



The Association Between Long Term Tobacco Use and the Prevalence of Social Phobias Among Different Genders



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Introduction

- Cigarette smoking is leading the ranks of preventable disease death in the US. Not only do cigarettes kill 480,000 Americans a year, but they also increase healthcare spending (CDC, 2018)
- Currently, 15 million American adults have social anxiety disorder putting them at risk for substance abuse and depressive disorders (MHA).
- Smoking displays a high comorbidity with anxiety. Furthermore, smoking causes present social phobia disorders to worsen. (National Library of Medicine)

Research Questions

- Among Americans, does long term smoking and tobacco use worsen or cause the prevalence of social phobias?
- Does this relationship differ due to the gender of the subjects?

Methods

Sample

- Respondents (n=42,093) were drawn from Wave 1 of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), conducted by the National Institute of Alcohol Abuse and Alcoholism (NIAAA).

Measures

- Tobacco use was measured if the participant was a current user, ex-user, and lifetime nonsmoker. If the participant was a current user or ex-user, it was labeled “yes”, and if the participant was a lifetime nonsmoker, it was labeled “no”.
- Social phobia was measured using the question, “Have you ever had a strong fear or avoidance of social situations?” This variable was coded dichotomously in terms of the presence or absence of social anxiety.

Results

Bivariate

- Chi-Square analysis showed that tobacco use is significantly associated with the display of social phobias. ($\chi^2 = 72.53$, $p = 0.00$).
- A logistic regression analysis shows that there is a significant association between tobacco use status and the prevalence of social phobias. ($P = 0.00$)

Multivariate

- Logistic regression analysis showed that tobacco users is significantly associated with the display of social phobias ($p = 0.00$).
- After controlling for sex, the association between tobacco use and the rise in social phobia prevalence is still significant.
- An odds ratio displays that tobacco users are 1.38 times more likely to display social phobias than non-users. Furthermore, females are roughly 17% less likely to display social phobias than males. (Figure 3)

Figure 1: Likelihood of Developing Social Phobias Based on Tobacco Use Status

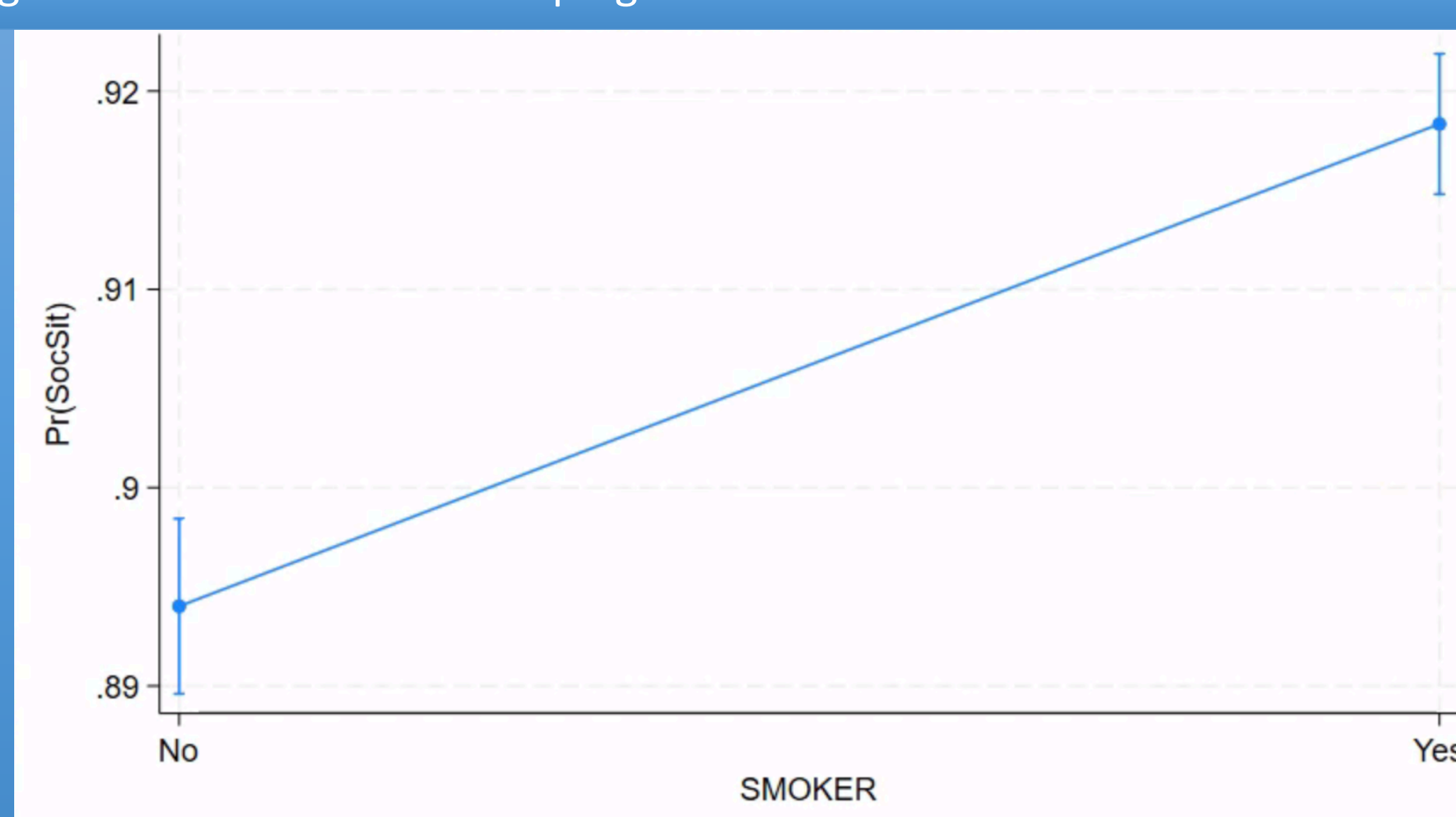


Figure 2: Relationship between Tobacco Use and the Prevalence of Social Phobias

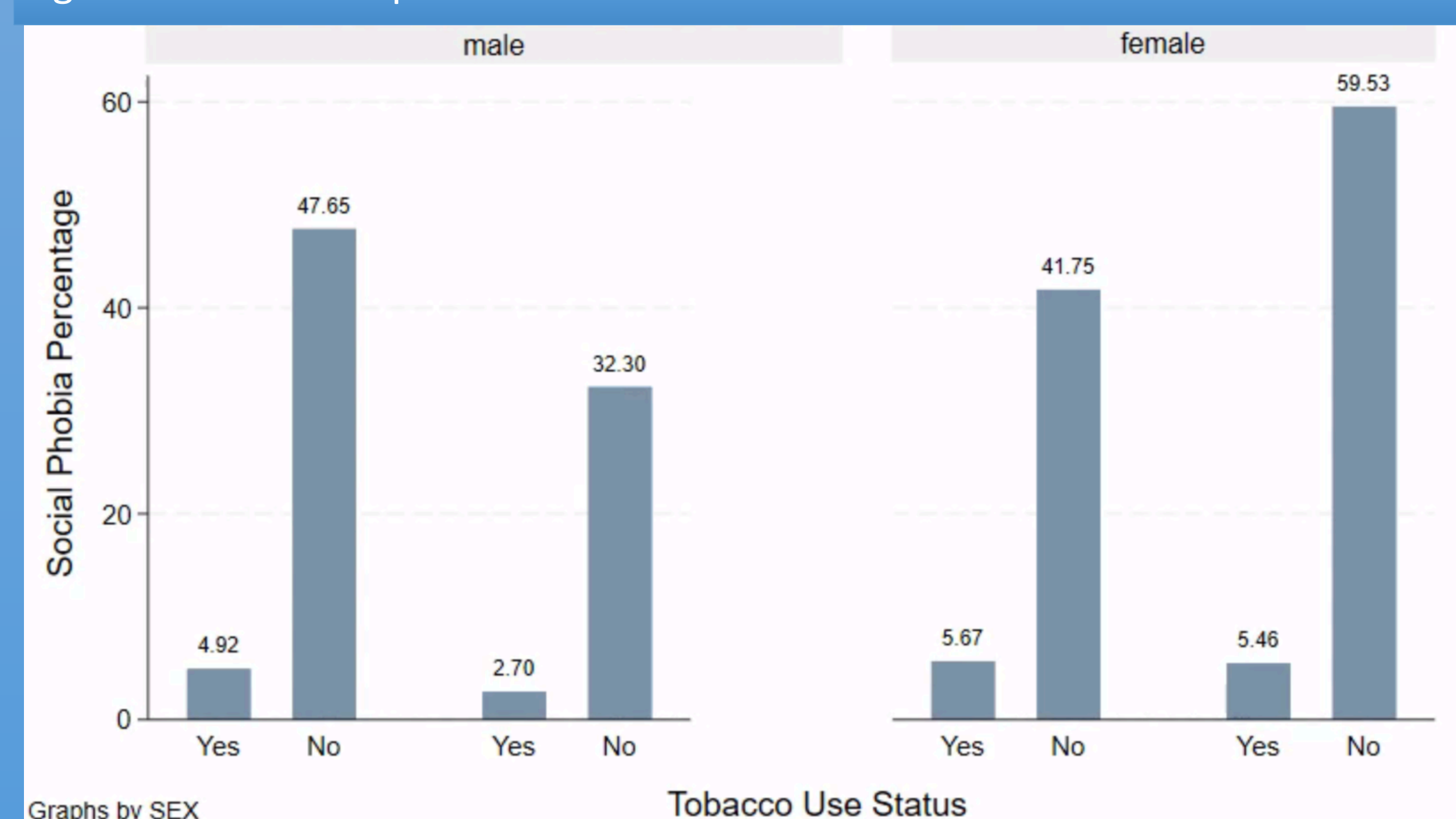


Figure 3: Likelihood of Developing Social Phobias Based on Tobacco Use Status Controlling for Sex



- Gender was measured based on if the participant labeled themselves as a male or a female.

Discussion

- Those who are tobacco users are significantly more likely to display social phobias.
- The sex of the individual does not significantly effect the association between tobacco use and the display of social phobias.
- Future research may be valuable in determining how to help those who have nicotine addictions that worsen their social anxiety.

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