



# The Association Between Adolescent Relationships and Depression Symptoms

Isabelle Allieri, Applied Data Analysis, Wesleyan University

## Introduction

- In recent years, the percent of adolescents diagnosed with depression has continued to rise starting at 5.4% in 2003, and rising to 13% in 2017 (CDC, 2018).
- Adolescent girls were three times more likely to experience a depressive episode than adolescent boys (CDC, 2018).
- Suicide is the second-leading cause of death amongst people ages 15-24 (UCLA, 2023).
- One source of increasing suicide rates stems from unhealthy romantic relationships (Price, et al, 2016).
- In a study done by the National Institute of Health, it was found that the lowest quality of relationships had double the risk of depression (NIH, 2013).

## Research Questions

- Are adolescent romantic relationships associated with having depression symptoms?
- Does the association between adolescent relationships and depression symptoms differ between gender?

## Methods

### Sample

- Respondents (n=6504) were drawn from the 1994 National Longitudinal Study of Adolescent Health (ADDHEALTH), a representative survey of adolescents in grades 7-12 in the United States.

### Measures

- Depression symptoms were made using the ADDHEALTH survey questions and range from 0, having no symptoms, to 3 having symptoms constantly.
- Whether or not the participant participated in an adolescent relationship was assessed based off the question "have you had a romantic relationship" with 0 indicating they had not, and a 1 indicating they had.

## Results

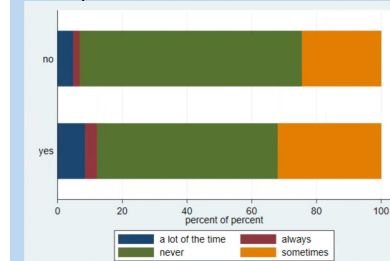
### Univariate

- 51.61% of respondents are female.
- 55.45% of respondents indicated that they had been in a romantic relationship
- 38.4% of respondents indicated that they had depression symptoms.

### Bivariate

- Chi-Square analyses showed that for all levels of depression symptoms those adolescents that indicated they had been in a romantic relationship were significantly more likely to develop depression ( $p < .001$ ).
- Those individuals who have had an adolescent relationship are significantly more likely to develop depression symptoms.

Figure 1. Percent of participants with varying levels of depression, and whether or not they've been in an adolescent relationship

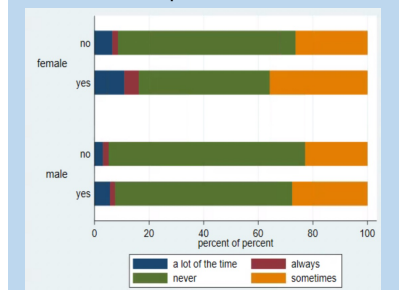


- Additionally, a simple regression analysis showed that there was a significant positive association between those who have been in a romantic relationship, and increasing levels of depression ( $B = .19$ ,  $P < .001$ ).

### Multivariate

- Whether or not the participant had sexual intercourse does appear to be a confounding variable.
- After controlling for sexual intercourse those who were in an adolescent romantic relationship were not more likely to develop depression symptoms ( $B = .04$ ,  $p = .226$ ).
- When comparing genders, girls were 20% more likely to develop increased depression symptoms ( $B = .20$   $P < .001$ ). **Figure 2**

Figure 2. Percent of participants with varying levels of depression symptoms by gender, and whether or not they had an adolescent relationship



## Discussion

- There is no significant association between the development in depression and being in an adolescent relationship.
- Those participants who were female, had been in an adolescent relationship, and had sexual intercourse were most significantly likely to have depression symptoms.
- Given depression when left untreated could lead to suicide, psychiatrists might use this information to provide more services to those in the most effected group.
- Further research is needed to determine whether an adolescent romantic relationship is a direct cause of the depression symptoms.