

The Relationship Between Hallucinogen Use and Social Phobia

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Introduction

- Social phobia, or social anxiety disorder, can lead to a decreased state of mental health and can ultimately lead to other problems such as depression, social problems, alcohol problems, and drug problems (NIH).
- Hallucinogenic drugs in particular stimulate symptoms that present similarly to symptoms of social phobia (Sareen et al. 2006).
- Researchers have linked a connection between substance users, their sex, and social phobia diagnosis (Zimmerman et al. 2004).
- Thus, those who use hallucinogens may be more prone to diagnoses of social phobia.

Methods

Sample

- Young adults (age 18 to 25) who have used hallucinogenic drugs in the past (n=39,861) were drawn from the first wave of the National Epidemiologic Study of Alcohol and Related Conditions (NESARC).
- NESARC is a nationally representative sample of non-institutionalized adults in the U.S.

Measures

- Social phobia was diagnosed using the NIAAA, Alcohol Use Disorder and Associated Disabilities Interview Schedule – DSM-IV (AUDADIS-IV).
- Any use of hallucinogenic drugs was measured with the question: “Have you ever used hallucinogens?”.
- Sex was measured with the question: “Are you male or female?”.

Research Questions

- Is there a relationship between hallucinogen use and having social phobia?
- Does this relationship differ between males and females?

Results

Bivariate

- Regardless of social phobia diagnosis, there was a greater number of people who did not use hallucinogens.
- However, among hallucinogen users, there is a greater proportion of those with social phobia than those without social phobia.
- Chi-square analysis showed that **those who have used hallucinogens in their lifetime were significantly more likely to be diagnosed with social phobia**, $X^2=98.26$, $df=1$, $p= <2.2e-16$.

Multivariate

- Logistic regressions found that hallucinogen use was significantly associated with DSM-IV diagnosis of social phobia ($p<0.001$).
- Proportionally, there were more females than males regardless of hallucinogen usage that were diagnosed with social phobia (Figure 1).
- After controlling for sex, those who use hallucinogens are still significantly more likely to be diagnosed with social phobia ($OR=2.8$, $p<0.001$).
- Regardless of hallucinogen use, females are 1.5 times more likely to be diagnosed with social phobia ($OR=1.5$).

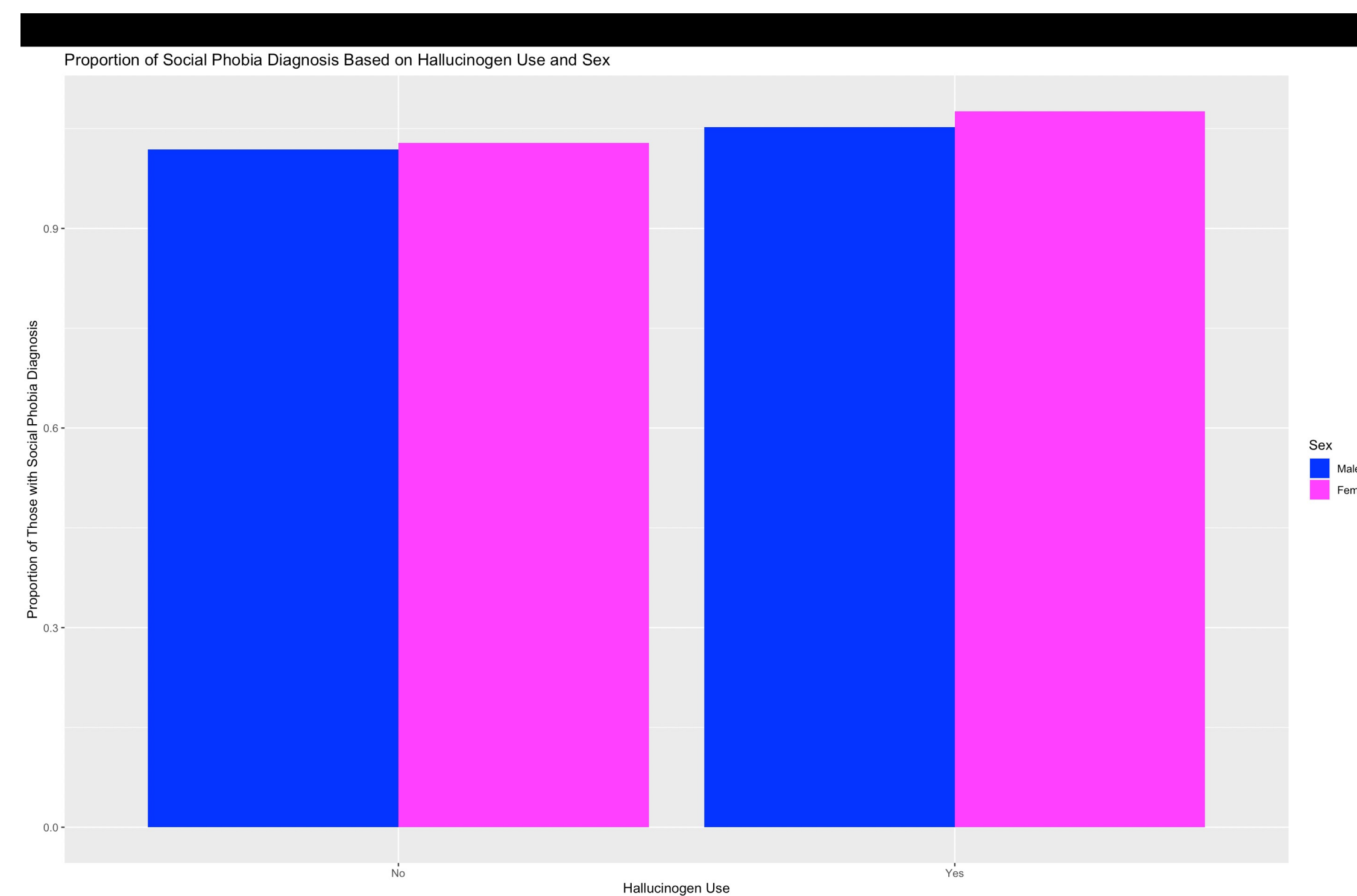


Figure 1: Multivariate Graph of The Proportion of Social Phobia Diagnosis Based on Hallucinogen Use and Sex

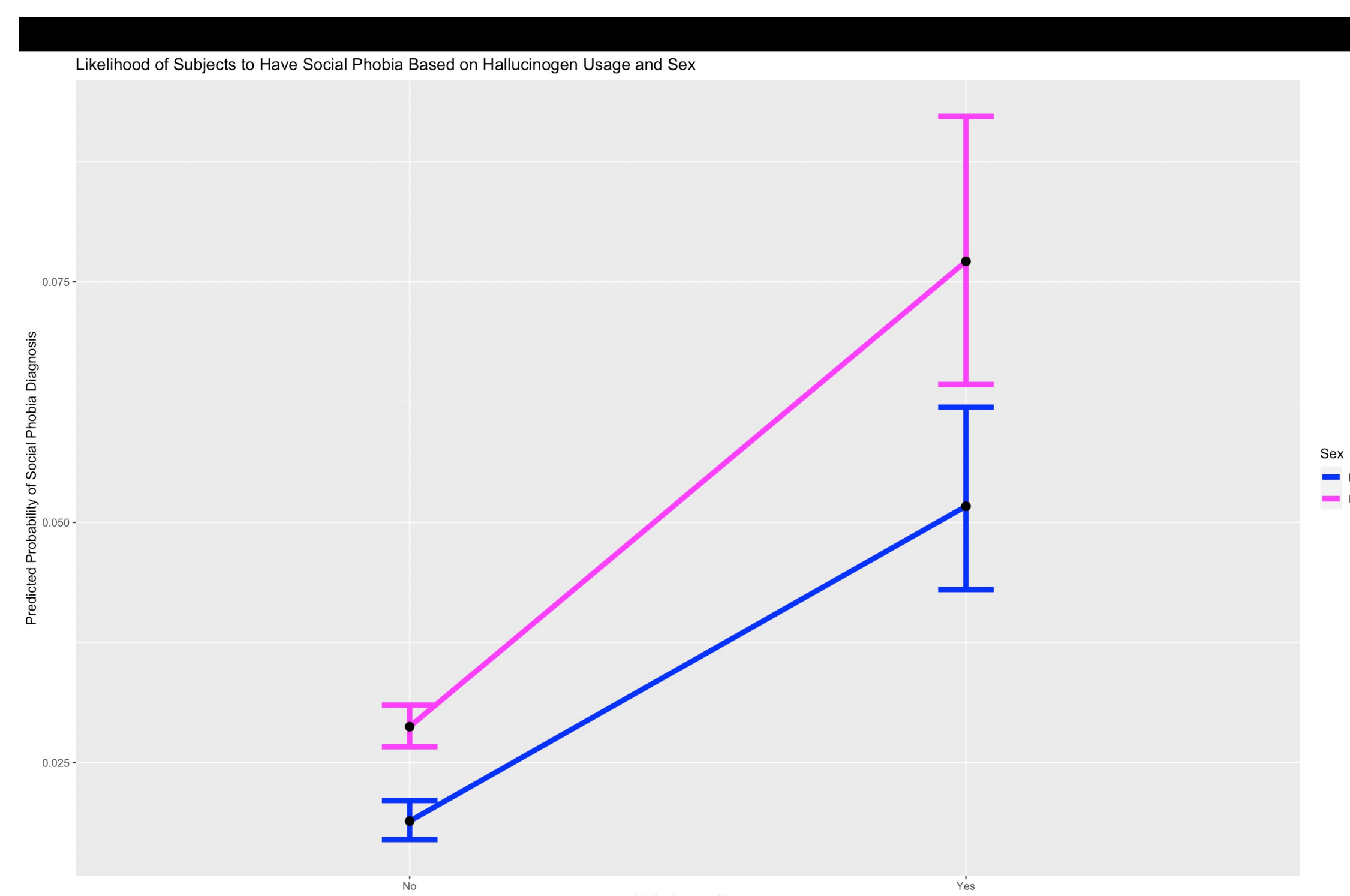


Figure 2: Logistic Regression Graph of the Likelihood of Subjects to Have Social Phobia Based on Hallucinogen Usage and Sex

Discussion

- Female individuals who use hallucinogens are more likely diagnosed with social phobia than males.
- Present findings can be used to help mental health professionals to provide more targeted treatment to those struggling with social phobia.
- Additionally, these findings may help provide a path for further research to determine which parts of the brain are affected by hallucinogens that may worsen the symptoms of social phobia.
- Further research is needed to determine whether targeted treatment of social phobia can reduce an individual's hallucinogen usage.

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