



# The Association Between the Education of Alcohol in Schools and the Development of Alcohol Use Disorder



Andy Sampedro, Applied Data Analysis, Wesleyan University

## Introduction

- Alcohol Use Disorder is one of the most common substance addictions in the United States with over 178,000 people dying from disorder every year (CDC, 2024).
- There are countless variables leading to the development of this disorder, one of them being the lack of early education on the effects of alcohol
- There have been studies showing that students at universities have misconceptions on the drinking norms, they tend to overdo it with males averaging 20 units of alcohol and females averaging 16 units of alcohol (John and Alwyn 2014).

## Research Questions

- Is there an association between the education of the effects of alcohol in schools and the development of Alcohol Use Disorder later in life?
- Does this association differ when taking into account if the participant had any relationship with their biological mother or father?

## Methods

### Sample

- The sample from the first and fifth waves of ADDHEALTH represents adolescents from grades 7-12 during the 1994-95 school year. Information ranged from biological data such as height and weight to information like race, health, relationships, and substance abuse.

### Measures

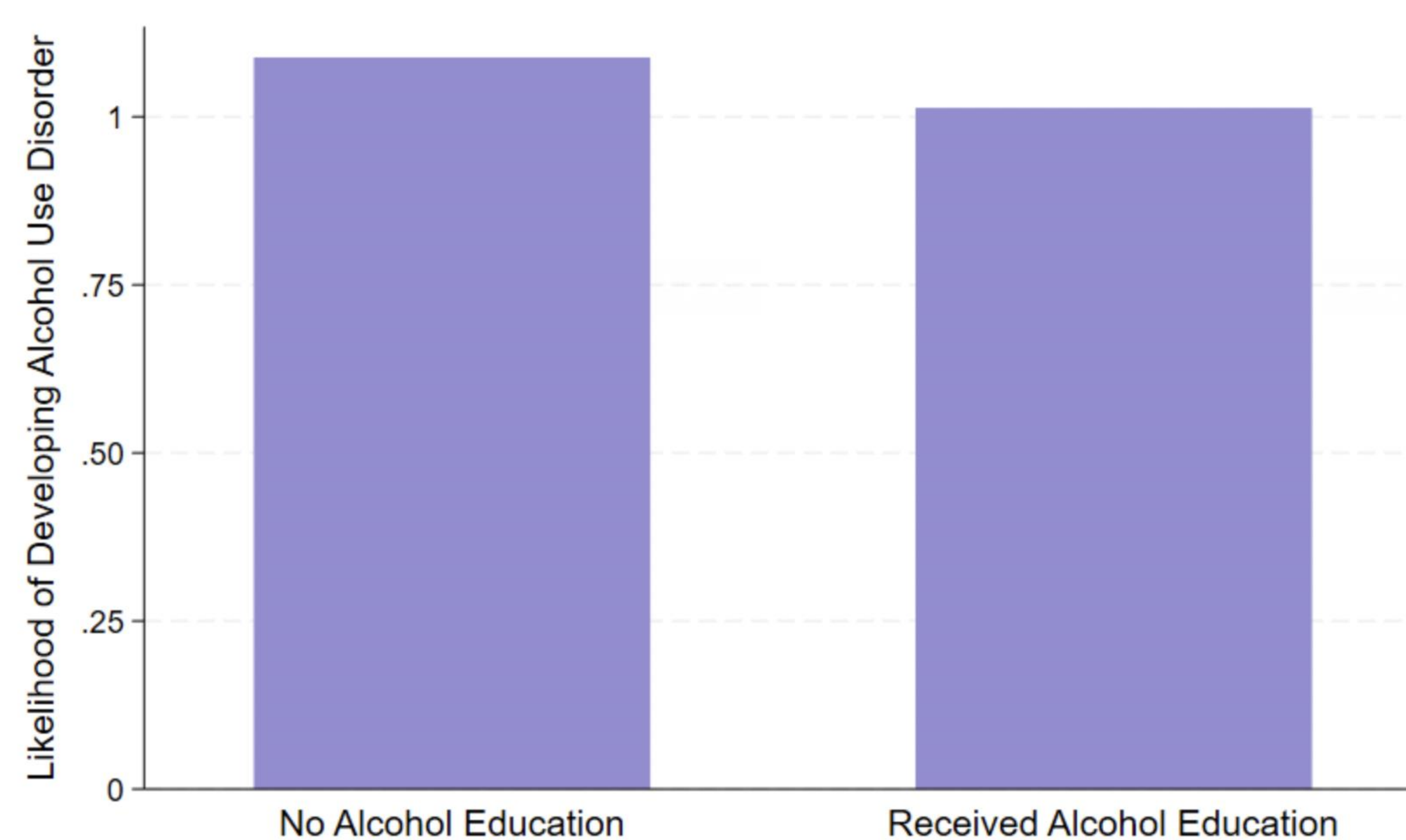
- Alcohol Use Disorder was assessed by using the question “During the past 12 months, how many days did you drink alcohol (beer, wine, or liquor)?” in the wave 5 survey. When the response ranged from more than 4, it was determined the participant suffered from Alcohol Use Disorder.
- Responses to the question ranged from 1-4 with the final option being 4 or more.

- When the response was 4 or more, it was determined the participant suffered from Alcohol Use Disorder.

## Results

### Bivariate

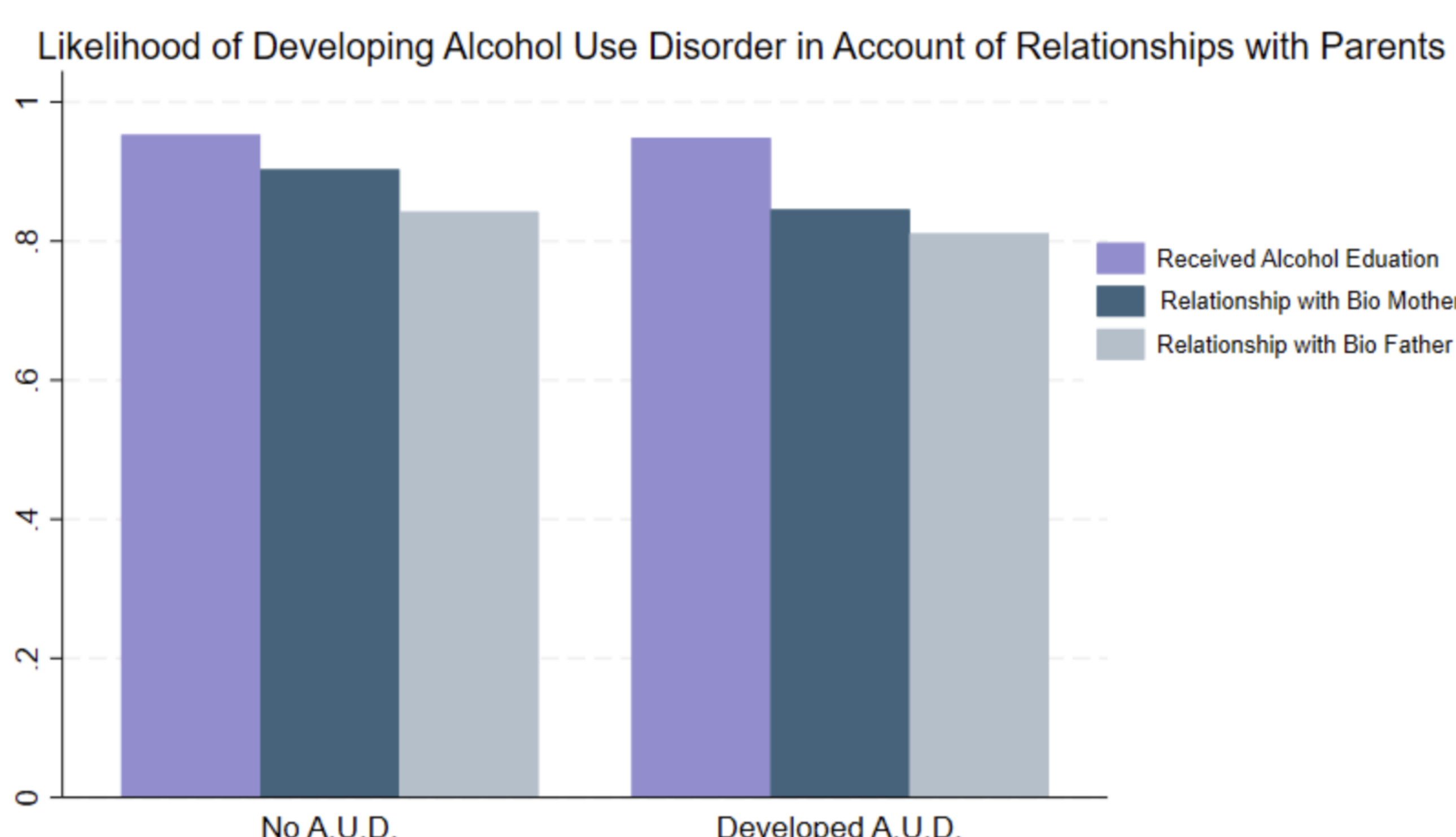
- Chi-Square analysis showed that alcohol education received in school was **not** significantly associated with a development in alcohol use disorder. (P-Value = .633).
- The likelihood of one developing alcohol use disorder whether a participant received an education on alcohol or not wasn't very significant on the graph



**Figure 1: The Likelihood of an Individual Developing Alcohol Use Disorder if they Received Alcohol Education in School**

### Multivariate

- Logistic regression analyses showed there was a significant association between the development of A.U.D. in participants who had no relationship with their biological mother ( $p = 0.040$ ).
- When viewing the relationship with biological fathers, there wasn't a statistical significance ( $p = 0.959$ ), along with if the participant received alcohol education in school ( $p = 0.969$ )
- There was no difference in participants who received alcohol education and did not, along with those who had no relationship with their biological fathers'.



**Figure 2: Likelihood of Developing Alcohol Use Disorder in Account of Relationships with Parents**

## Discussion

- Although there wasn't an association between an education on alcohol and the development of the disorder, programs may help against alcohol poisoning during adolescence.
- There can be further studies conducted on how to incorporate long-term effects in alcohol education programs taught in schools.
- There needs be further research conducted on the relation between biological mothers and alcohol use disorder to determine an association between the two variables.

## References

- Centers for Disease Control and Prevention. (2024, May 15). *Alcohol use and your health*. <https://www.cdc.gov/alcohol/about-alcohol-use/index.html>
- John, B., Alwyn, T., 2014. Revisiting the rationale for social normative interventions in student drinking in a UK population. *Addictive Behaviors* 39, 1823–1826. <https://doi.org/10.1016/j.addbeh.2014.07.022>
- Van Der Vorst, H., Engels, R.C.M.E., Meeus, W., Deković, M., 2006. The impact of alcohol-specific rules, parental norms about early drinking and parental alcohol use on adolescents' drinking behavior. *Journal of Child Psychology and Psychiatry* 47, 1299–1306. <https://doi.org/10.1111/j.1469-7610.2006.01680.x>
- Karriker-Jaffe, K.J., Lönn, S.L., Cook, W.K., Kendler, K.S., Sundquist, K., 2021. Young men's behavioral competencies and risk of alcohol use disorder in emerging adulthood: Early protective effects of parental education. *Development and Psychopathology* 33, 135–148. <https://doi.org/10.1017/s0954579419001640>