



The Relationship between Family History of Alcoholism, One's Living Situation and Alcoholism among American Adolescents



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Introduction

- There is a known association between genetics and alcoholism, with specific genes being traced as the leading candidates (Agrawal, A, Lynskey, MT, 2008)
- Trouble paying rent, mortgage or loss of housing compared to stable housing were significantly associated with experiencing more negative drinking consequences and alcohol dependency symptoms (Murphy, R. D., Zemore, S. E., & Mulia, N., 2014)
- Offspring with a family history of alcohol dependency were significantly more likely to exhibit alcohol addiction or alcohol dependency than were offspring of nonalcoholic fathers (Jacob, T, et al., 2003)
- Housing stability in terms of SES has a significant association with alcohol use disorders (AUD), but there is little to no research about housing stability in terms of the number of genetic parents living in the same household as an adolescent (Wiles N.J., et al, 2017).

Research Questions

- Is there a relationship between a family history of AUD and the future development of AUD among adolescents
- Is there a relationship between the number of genetic parents in the household and future development of AUD
- Does the relationship between future development of AUD and family history of AUD differ for adolescents with varying levels of the number of genetic parents present in the household

Methods

Sample

- Young adults age 18 to 25 (n=5,838) drawn from the first wave of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) from 2001 to 2002
- NESARC is a nationally representative sample of non-institutionalized adults in the U.S.

Measures

- Alcohol use disorder (AUD) was assessed using the NIAA, Alcohol Use Disorder and Associated Disabilities Interview Schedule
- Family history of AUD was evaluated with a series of four questions about the father, mother, brothers and sisters AUD status. Responses were summed to create a quantitative variable with higher scores reflecting more alcoholics in the respondents immediate family.
- Biological parents in the household were measured with a series of two questions; whether the respondent lived with their father and whether the respondent lived with their mother. Responses were summed to create a quantitative variable with higher scores reflecting more parents in the household.

Results

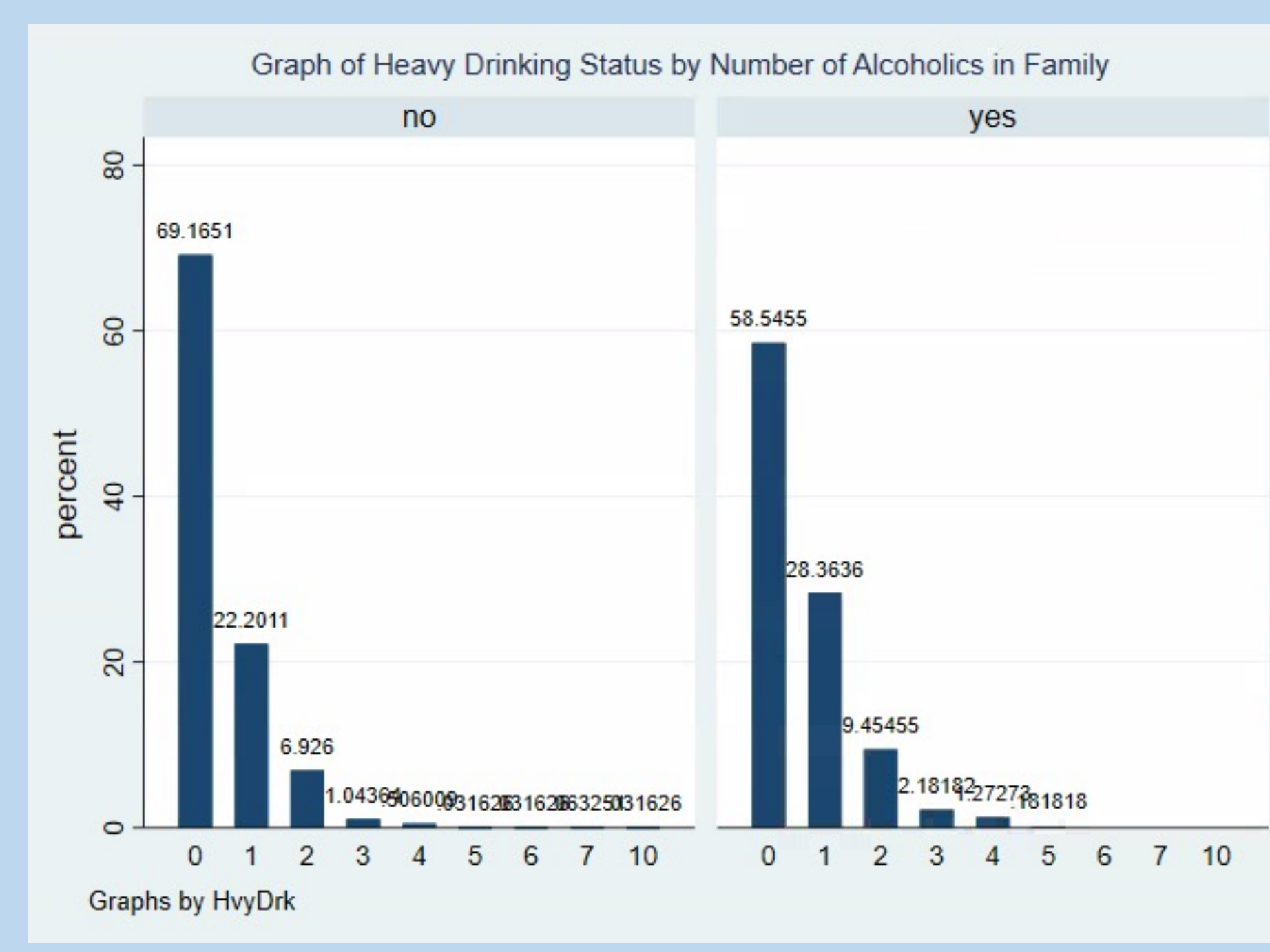
Univariate

- 91.4% of young adults had 0 biological parents in the household as a minor
- 67.47% of respondents had 0 immediate biological family members with AUD histories
- Both distributions of the number of biological family members with AUD histories and the number of biological parents in the household were skewed right

Bivariate

- A Pearson chi-squared test of independence showed that the number of biological family members with AUD histories was significantly associated with a respondents AUD status ($\chi^2=31.7262$, d.f.=8, p-value=0.000)
- Another Pearson chi-squared test of independence showed that the number of biological parents in the household was not significantly associated with a respondents AUD status ($\chi^2=1.8832$, d.f.=2, p-value=0.390)

Figure 1. Percent of Respondents Heavy Drinking Status for Each Level of Number of Alcoholics in Family

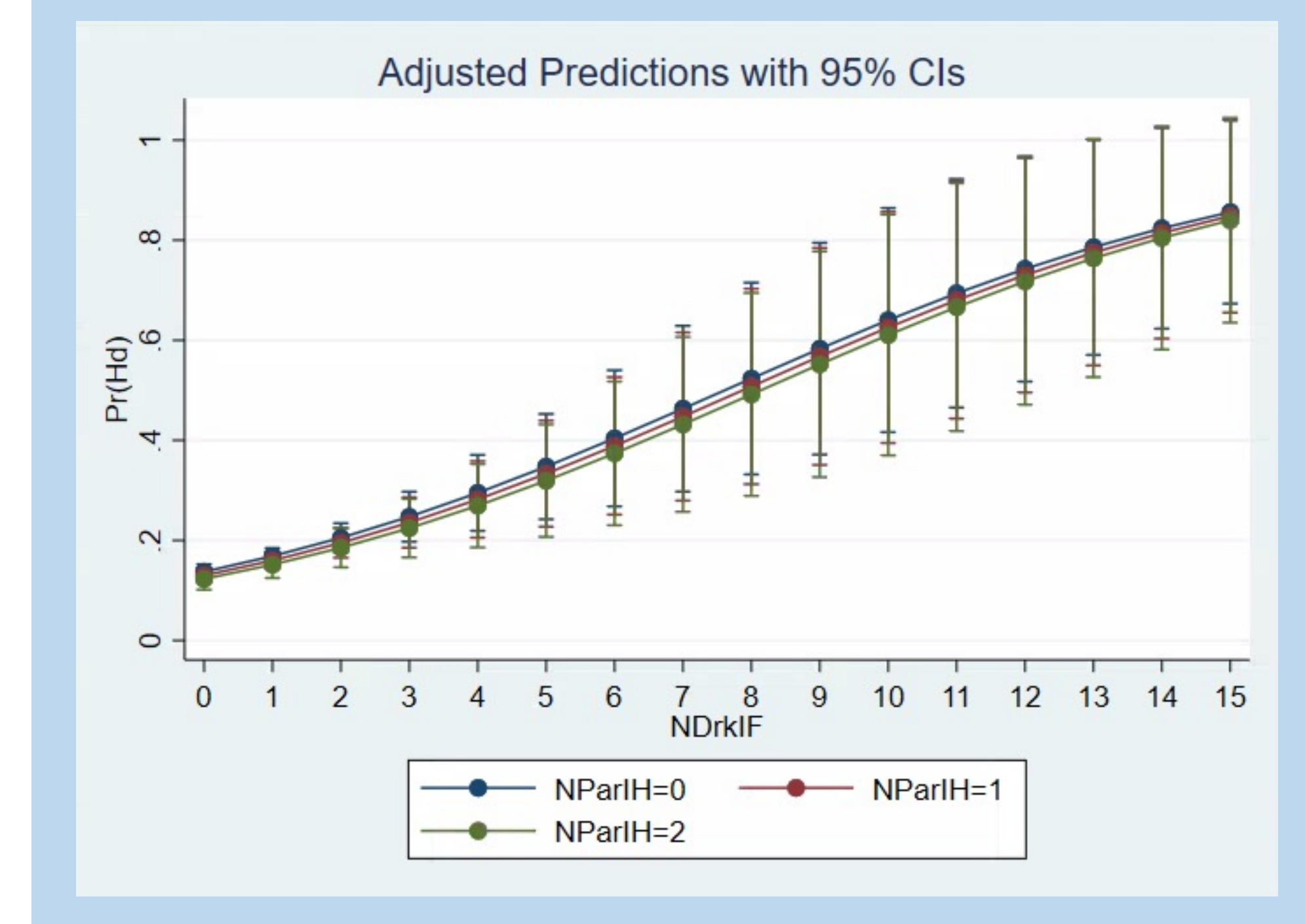


- Additionally, post-hoc tests revealed statistically significant association within family AUD history levels for all levels except between "six" and "ten", and "five" and "six" (See Figure 1)

Multivariate

- Logistic regression demonstrated that the odds ratio of respondents AUD risk profile is 1.28 times greater for each additional level of family AUD history
- Controlling for the number of parents in the household does not affect the relationship between AUD and family AUD history
- The number of parents in the household as a minor, is not significant and should not be included as a covariate

Figure 2. Probability of Heavy Drinking by Number of AUD Histories in Family and Number of Parents in Household



Discussion

- Statistical analysis based on the sample suggest that family history of AUD is a significant predictor for respondents AUD risk
- The odds ratio of the respondents AUD risk profile is 0.939, or decreases by 0.061 for every additional level of number of parents in household (not significant)
- The odds ratio of respondents AUD risk profile is 1.28 times greater for each additional level of family AUD history
- This information can help understand the social determinants that influence alcoholism, allowing for effective welfare reform targeted towards at risk individuals
- Further research of housing stability and parental supervision is needed to determine whether other variables are significant predictors of AUD

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