

The Relationship Between Alcohol Abuse and/or Dependence and Childhood Family Status



Caleb Henning, Applied Data Analysis, Wesleyan University

Introduction

- Childhood familial status (whether a child was raised with biological parents or non-biological parents) can be an important indicator of later in life mental illness, especially when it comes to alcohol abuse and/or dependence (Askeland et al., 2018; Hoffmann, 2017).
- Additionally, whether a child experienced negative family interactions, especially when it comes to divorce or death of a parent, can play a role in later in life alcohol abuse and/or dependence (Balázs et al., 2017; Lee et al., 2020).
- It is unclear how much familial status and interactions are indicators of later in life alcohol abuse and/or dependence, especially in adults who are no longer living with their parents (Cadoret et al., 1986).
- This research aims to remove other confounding variables by focusing only on familial status for three specific family types (at least one biological parent, adoptive parents, and other) and whether the family experienced turbulence (parental death and/or divorce) with specific focus on those who are between 25 and 35.

Methods

Sample

- Young adults (age 25 to 35) (n=7454) 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. conducted between 2001 and 2002.

Measures

- NESARC calculated alcohol abuse and/or dependence in respondents in the 12 months prior to filling out this survey using their responses to questions about alcohol consumption and the DSM-IV criteria.
- Family structure was evaluated through combining responses to questions about living with at least 1 biological parent, being raised by adoptive parents, and any other childhood family situations.
- Family turbulence was evaluated through combining responses to questions about experiencing parental divorce and/or death during childhood.

Research Questions

- •Is there an association between childhood familial status—specifically whether a parent is raised with biological parents, adoptive parents, or some other family situation—and alcohol abuse and/or dependence in a person's mid-20s to mid-30s?
- •Is there an association between childhood family turbulence—specifically whether a child experienced parental death, divorce, or both—and alcohol abuse and/or dependence in a person's mid-20s to mid-30s?

Results

Univariate

- 27% of young adults between 25 and 35 who experienced divorce during childhood developed problems with alcohol abuse and/or dependence.
- A much lower proportion of young adults in this age range had unorthodox family structures, with 2% being adopted and 0.9% in other situations.

Bivariate

- Chi-Square analysis showed that young adults who experienced family turbulence were more likely to develop drinking problems than those who did not (X²=14.59, 3 df, p=0.002). Pearson residuals revealed that those who experienced divorce are especially more likely to develop drinking problems than those who experienced no turbulence (p=0.006).
- Chi-Square analysis also showed an association between family structure and developing drinking problems (X²=12.41, 2 df, p<0.0002). Pearson residuals revealed that those who were raised in other family structures (p<0.02) are especially more likely to develop drinking problems.

Multivariate

- Both family turbulence and family structure influence later in life drinking problems, but underrepresentation of adopted children has led to difficulty in interpreting how much of a difference turbulence makes for them. However, adopted children are more at risk for drinking problems even if they don't experience turbulence, emphasizing the importance of family structure (Figure 1).
- It is also clear that those raised by at least one biological parent experience significant effects from family turbulence, specifically divorce, as their probability for drinking problems rises from 0.10 to 0.13 after experiencing divorce during childhood (Figure 1).

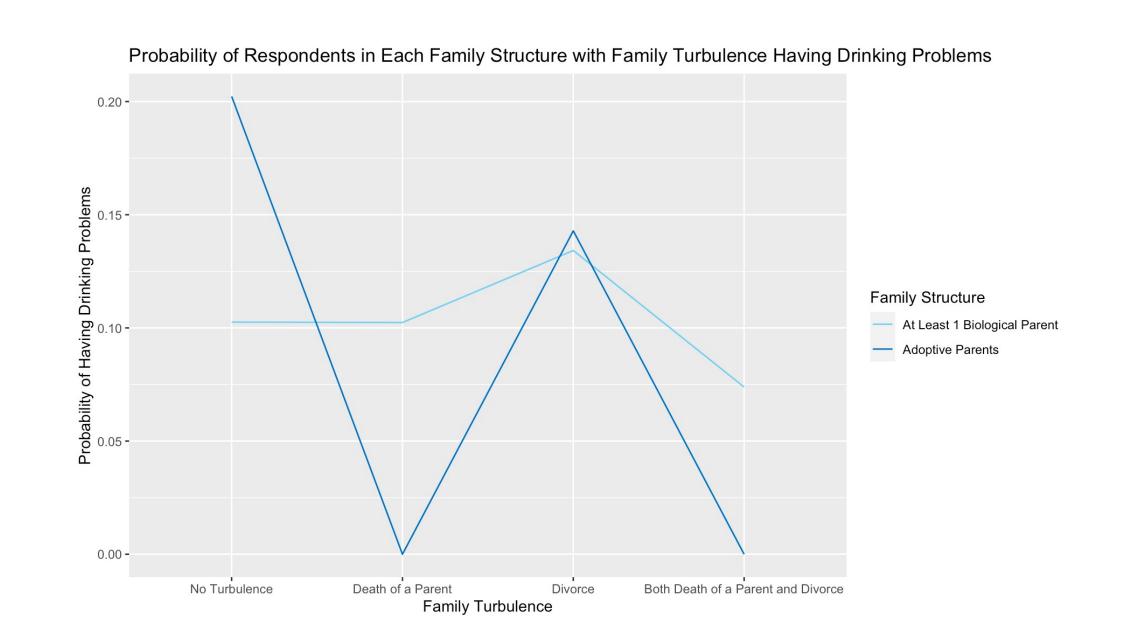


Figure 1. Probability of Respondents in Each Family Structure with Family Turbulence Having Drinking Problems

Multivariate (cont.)

- Those raised by adoptive parents have an expected odds of drinking problems that is 1.94 times higher than those raised by at least one biological parent holding age, sex, region and family turbulence fixed.
- Those who experienced divorce during childhood have an expected odds of drinking problems that is 1.43 times higher than those raised by at least one biological parent holding age, sex, region and family structure fixed.
- Age also appears to influence drinking problems as respondents who are within the 18-29 age group having a probability of 0.15, which drops down to 0.09 in the 30-39 age group, holding all other variables fixed (Figure 2).

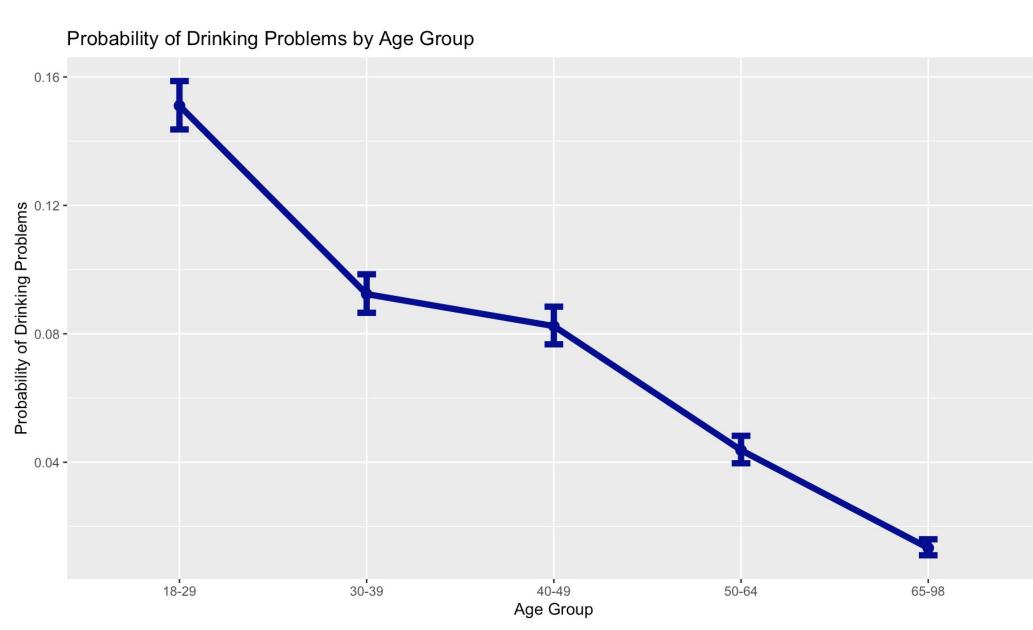


Figure 2. Probability of Respondents in Each Age Group Having Drinking Problems

Discussion

- Individuals raised by adoptive parents are more at risk for developing later in life alcohol abuse and/or dependence.
- Individuals experiencing parental divorce are also more at at risk for developing later in life alcohol abuse and/or dependence.
- Younger individuals in general are significantly more at risk for developing alcohol abuse and/or dependence.
- Interestingly, other factors also seem to be related to later in life alcohol abuse and/or dependence, including sex and region. Research does not support the findings about those in the Midwest being most at risk (Sacks et al., 2013). Research does support men being historically more at risk for drinking problems and less willing to get help for them (Grant, 1997; Timko et al., 2005).
- Those raised in unorthodox family situations and/or those experiencing family turbulence during childhood need more support during adolescence to prevent developing drinking problems.

Askeland, K. G., Sivertsen, B., Skogen, J. C., La Greca, A. M., Tell, G. S., Aarø, L. E., & Hysing, M. (2018). Alcohol and drug use among internationally adopted adolescents: Results from a Norwegian population-based study. *American Journal of Orthopsychiatry*, 88(2), 225–235.

Balázs, M. Á., Piko, B. F., & Fitzpatrick, K. M. (2017). Youth problem drinking: The role of parental and familial relationships. Substance Use & Misuse, 52(12), 1538–1545.

https://doi.org/10.1080/10826084.2017.1281311
Cadoret, R. J., Troughton, E., O'Gorman, T. W., & Heywood, E. (1986). An adoption study of genetic and environmental factors in drug abuse. *Archives of General Psychiatry, 43*(12), 1131–1136.

https://doi.org/10.1001/archpsyc.1986.01800120017004
Grant, B. F. (1997). Prevalence and correlates of alcohol use and DSM-IV alcohol dependence in the United States: Results of the National Longitudinal Alcohol Epidemiologic Survey. Journal of Studies on Alcohol, 58(5), 464–473. https://doi.org/10.15288/jsa.1997.58.464
Hoffmann, J. P. (2017). Family structure and adolescent substance use: An international perspective. Substance Use & Misuse, 52(13), 1667–1683. https://doi.org/10.1080/10826084.2017.1305413.

Lee, M.-C., Huang, N., & Chen, C.-Y. (2020). Effects of childhood adversity trajectories on mental health outcomes in late adolescence: The buffering role of parenting practices in Taiwan. *Child Abuse & Neglect,* 109, 104705. https://doi.org/10.1016/j.chiabu.2020.104705
Sacks, J. J., Roeber, J., Bouchery, E. E., Gonzales, K., Chaloupka, F. J., & Brewer, R. D. (2013). State costs of excessive alcohol consumption, 2006. *American Journal of Preventive Medicine,* 45(4), 474–485.

https://doi.org/10.1016/j.amepre.2013.06.004

Timko, C., Finney, J. W., & Moos, R. H. (2005). The 8-year course of alcohol abuse: Gender differences in social context and coping. *Alcoholism: Clinical and Experimental Research*, 29(4), 612–621.

https://doi.org/10.1097/01.ALC.0000158832.07705.22