

# Do Adolescent Depression and Anxiety Symptoms Predict Adult Diagnoses, and Is This Link Altered by Suicide Attempts?



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## Introduction

- Adolescent anxiety and depression are common internalizing problems linked to disrupted development and elevated suicide risk (Ramdhonee-Dowlot et al., 2025). Anxiety disorders also increase risk for suicidal behavior in adulthood, with affected individuals more likely to report suicide attempts (Nepon et al., 2010).
- Longitudinal studies show that early emotional problems predict adult psychiatric disorders across multiple cohorts, with juvenile anxiety and depression increasing long-term vulnerability even after accounting for other conditions (Kim-Cohen et al., 2003; Fryers & Brugha, 2013; Mulraney et al., 2021; Schlack et al., 2021).
- Despite strong evidence for continuity, little work has examined why these associations vary, particularly whether adolescent suicide attempts, an especially severe marker of internalizing distress, alter the link between early symptoms and adult diagnoses.

## Research Questions

- Do adolescent symptoms of depression correlate to adulthood diagnoses of depression?
  - Does this relationship differ between those who attempted suicide during childhood?
- Do adolescent symptoms of anxiety correlate to adulthood diagnoses of anxiety?
  - Does this relationship differ between those who attempted suicide during childhood?

## Methods

## Sample

■ Participants were drawn from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative study following U.S. adolescents into adulthood. After excluding cases with missing data, the analytic samples included 5,784 respondents from Wave 1 (ages 12–19) and 4,177 respondents from Wave 5.

## Measures

#### **Adolescent Anxiety Risk Score:**

■ Computed by summing standardized responses to three items assessing moodiness, frequent crying, and fearfulness (0–4) from the CBCL/ASEBA manual (Achenbach & Rescorla, 2001). Higher scores indicate greater anxiety symptoms.

## Adolescent Depression Risk Score:

Derived from CES-D (Radloff, 1977) items by reverse-coding positive affect (hopeful about the future, etc.) and summing
depressive symptoms (feeling sad, depressed, etc.). Higher scores indicate greater depressive symptoms.

#### **Adolescent Suicide Attempt:**

Measured by: "During the past 12 months, how many times did you actually attempt suicide?" Coded 0 = none, 1 = ≥1 attempt.

#### **Adulthood Anxiety and Depression Diagnoses:**

■ Based on Wave 5 self-reports of lifetime professional diagnoses (0 = no, 1 = yes).

# Results

## Bivariates

## Figure 1:

- ANOVA showed that adolescent depression scores were not significantly associated with later adulthood depression diagnosis (p = .823).
- Mean depression scores were nearly identical across diagnostic groups.

#### Figure 2:

- ANOVA showed that adolescent anxiety scores were significantly associated with adulthood anxiety diagnosis (p = .0019).
- Individuals with a later anxiety diagnosis had higher adolescent anxiety scores.

# Figure 1: Relationship Between Adolescent

Figure 2: Relationship Between Adolescent
Anxiety Score and Adulthood Anxiety Diagnosis

12.5

10.0

7.5

2.5

2.5

Figure 3: Adolescent depression scores and adulthood diagnoses separated by the presence of a suicide attempt during adolescence

AnxietyDx

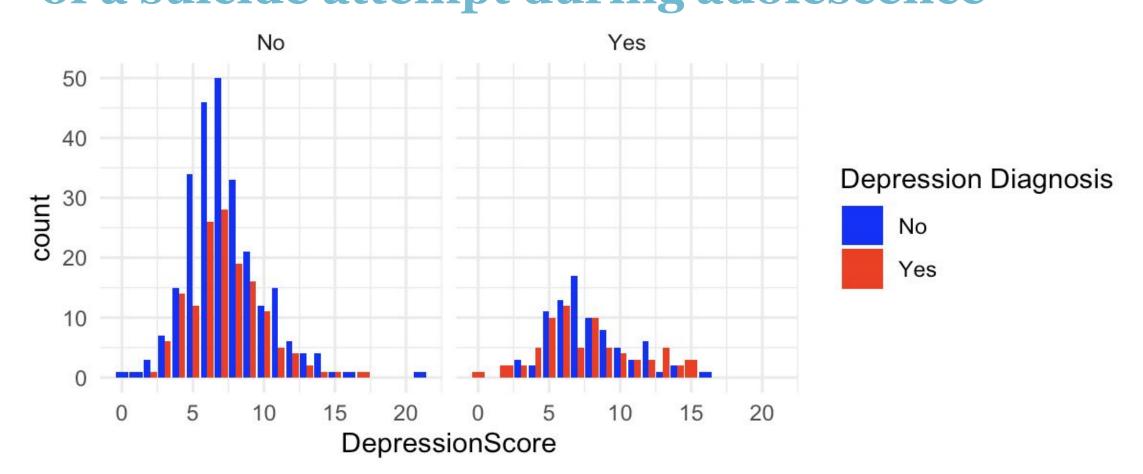
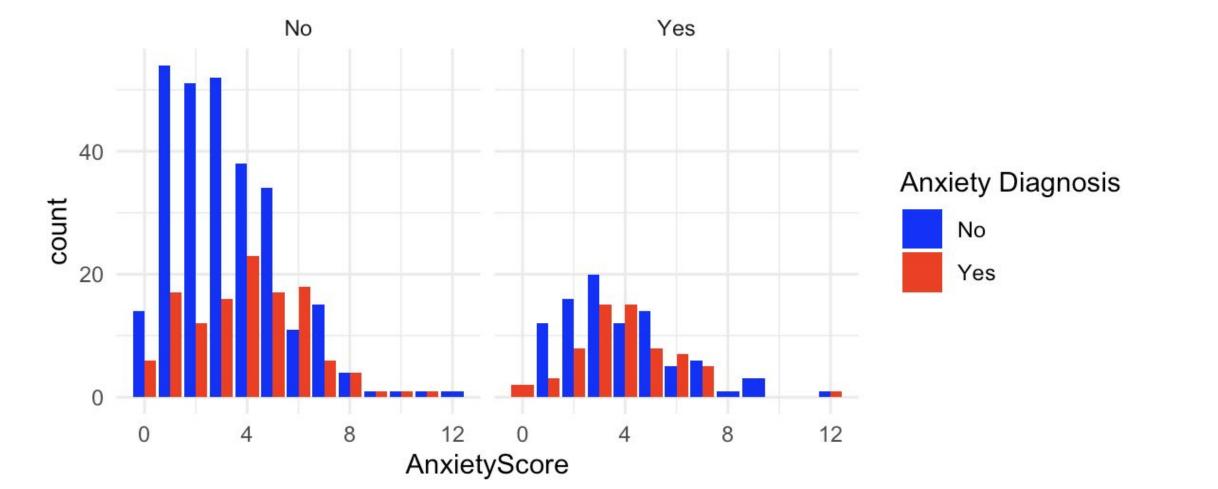


Figure 4: Adolescent anxiety scores and adulthood diagnoses separated by the presence of a suicide attempt during adolescence



## Discussion

- As adolescent anxiety scores increase, individuals are more likely to be diagnosed with anxiety in adulthood, and those with a suicide attempt history show an even higher risk.
- These findings may contribute to research on early predictors of anxiety and long-term mental-health trajectories.
- Future research should examine additional covariates (depression severity, trauma exposure, etc.), assess more nuanced forms of adolescent suicidality (ideation frequency, NSSI, etc.), and explore whether these patterns differ across gender, race, or socioeconomic groups.

## References

Achenbach, T. M. (1991). Manual for the Child Behavior Checklist/4–18 and 1991 profile. University of Vermont, Department of Psychiatry.

Fryers, T., & Brugha, T. (n.d.). Childhood Determinants of Adult Psychiatric Disorder. <a href="https://doi.org/10.2174/1745017901309010001">https://doi.org/10.2174/1745017901309010001</a>

Harris, K. M., & Udry, J. R. (2015). National Longitudinal Study of Adolescent to Adult Health (Add Health) Wave I, 1994–1995 (V3). UNC Dataverse. <a href="https://doi.org/10.15139/S3/11900">https://doi.org/10.15139/S3/11900</a> Kim-Cohen, J., Caspi, A., Moffitt, T. E., Harrington, H., Milne, B. J., & Poulton, R. (2003). Prior Juvenile Diagnoses in Adults With Mental Disorder: Developmental Follow-Back of a Prospective-Longitudinal Cohort. Archives of General Psychiatry, 60(7), 709–717. <a href="https://doi.org/10.1001/archpsyc.60.7.709">https://doi.org/10.1001/archpsyc.60.7.709</a>

Mulraney, M., Coghill, D., Bishop, C., Mehmed, Y., Sciberras, E., Sawyer, M., Efron, D., & Hiscock, H. (2021). A systematic review of the persistence of childhood mental health problems into adulthood. Neuroscience & Biobehavioral Reviews, 129, 182–205. <a href="https://doi.org/10.1016/j.neubiorev.2021.07.030">https://doi.org/10.1016/j.neubiorev.2021.07.030</a>

Nepon, J., Belik, S. L., Bolton, J., & Sareen, J. (2010). The relationship between anxiety disorders and suicide attempts: Findings from the National Epidemiologic Survey on Alcohol and Related Conditions. Depression and Anxiety, 27(9), 791–798.

and Related Conditions. Depression and Anxiety, 27(9), 791–798.

<a href="https://doi.org/10.1002/da.20674">https://doi.org/10.1002/da.20674</a>

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the genera population. Applied Psychological Measurement, 1(3), 385–401.

https://doi.org/10.1177/014662167700100306

Ramdhonee-Dowlot, K., Balloo, K., Morgül, E., & Essau, C. A. (2025). Prevalence of Anxiety and Depression Among Children and Adolescents in Low- and Middle-Income Countries—A Systematic Review. Psychiatric Research and Clinical Practice, n/a-n/a.

https://doi.org/10.1176/appi.prcp.20250026

Schlack, R., Peerenboom, N., Neuperdt, L., Junker, S., & Beyer, A.-K. (2021). The effects of mental health problems in childhood and adolescence in young adults: Results of the KiGGS cohort. Journal of Health Monitoring, 6(4), 3–19. <a href="https://doi.org/10.25646/8863">https://doi.org/10.25646/8863</a> Harris, K. M. (2025). National Longitudinal Study of Adolescent to Adult Health (Add Health) Wave V, 2016–2018 (V1). UNC Dataverse. <a href="https://doi.org/10.15139/S3/ZYRZ5J">https://doi.org/10.15139/S3/ZYRZ5J</a>

## Multivariate

#### Figure 3:

- Logistic regression showed no significant association between adolescent depression scores and adulthood depression diagnosis (OR 1.00, p = .996).
- Suicide attempt history was also not a significant predictor (OR 1.47, p = .472), and there was no significant moderation effect (OR 1.00, p = .945).

#### Figure 4:

- Logistic regression showed that higher adolescent anxiety scores significantly increased the likelihood of adulthood anxiety diagnosis (OR 1.17, p = .002).
- Suicide attempt history was also a significant predictor (OR 2.41, p = .029), but the interaction was not significant (OR 0.89, p = .205).