



# The Association Between Parental Substance Abuse and Social Phobia

Nancy Li, Applied Data Analysis, Wesleyan University

## Introduction

- Social phobia (or social anxiety disorder) significantly impacts children's social functioning, academic performance, and well-being.
- Parental substance abuse, particularly alcohol use disorder, is a key risk factor for the development of social phobia in children (Pagano et al., 2007; Knappe et al., 2008).
- In the US, 1 in 8 children has a parent with a substance use disorder (Lipari & Van Horn, 2017).
- Gender differences in the relationship between parental substance abuse and social phobia onset are less explored, with some studies indicating a stronger effect on females (DeWit et al., 2005).

## Methods

### Sample

- The sample from the first wave (2001-2002) of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) represents the civilian, non-institutionalized adult population of the United States
- The NESARC included a sampling of Blacks, Hispanics, and young adults aged 18 years and older.
- Face-to-face computer-assisted interviews were conducted in respondents' homes following informed consent procedures.
- who provided complete data on their parents' alcohol or drug use status.

### Measure

- Parental Substance Abuse: This variable is categorized into four levels: neither parent ever engaged in alcohol or drug abuse, only the mother had a history of substance abuse, only the father had a history of substance abuse, and both parents had a history of substance abuse.
- Social Phobia: Lifetime Social Phobia is evaluated based on DSM-IV criteria, diagnosing social anxiety disorder when an individual experiences significant fear in a range of social situations.

## Research Questions

- Does the NESARC dataset reveal an association between parental substance abuse and social phobia?
- Does the association between parental substance abuse and social phobia vary depending on whether the mother or the father is the one engaging in substance abuse?

## Results

### Univariate

- 4.69% of the subjects met the criteria for DSM-IV lifetime social phobia.
- Of the subjects studied, 3.35% have both parents with substance abuse problems, 16.85% have only their fathers with substance abuse issues, 2.3% have only their mothers with substance abuse problems, and 77.5% have neither parent affected by substance abuse.

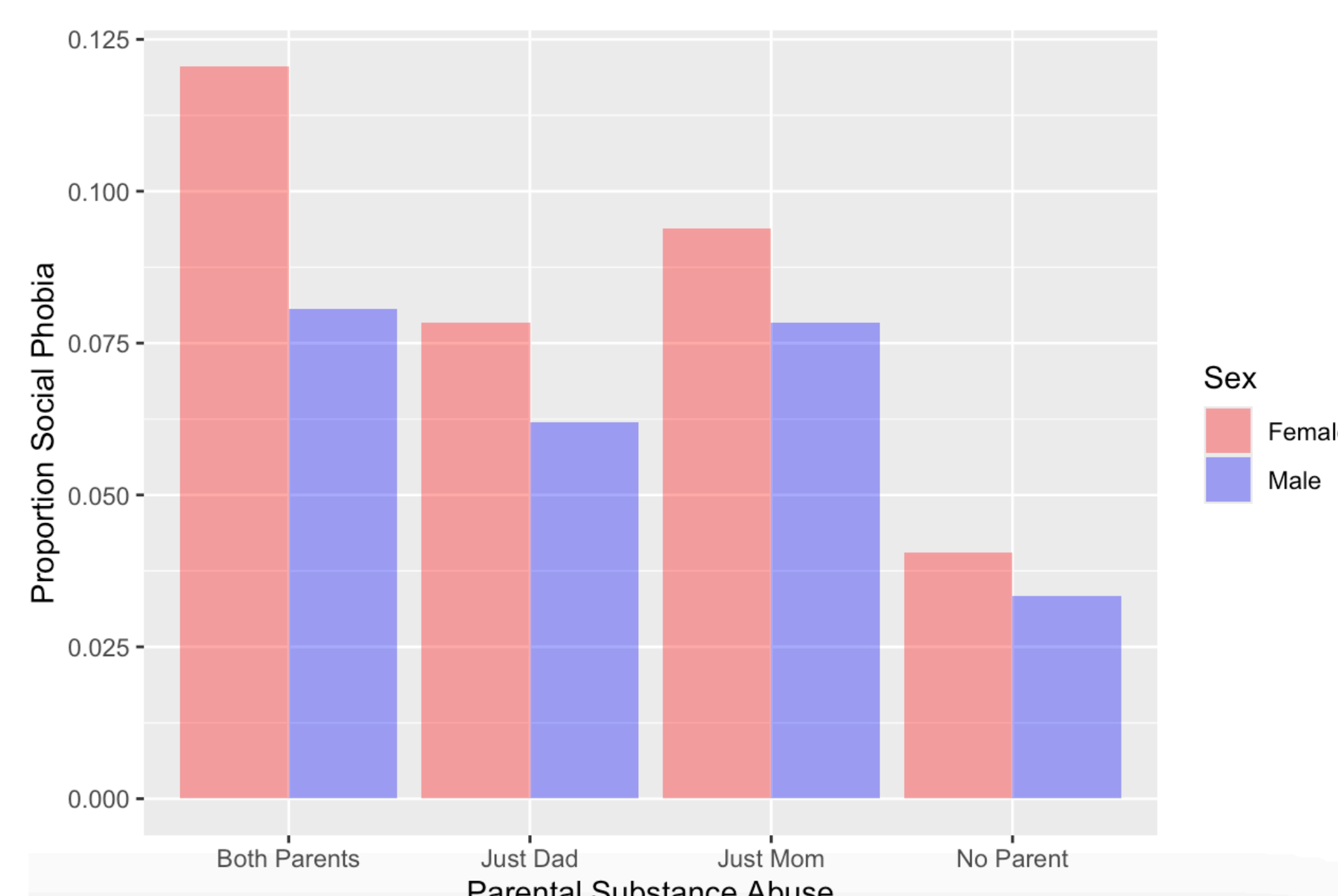


Figure 1. The proportion of Subjects who have social phobia at each Parental Substance Abuse and Sex Combination

### Bivariate

- Chi-Square analysis revealed that subjects with both parents who experienced substance abuse problems were more likely to have social phobia (10.66%) compared to those with only mother having substance abuse problem (8.82%), those with only fathers having substance abuse problem (7.07%), and those with neither parents having substance abuse problem (3.75%),  $X^2 = 283.26$ ,  $df = 3$ ,  $p\text{-value} < 2.2e-16$ .
- The post-hoc test indicates that the difference between groups is significant for all group combinations, with the exceptions of 'both parents' versus 'just mom,' and 'just mom' versus 'just dad.'
- As expected, parental substance abuse and social phobia are **significantly** related; however, the **difference between whether the mom or the dad is the one engaging in substance abuse is not significant.**

### Multivariate (cont.)

- Parental substance abuse is significantly associated with social phobia after controlling for whether any of the subject's parents displayed antisocial behavior.

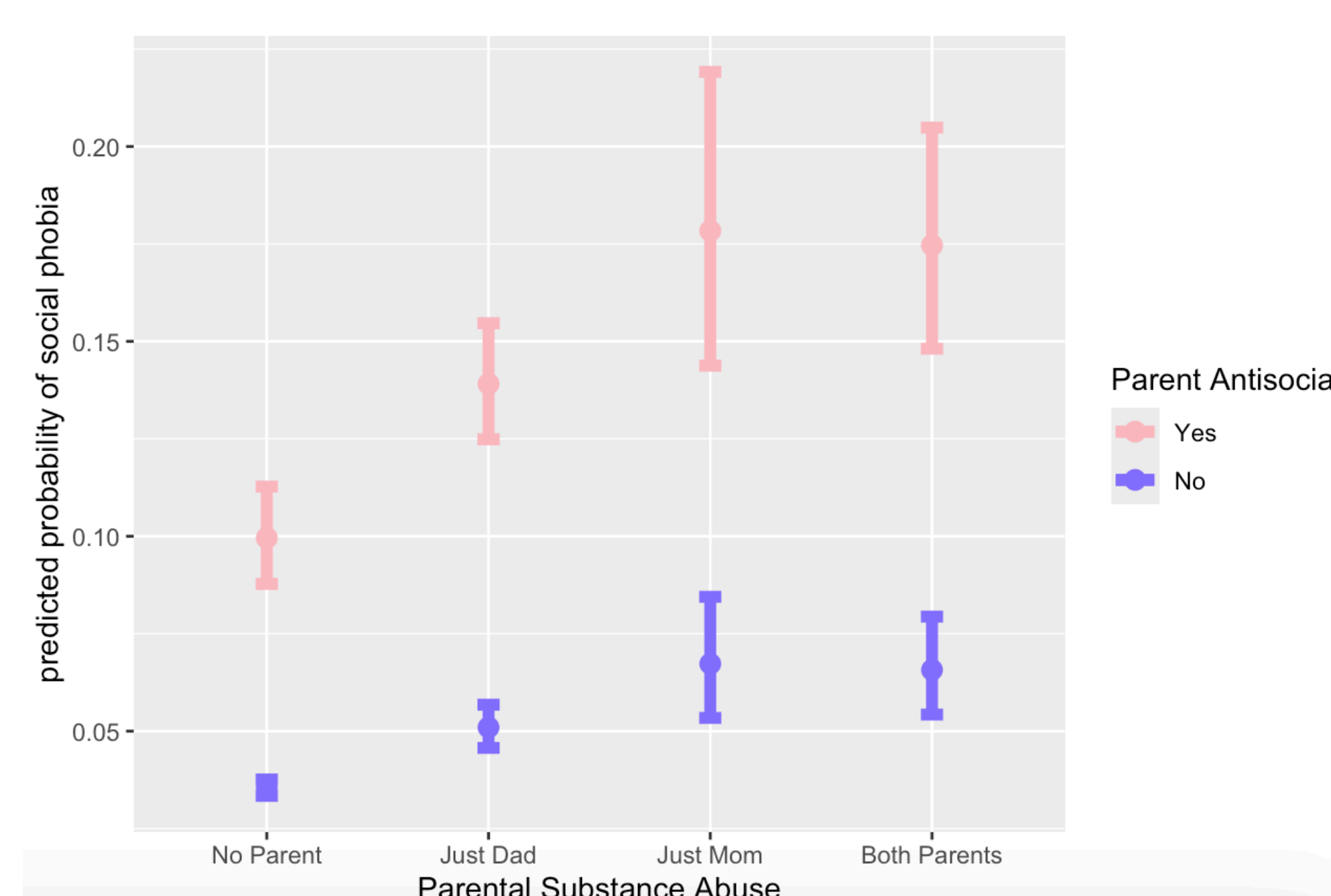


Figure 2: Predicted Probability of Social Phobia by Parental Substance Abuse and Antisocial

### Multivariate

- When considering biological sex, females exhibit a higher proportion of social phobia compared to males across all groups. (Figure 1)
- When including sex as a second explanatory variable in the regression test, the association between parental substance abuse and social phobia remains significant.
- The odds of developing social phobia are 21% less for male than female

- The odds of developing social phobia are 3 times higher for individuals whose parents have had antisocial behavior compared to those whose parents did not have antisocial behavior; this association is significant.
- After controlling for this variable, for individuals with only their mothers having substance abuse problems, the odds of developing social phobia are 3% higher than for those with both parents having substance abuse problems; however, this association is not significant

## Discussion

- Individuals with a history of parental substance abuse show a significantly higher likelihood of developing social phobia, even after controlling for factors like antisocial behavior.
- The study's findings show that parental substance abuse increases the risk of social phobia in both males and females, with females being slightly more likely to be affected.
- Maternal and paternal substance abuse both increase the risk of social phobia, but the differences between their effects are not statistically significant.
- Limitations include that the result cannot be used to establish causal relationships.
- Future research should investigate potential mechanisms, including genetic predispositions, environmental stressors, and parental modeling of behaviors, to better understand how parental substance abuse contributes to the development of social phobia.

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Knappe, S., Beesdo, K., Fehm, L., Lieb, R., & Wittchen, H.-U. (2008). Associations of familial risk factors with social fears and social phobia: evidence for the continuum hypothesis in social anxiety disorder? *Journal of Neural Transmission, 116*(6), 639-648.

Lipari, R., & Van Horn, S. (2017, August 24). Children Living with Parents Who Have a Substance Use Disorder. *Samhsa.gov*.

Pagano, M. E., Rende, R., Rodriguez, B. F., Hargraves, E. L., Moskowitz, A. T., & Keller, M. B. (2007). Impact of parental history of substance use disorders on the clinical course of anxiety disorders. *Substance Abuse Treatment, Prevention, and Policy, 2*(1).