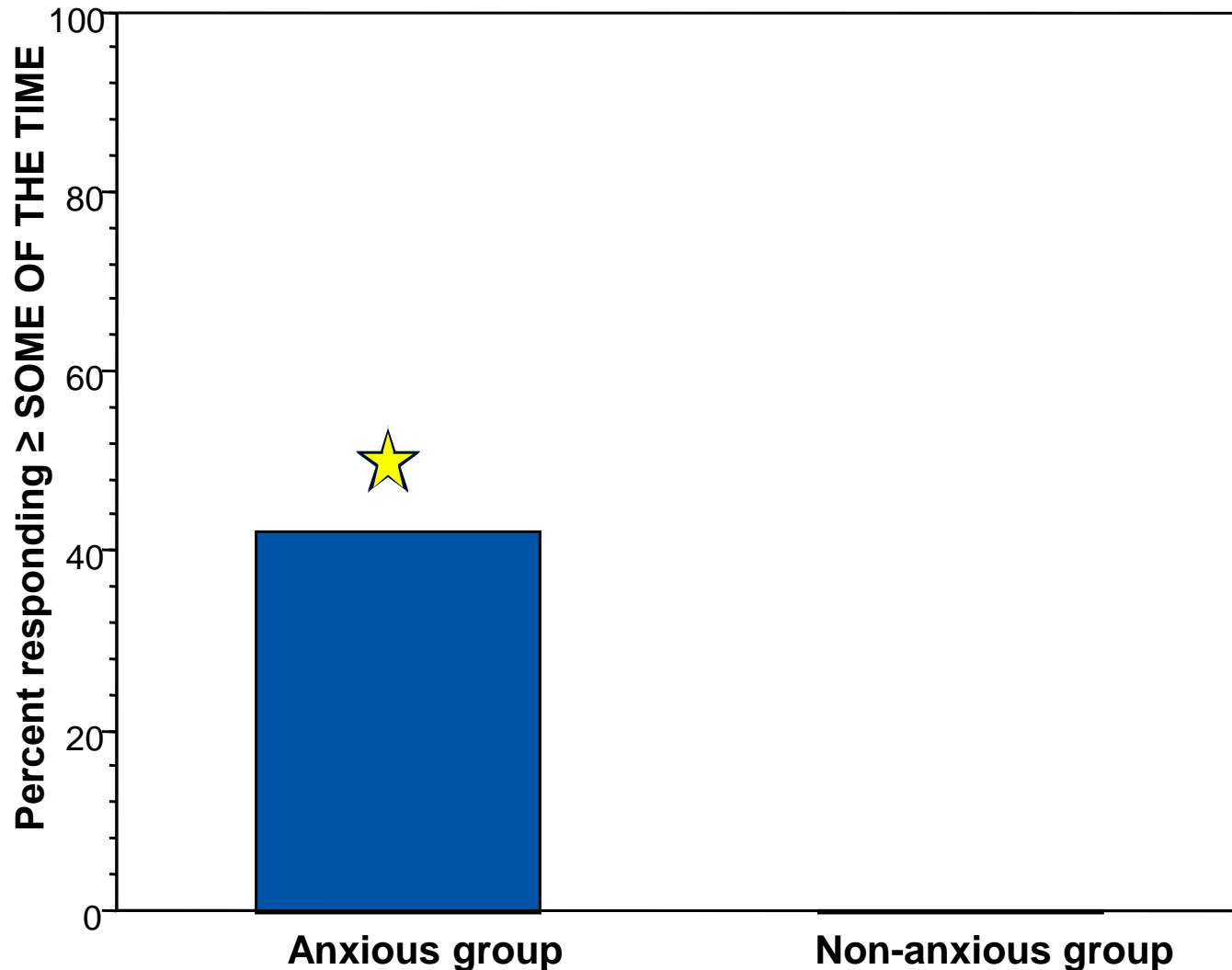
How many drinks would you usually need to feel comfortable or less anxious during social situations?



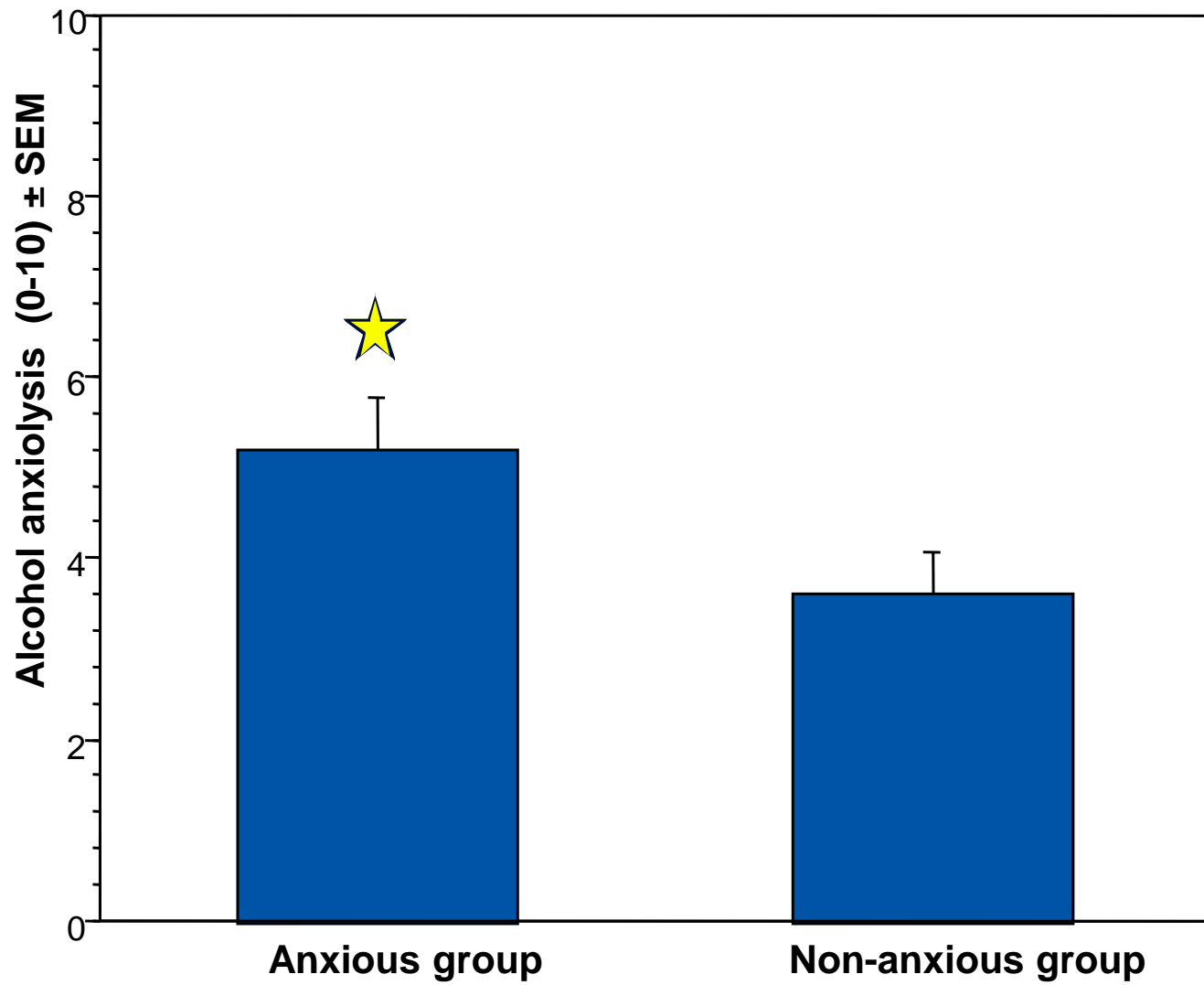
“Do you ever drink alcohol BEFORE a  
social situation  
to help you feel comfortable?”



How often would you **AVOID** a social situation if you knew you would not be able to drink before it?

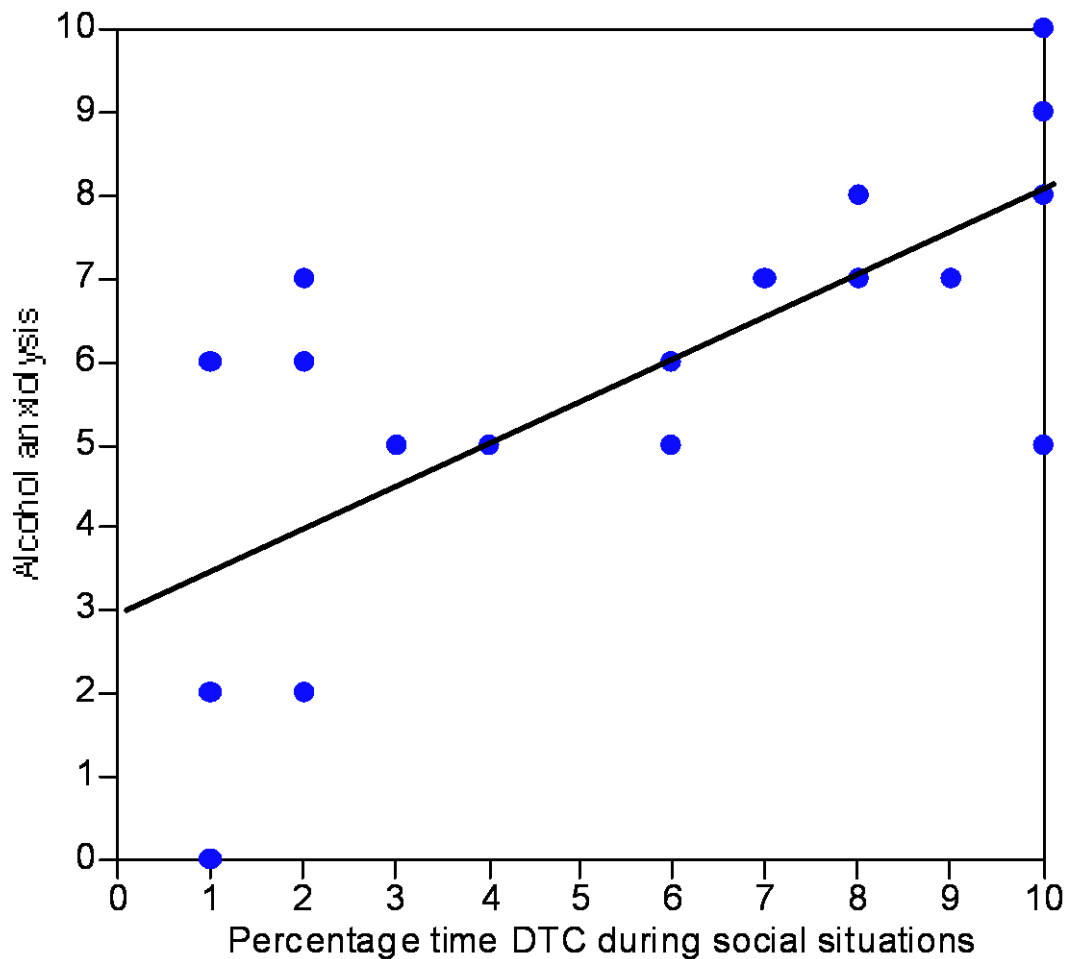


“How much does alcohol relieve your anxiety in social situations?”





# Anxiety relief by alcohol and drinking to cope: individuals with high social anxiety



Bivariate  $r = .71$ ,  $p < .001$   
 $R^2 = .50$




# Conclusions

---

- High prevalence of drinking to cope in both groups
- Socially anxious group was more likely than non-anxious group to drink both *in anticipation of* and *during* social situations
- Socially anxious individuals were more likely to “avoid”
- Alcohol appears to relieve anxiety more in the socially anxious group
- Degree of anxiety relief by alcohol is related to propensity to drink to cope

Does social anxiety disorder  
complicate treatment for  
alcoholism?

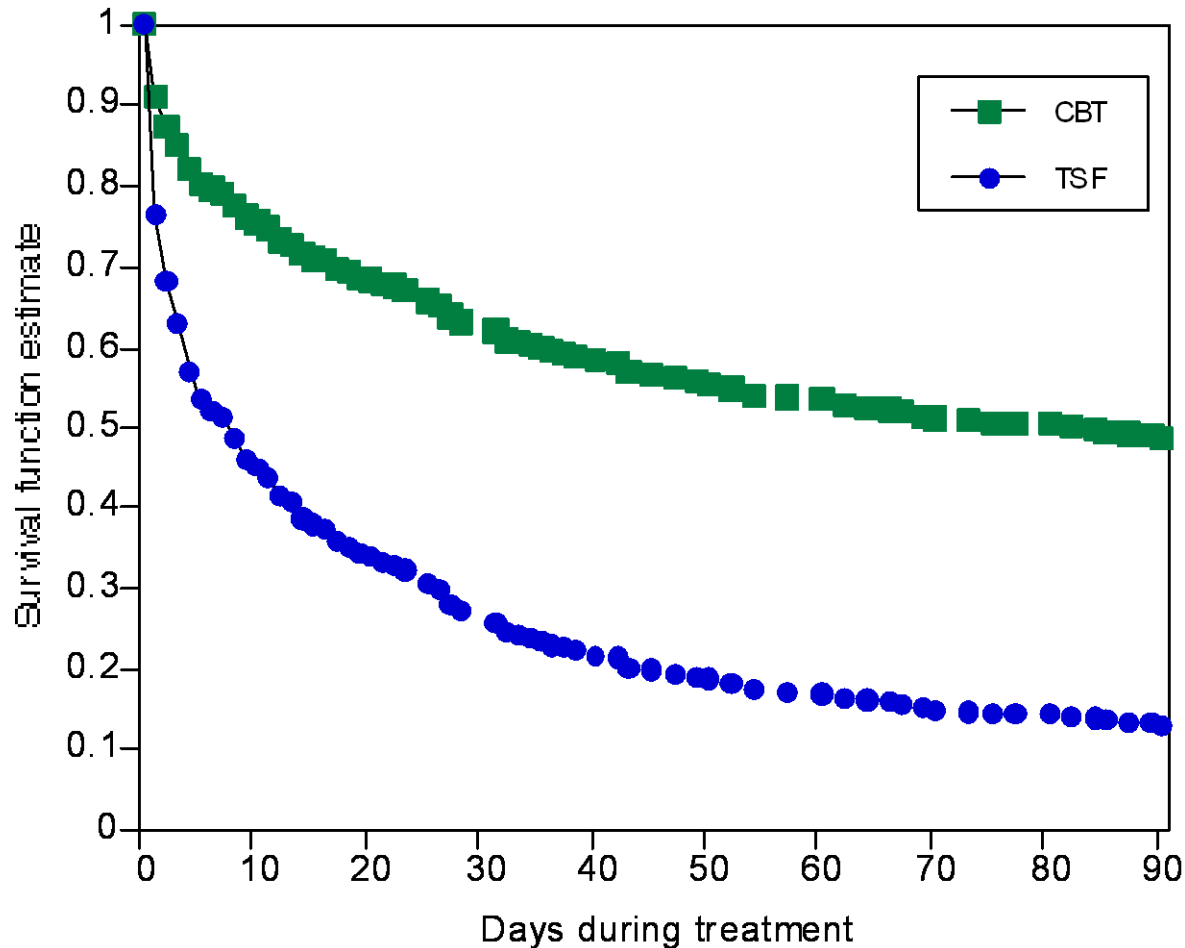


# Alcoholics with (vs. without) social anxiety disorder

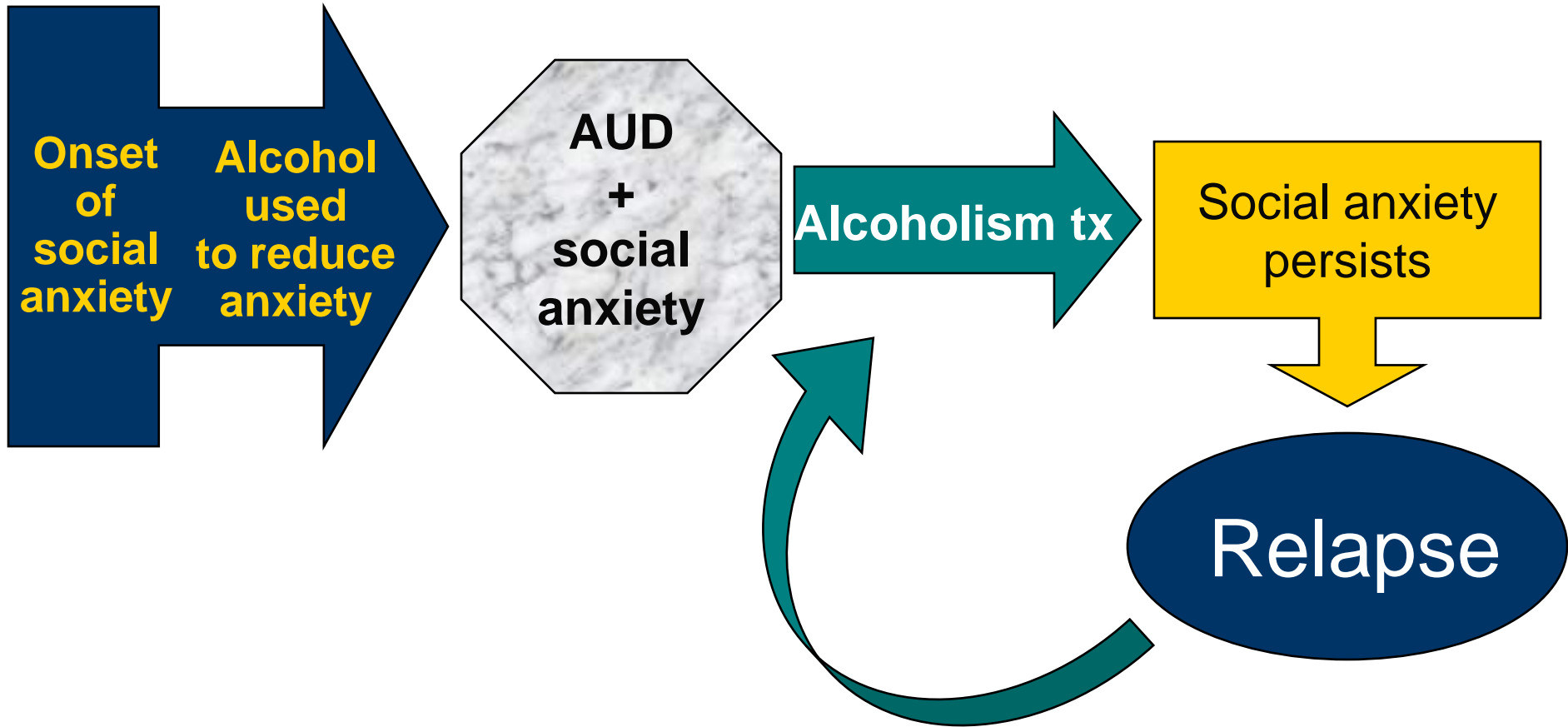
---

- Endorse drinking to improve functioning
- Greater endorsement of suicidal ideation
- More severe alcohol dependence
- More likely to have comorbid affective disorder (especially women)

# Alcoholic women with social anxiety disorder: Time to first heavy drinking day



# Working Model





# Comorbidity of alcoholism and social anxiety disorder

---

Clinical trials investigating optimal  
treatment approaches

# Concurrent alcoholism and social anxiety disorder

A first step toward developing effective treatments





# Participants

---

- All clients (N=93) were seeking treatment for alcohol problems
- All clients met DSM-III-R criteria for current alcohol dependence
- All clients met DSM-III-R criteria for current social anxiety disorder



# Study design

---

- Two group, randomized clinical trial:
  - Alcohol Only CBT
  - Alcohol and Social Phobia CBT
- 12 sessions of individual manual-guided cognitive behavioral therapy for both disorders
- Assessment points
  - Baseline
  - End of 12-week treatment
  - Follow-up at 3, 6, & 9 months after treatment completion (3 month follow-up is presented)

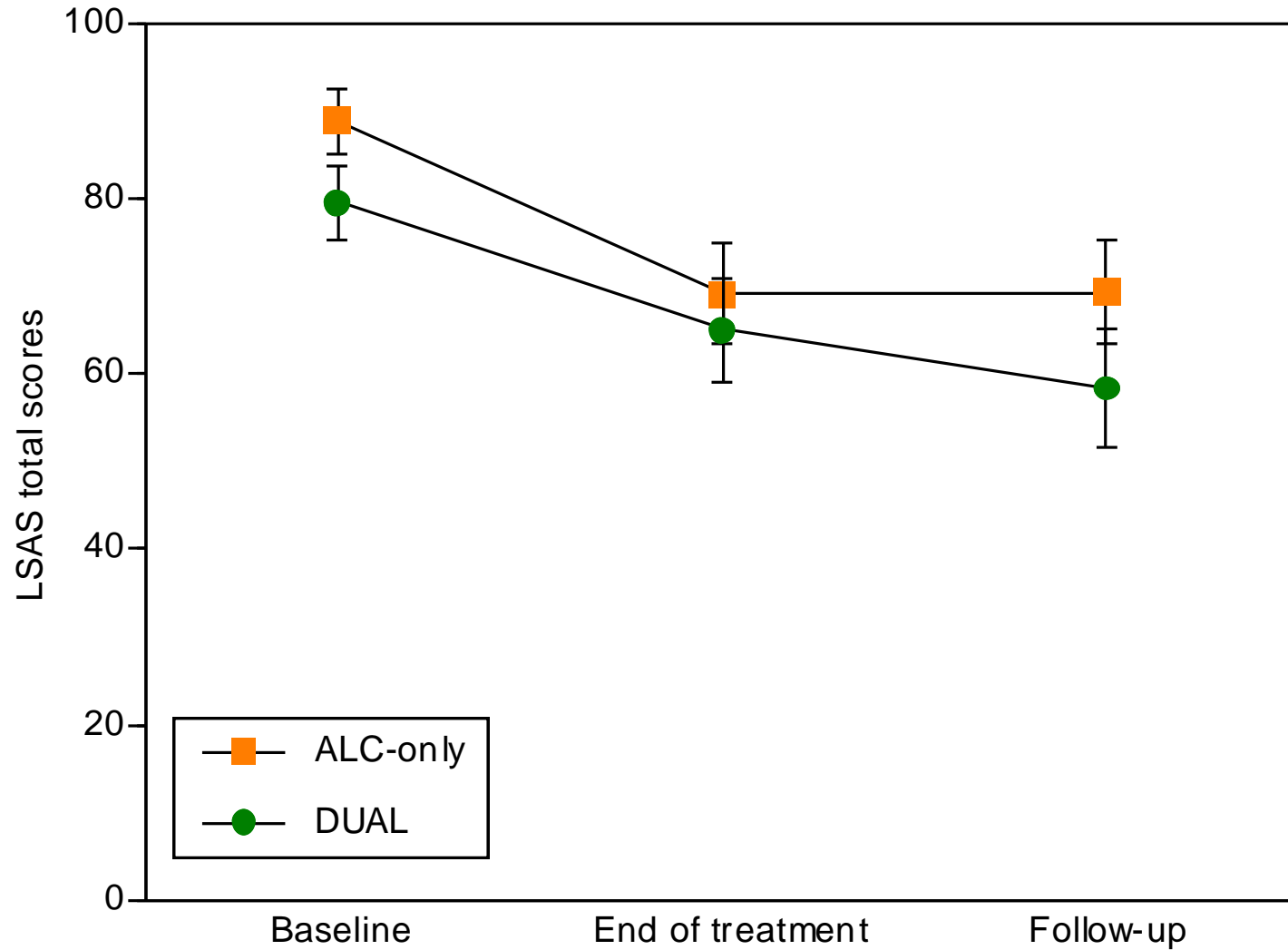


# Hypotheses

---

- Clients who received DUAL treatment would have *greater reduction in social anxiety* than clients who received ALC-only treatment
- Clients who received DUAL treatment would have *better drinking outcomes* than clients who received ALC-only treatment

# LSAS total scores



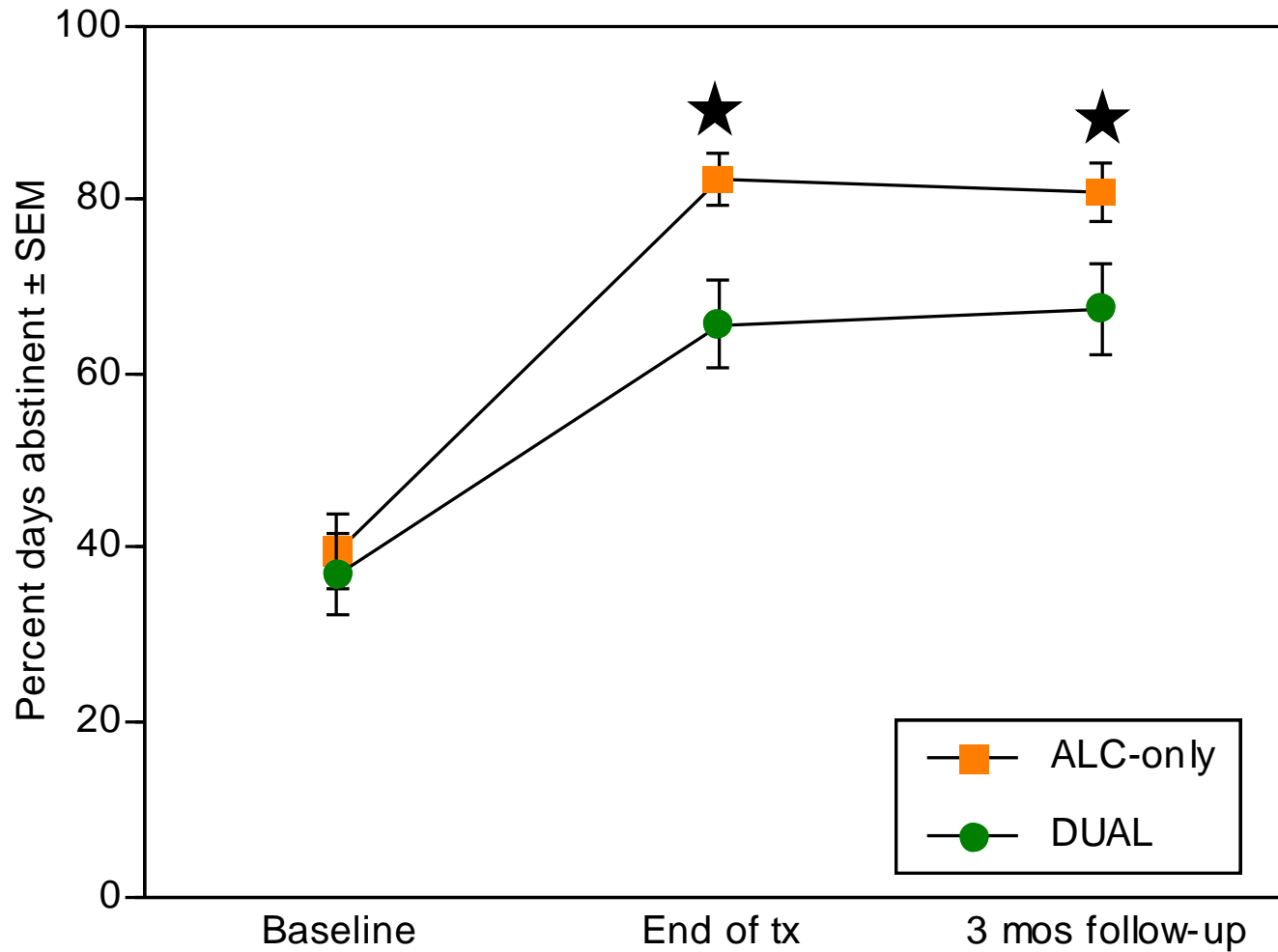


# Social anxiety outcomes

---

- Both groups had improvements on social anxiety measures (on average, scores dropped 20% from baseline levels)
- No treatment group differences on any social anxiety measures

# Percent days abstinent





# Drinking outcomes

---

- Both groups decreased alcohol use from baseline
- DUAL group had worse drinking outcomes than the ALC-only group at the 3-month follow-up
- Collateral reports corroborated self-reported alcohol use



# Conclusions/Implications

---

- ◆ Our hypothesis regarding improved drinking outcomes in the dual group was NOT supported
- ◆ Why not?
  - Did the two CBT therapies compete for client resources?
  - Did requiring “exposure” result in more drinking?
  - Should the disorders be treated in “stages”?
  - Was the improvement in social anxiety too modest?
  - Would pharmacotherapy for SAD work better? Quicker?





# Pharmacotherapy Trial

---

Paroxetine treatment of comorbid  
social anxiety disorder and alcoholism:  
A pilot study



# Study design

---

- ◆ Eight week, randomized, double blind, placebo-controlled
- ◆ All clients met diagnostic criteria for both social anxiety disorder and AUD
- ◆ All clients received one session of MI for alcohol problem prior to receiving medication
- ◆ Flexible dosing initiated at 20 mg/day; weekly increases of 20 mg/day to maximum dose of 60 mg/day
- ◆ Clinical and research ratings were collected separately



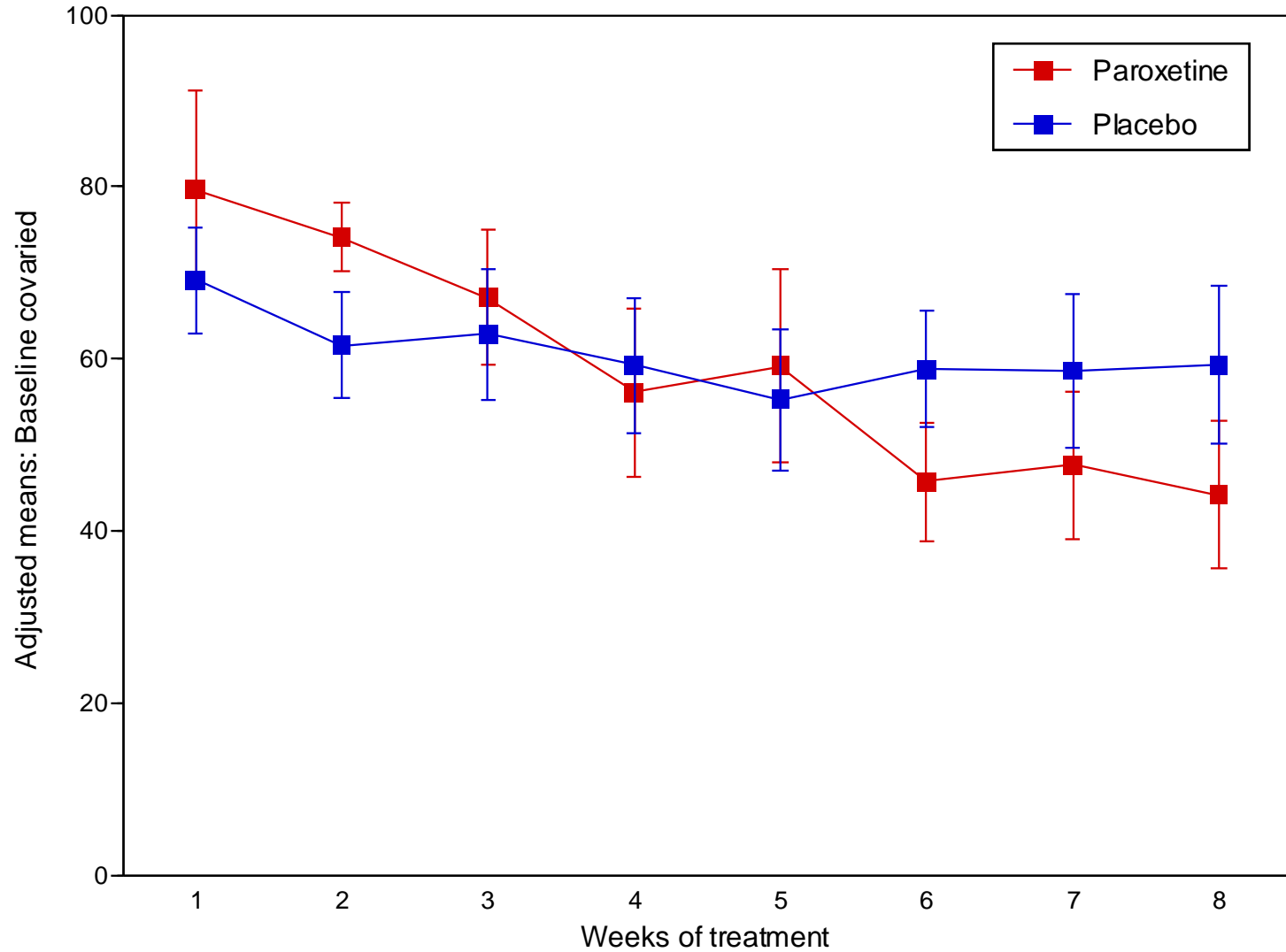
# Pre-treatment severity

---

	<u>Paroxetine</u>	<u>Placebo</u>
N	6	9
Age onset social anxiety	12	14
Severity rating (1-7) for social anxiety	4.7	4.3
Age onset drinking problems	19.6	24.7
ASI alcohol severity	0.52	0.57

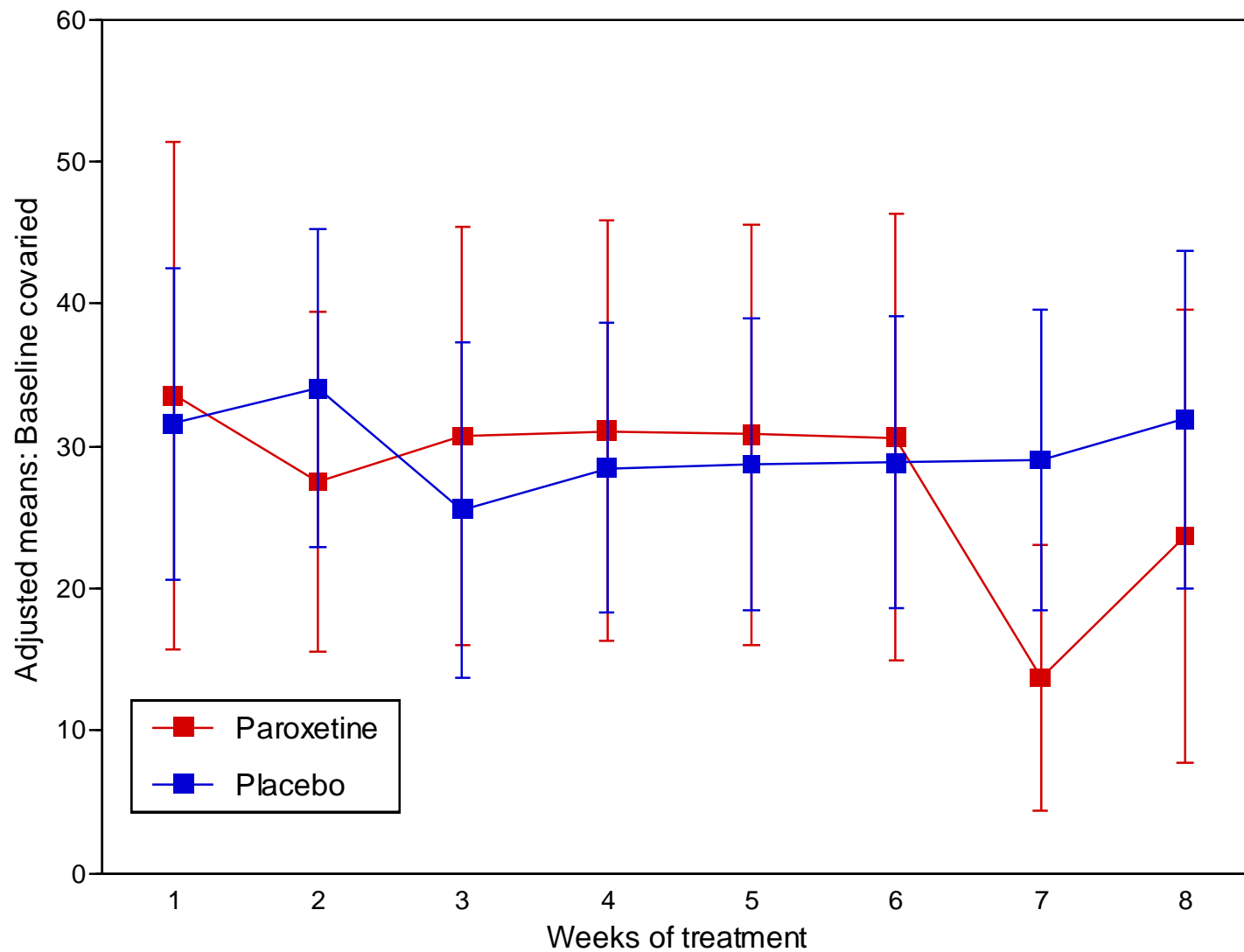
Baseline scores covaried in all outcome analyses

# LSAS Total Scores



Treatment x time effect:  $F=16.8$ ,  $p=.01$

# Percent heavy drinking days





# Conclusions/Implications

---

- ◆ Paroxetine was safe in individuals with alcohol use disorders
- ◆ Promising pilot results merited a larger scale study
- ◆ Longer treatment regimen may be needed to assess positive drinking outcomes
- ◆ Paroxetine may best benefit individuals who are relatively “early” in their alcohol use disorder (non-treatment seeking for AUD)



# Study in progress

---

Paroxetine for comorbid social  
anxiety disorder and AUD

Funded by NIAAA

# Study design

- 16 week, double-blind, placebo-controlled trial
- Participants are treatment-seeking for social anxiety (not alcohol problems)
- Participants report drinking to cope
- Participants meet criteria for AUD yet do not identify alcohol as a problem





# Primary outcome measures

---

## Social anxiety

- ◆ LSAS
- ◆ CGI
- ◆ Emotional Stroop

## Alcohol use

- ◆ Q/F measures
- ◆ Q/F drinking to cope
- ◆ Emotional Stroop



# Study sample to date

---

N	34
Male (%)	53%
Caucasian (%)	92%
Age	28
LSAS total	91
Percent days drinking (30 days, BL)	42%
Percent days drinking to cope (of drinking days)	58%
Drinks per drinking day	6



# Lessons and Speculations

---

- Many people with high social anxiety and social anxiety disorder drink alcohol as a primary coping strategy
- Social anxiety may
  - *initiate* drinking
  - *maintain* drinking to decrease anxiety
  - *increase the risk of relapse* if left untreated in alcoholism treatment



# Our Plans for Future Research

---

- Determine appropriate staging of interventions for social anxiety (e.g., sequential, integrated, etc.)
- Evaluate the “uniqueness” of the social anxiety/alcohol relationship
- Use lab-based studies to assess whether alcohol actually reduces social anxiety (and for whom)
- Investigate the role of alcohol beliefs and expectancies in drinking-to-cope in socially anxious individuals

# Acknowledgements



## Collaborators

Maureen Carrigan, Ph.D.

Angelica Thevos, Ph.D.

Sarah Book, MD

Shannon Anderson

Suzanne Thomas, Ph.D.

Darlene Moak, MD



# Situations in which drinking to cope is more common in socially anxious individuals

	Anxious	Non-anxious
Eating at restaurants in front of strangers	96%	24%
In situations where you'll be criticized	44%	12%
Going to a party with strangers present	84%	52%
Meeting people for the first time	56%	16%
In situations where you'll likely appear nervous	56%	16%

## Situations in which drinking to cope is not endorsed in either sample

	Anxious	Non-anxious
Giving an oral report or speech to a group	12%	4%
Taking a test of your ability, skill, or knowledge	8%	0%
Working while being observed	8%	0%