

The Association between Disability and Depression Symptoms in Adolescents

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Introduction

Disability is often separated into categories of mental disabilities and physical disabilities. In the present study individuals with physical illness were identified. Depression is a mental disorder that causes low mood, negative thinking, and in some cases insomnia. Prior research has examined the link between disability and depression. Noh et al. (2016) found that disability had a strong positive correlation to disability, reinforcing commonly held public beliefs. Another study conducted by Tariq et al. (2020) found that physical disability had a strong positive correlation with depression. Other research conducted by Battalio et al. (2020) found that physical activity can lessen negative affect. The authors suggested integrating physical activity into treatment of those with chronic physical disabilities. Lastly, the presence of depression is comorbid with other disorders (Gross et al., 2018) Knowing what risk factors impact the presentation of depression in adolescence (Mohammadi et al., 2019) can influence future research and resources.

Research Question

- Is there an association between the presence of the presence of a physical disability and the average depression symptoms experienced in adolescents?

Research Purpose

- The purpose of this research is to evaluate the association between the presence of a physical disability and symptoms of depression.
- This study aims to answer the ongoing questions about the relationships between the presence of a physical disability and average symptoms of depression.
- The current study's goal is to aid in the resources allocated to individuals with physical disabilities by evaluating the association between physical disability and depression.

References

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Method

Participants

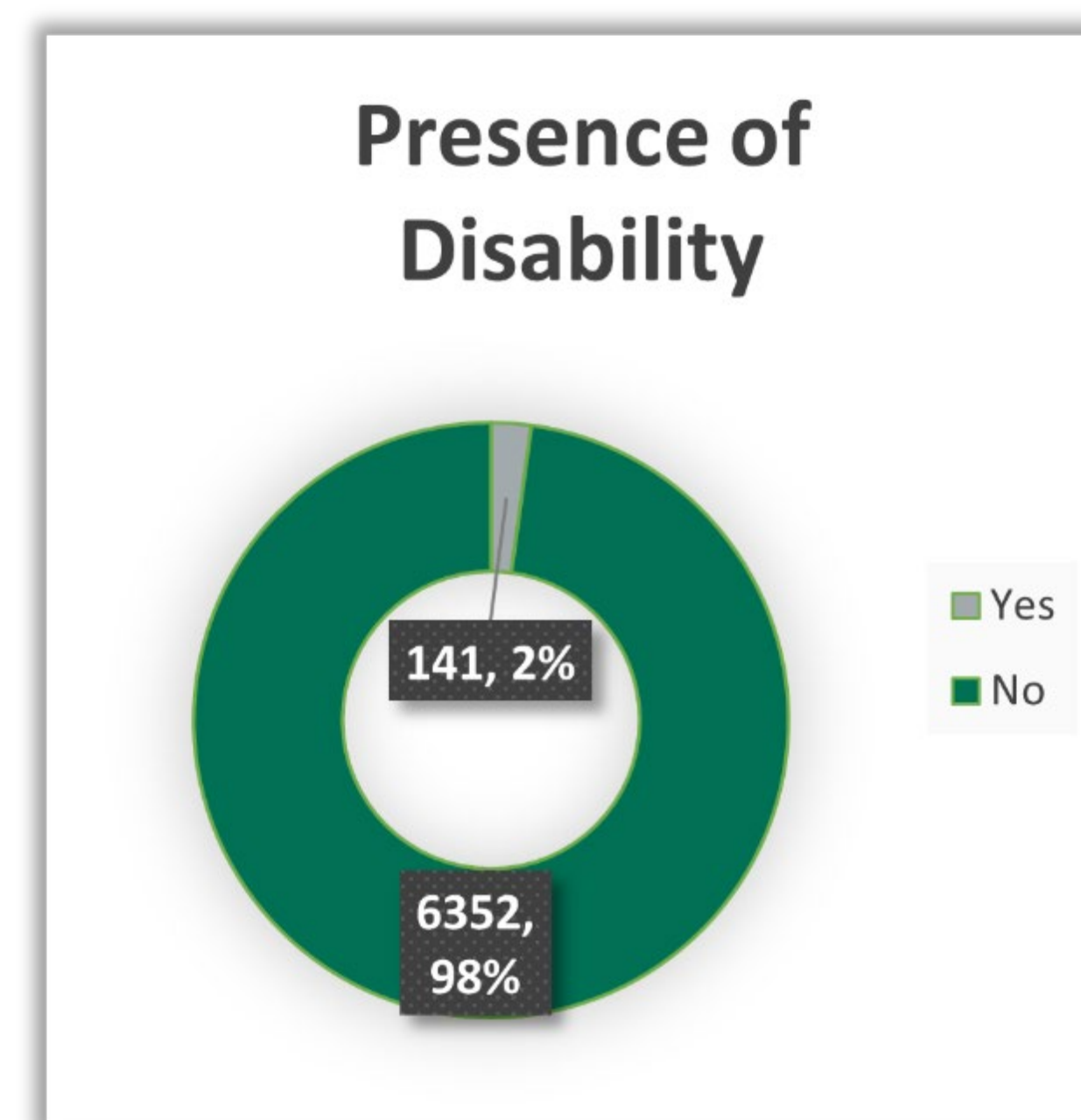
Participants for this study consisted of 6,051 respondents from Wave 1 of The National Longitudinal Study of Adolescent to Adult Health (Add Health). There were one hundred and forty-five schools in the U.S were involved in the study.

Wave I: When the sample was taken, the participants ranged in age from ranging from 12-21 years old ($M = 16.04$, $SD = 1.77$). 51.61% of the participants were female and 48.39% of the participants were male at birth. From the dataset 66% of the participants identified as white/Caucasian, 24.9% African American, 4.2% as Asian, and 4.9% as other.

Measures

Explanatory Variable

- **Physical Disability:** a categorical variable, Do you have difficulty using your hands, arms, legs, or feet because of a permanent physical condition, defined as yes or no



Response Variable

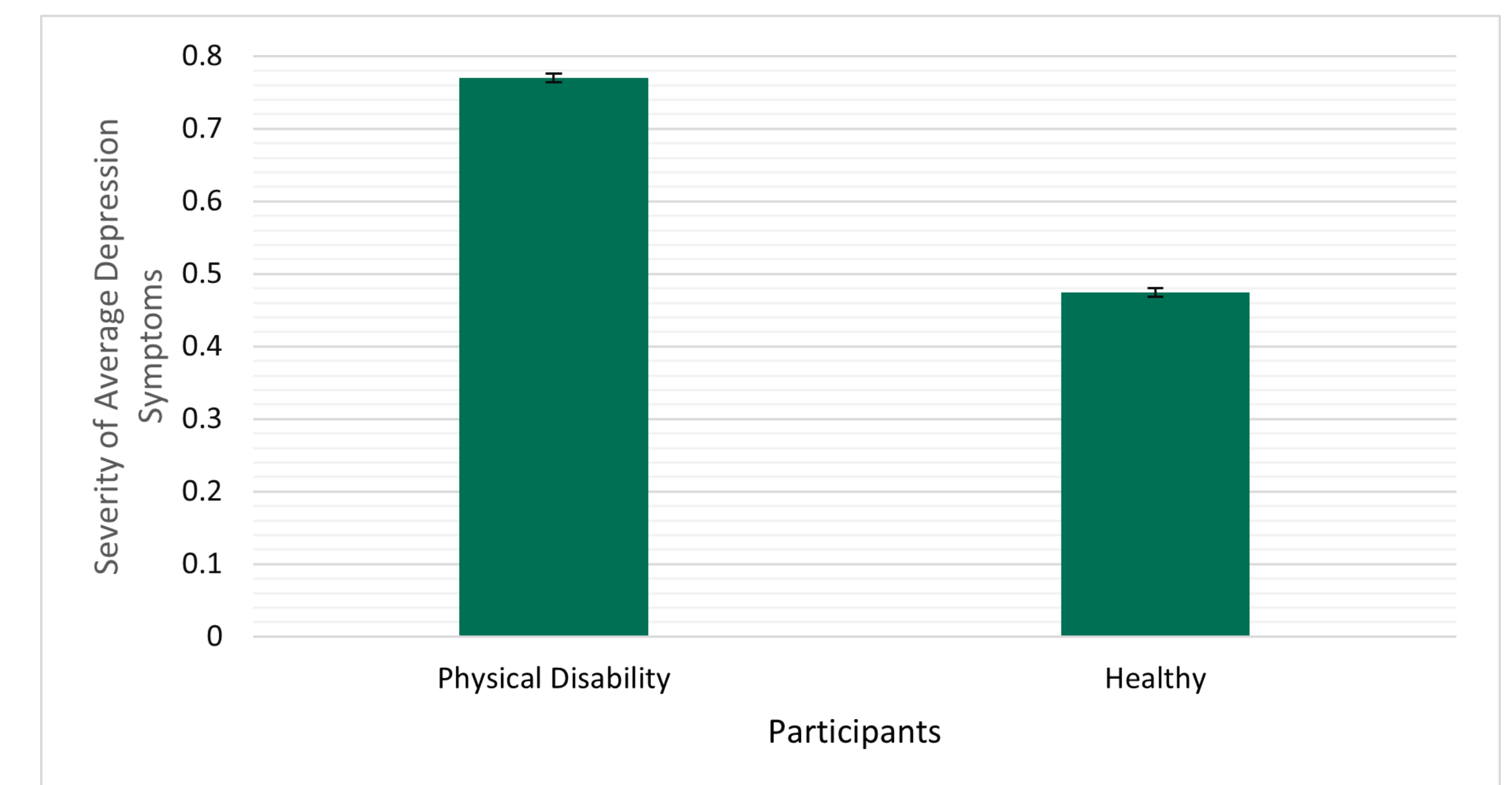
- **Average Depression Symptoms:** a quantitative variable, symptom related questions. These included "You didn't feel like eating, your appetite was poor", "You had trouble keeping your mind on what you were doing", "You felt depressed", "You felt lonely", and "You felt life was not worth living". Responses were rated on a 4-point scale (0-3) to which a participant agreed to the statement.

Data Analysis

1. **Develop Codebook:** A codebook was developed based on the finding of variables of interest to the research question pertaining to depression symptoms and presence of disability. Survey questions relating to general demographic information were also included.
2. **Descriptive Data Analysis:** Variables were evaluated using frequency tables and descriptive data.
3. **Data Management:** To ensure the variables were adequate for statistical analysis the following measures were taken to alter the data: missing data specified, logical response codes and creating secondary variables.
4. **Bivariate Analysis:**
 - **ANOVA** was used to test the association between average depression score and presence of physical disability

Results

Figure 1: The association between physical disability and depression symptoms



- A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of difficulty using one's hands, feet or limbs on average depression symptoms.
- The difference in scores on average depression symptoms between those with a physical disability ($M = .7702$, $SD = .4805$) and those without a disability ($M = .4741$, $SD = .76963$) was significant, $F(1, 6488) = 53.766$, $p < .001$.
- Those with physical disabilities had a significantly higher average depression score than those without disabilities.

Implications

- This research will help give the scientific community new information on how disability can influence depression and the two variables may be associated with each other.
- A strength of this study is that it has a large sample and racial diversity, however it may not be representative of those with disabilities. There were only two options and there was not an indication of severity of disability.
- As future research is conducted on this topic, focused on the severity of disability and the differing forms of disability and the impact on mental health.
- Within the public health sector, once the relationship is known between disability and depression, and other mental health disorders, resources can be allocated to the vulnerable populations.