



The Relationship Between Parental Alcohol Problems and their Children's Alcohol Addiction in Adulthood

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Introduction

- Alcoholism is the leading preventable cause of death in the United States, shortening the life of Americans by 26 years on average. (CDC, 2022)
- Additionally, it is a leading risk factor for death and disability and impacts 4% of the adult population (Wang et al., 2020)
- Family dynamics, such as parental drinking habits, may have an influence on whether a person becomes an alcoholic.
- Parental interactions with their children have been shown to influence a child's behavior and alcohol consumption (Moore, Graham F, et al., 2010).
- Parental alcohol consumption may influence their child's decision to drink and increase the risk of alcoholism in their adult life.

Research Questions

- Are parental alcoholism problems associated to whether their children's alcohol addiction in their adulthood?
- Does the association between children's alcohol addiction in adulthood based on parental alcohol problems differ between gender?

Methods

Sample

- Respondents (n=42,059) were drawn from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).
- NESARC represents the non-institutionalized population of 18 years old and older in the U.S.

Measures

- The presence of alcoholism traits was assessed by collapsing variables that addressed alcohol withdrawal traits.
- A scale was created where a score of 4 traits or higher meant a sign of alcohol addiction and a score of 3 traits or lower meant no sign of alcohol addiction.
 - These include nausea, not sleeping, shaking, anxiety, hallucination, and restlessness when alcohol wore off.
 - All 6 traits were non-binary
- Parental alcohol problem status for both fathers and mothers was coded dichotomously.

Results

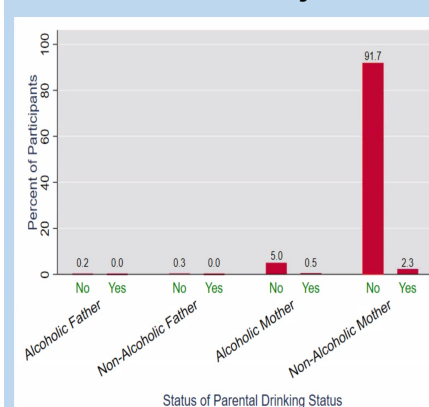
Univariate

- 97.1% of the participants were labeled as non-alcoholics in the addiction score, meaning those who had 4 or more
- 2.9% of the participants were labeled as alcoholics based on the score created meaning those 3 and less

Bivariate

- A chi-squared test of independence was run and showed a **significant association** between parental drinking status and whether or not the participants became alcoholics.

Figure 1. Percent of Participants' Alcohol Addiction in Relation to Parental Drinking Problem

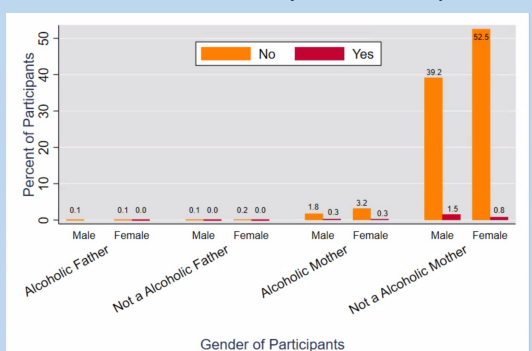


- This significance begged a post-hoc test. Of the six levels that were tested, there was a **statistically significant** difference in whether a participant became an alcoholic **only** if a mother was rated as an alcoholic versus a non-drinking mother. Dividing the standard p-value of 0.0 by the 6 levels, the statistical association was still true (p-value<0.0083). All other levels were not significant.
- Additionally, the logistic regression showed **no significant association** with the participant's alcohol addiction status in relation to their parent's alcoholic status.

Multivariate

- Gender is a confounder variable in relation to parental drinking problem status (Figure 2).
- After controlling for sex, females are **0.4292 times** likely that of men to be alcoholics within this sample. (p-value <0.05).
- There were no other levels of significance within this multivariate association.

Figure 2. Percent of Participant's Alcoholic Status in Relation to Parental Alcohol Problems By Gender of Participants



Discussion

- Participants' alcohol status is not significantly associated with their parent's alcohol drinking problems.
- This observational study is biased since the survey data is not able to determine causes, only associations between variables.
- For future research, the analysis of males and females should be separated into two different graphs and regressions.
- Biases within this data can be caused by the small sample size, uneven response distribution, and the nature of how the data was collected.
- Further research is needed to determine if parental alcoholic problems have an influence on whether their children grow up to become alcoholics themselves. These could include more variables such as religion, income, education, race, etc.
- Research on parental involvement in their child's life may be effective in determining if parental behavior has an impact on their children's life choices and behavior.