



Gender differences in the Association between Adolescent Depression and Adult Alcoholism

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Introduction

- In the last several years, depression rates among adolescents have risen in the United States. According to a survey done by the National Institute of Mental Health, in 2020, the prevalence of major depressive episodes was higher among adolescent females (25.2%) compared to males (9.2%) (National Institute of Mental Health 2022).
- Individuals who suffer from depression are more likely to abuse or become dependent on alcohol (Kuria et al. 2012). A number of studies have revealed a persistent association between alcohol use disorders and major depression, even after controlling other possible factors (Kuria et al. 2012). For example, one study from the National Library of Medicine reported high prevalence rates of major depression (63.8%) among alcohol-dependent persons.
- Some studies have reported gender differences in the link between alcohol use disorders and depression, while others have not (Kuria et al. 2012).

Research Questions

- Is there an association between adolescent depression and adult alcoholism?
- Is there a stronger correlation between adolescent depression and adult alcoholism among female or males?

Methods

Sample

- Data was drawn from the United States National Longitudinal Survey of Adolescent Health (Add Health) Wave 1 and Wave 5, a study of a nation-wide sample of over 20,000 individuals (n=3533) living in the United States who have been followed for five waves to date.

Measures

- In order to measure depression, a quantitative variable was created through the utilization of following categorical variables: "you felt sad, you felt lonely, you thought your life had been a failure, you felt tired, you felt depressed, you felt you could not shake off the blues." Each of these categorical variables had four response options: "never or rarely (0), sometimes (1), a lot of the time (2), most of the time or all of the time (3)." These were combined to make a quantitative variable, with higher scores reflecting the more severe forms of depression.
- Alcoholism in adults was measured with the question "During the past 12 months, on how many days did you drink [female:4/male:5] or have more drinks in a row?"

Results

Univariate

- Gender: 48.39% Male, 51.16% Female
- Mean Depression Score Value: 3.44
- Standard Deviation Depression Score: 3.31

Figure 1. Univariate Graph showing the Varying Levels of Depression Amongst Males and Females

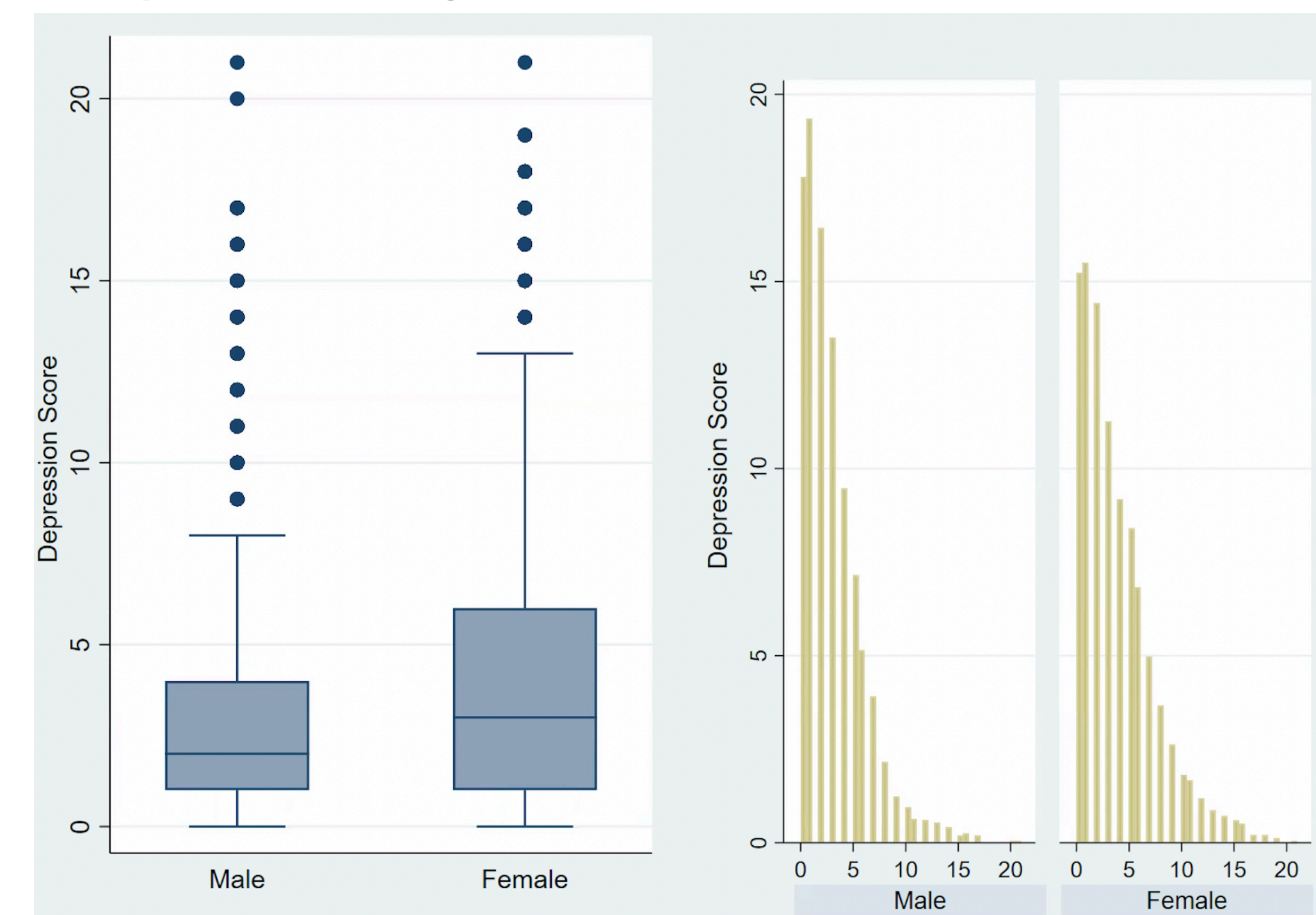
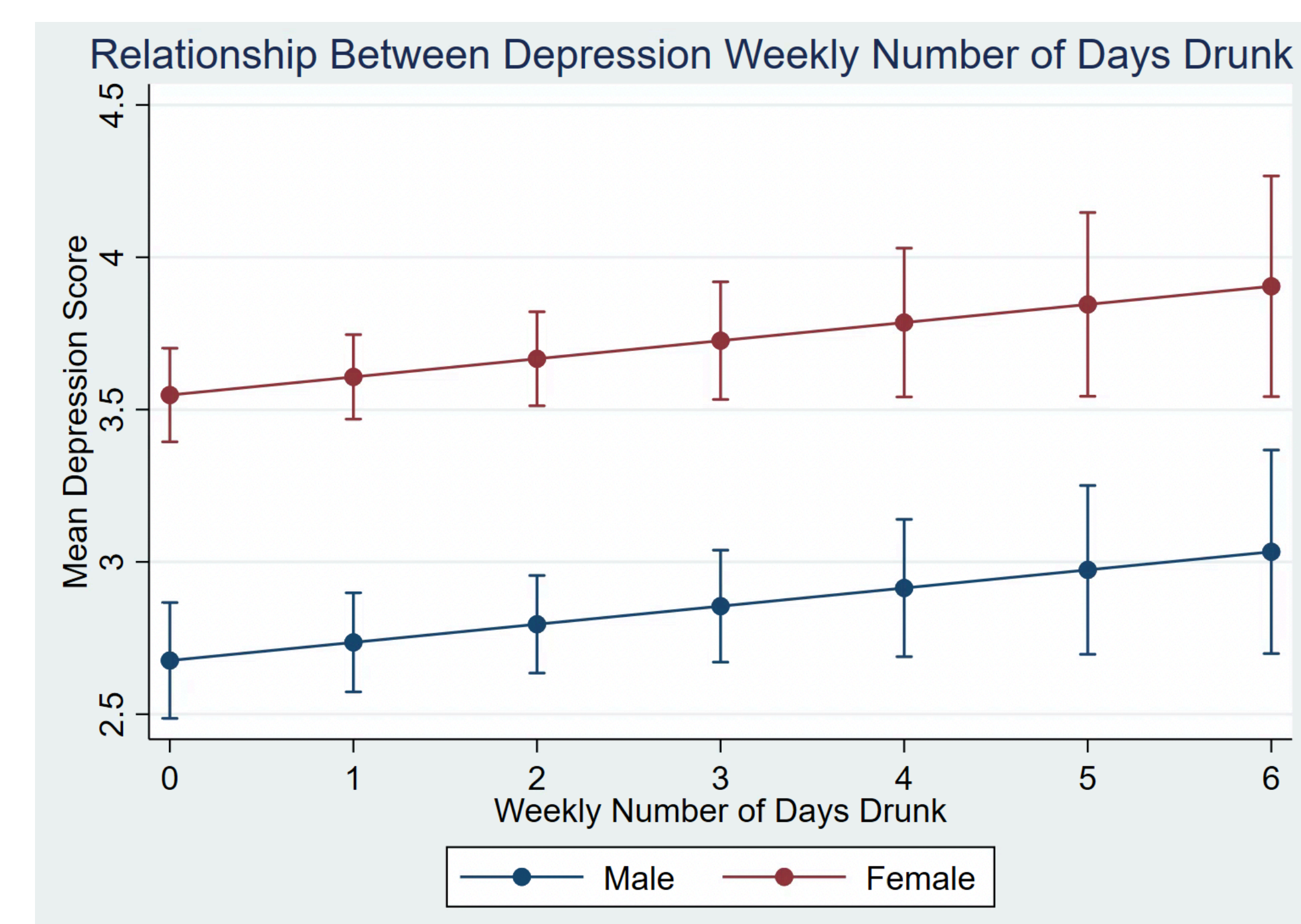
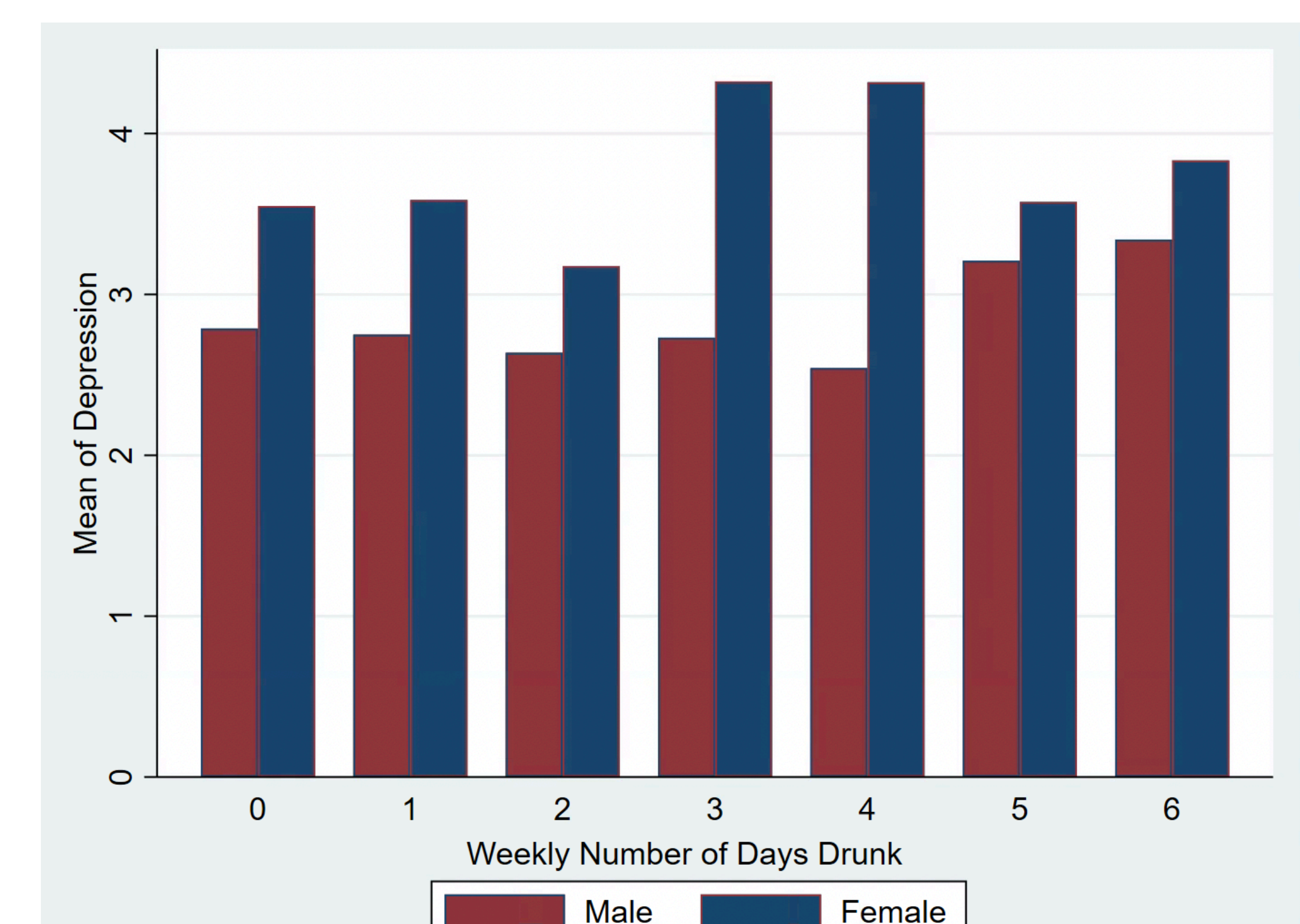


Figure 2 and 3. Multivariate Graphs showing the Relationship Between Depression and Weekly Number of Days Drunk Amongst Males and Females



Bivariate

- ANOVA analysis showed that there is not a statistically significant association between the depression score variable and weekly number of days drunk variable. ($F(6,3526)$ $P=0.2756$)

Multivariate

- There is not a statistically significant relationship between Mean Depression Score and Weekly Number of Days Drunk when controlling for Gender. ($P=0.82$).

Discussion

- After controlling for gender, the relationship between depression and alcohol abuse was found to be insignificant.
- Females were consistently found to have higher rates of depression.
- Further research should investigate how other variables such as race, gender, income, anxiety, and ethnicity effect symptoms of depression alcohol abuse.
- Limitations of this study include that depression was measured using symptoms and the personal subjective reports of participants, not objective medical diagnosis's from medical professionals. In addition, participants reported their own drinking habits, which they may not have portrayed accurately or remembers correctly.

U.S. Department of Health and Human Services. (2022). *Major depression*. National Institute of Mental Health. Retrieved March 5, 2023, from https://www.nimh.nih.gov/health/statistics/major-depression#part_2565

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