

Research Brief

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TRENDS.

MEASURING ASSOCIATIONS BETWEEN SYMPTOMS OF DEPRESSION AND SUICIDE IN ADOLESCENCE AND UNHEALTHY ROMANTIC RELATIONSHIPS IN YOUNG ADULTHOOD

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OVERVIEW

Research and clinical experience suggest that issues related to suicide and depression in adolescence can negatively affect interpersonal relationships, including romantic relationships, in later life. To date, few large-scale studies have followed adolescents into early adulthood to examine relationship outcomes.

To address this gap, Child Trends analyzed data from heterosexual young adults participating in Add Health (the National Longitudinal Study of Adolescent Health). The sample consisted of young adults who were ages 12 to 17 during Wave I of the Add Health survey, had reported having been in sexual relationships with members of the opposite sex at Wave III, and had participated in all three waves of the survey. We relied on adolescents' self-reports of moderate-to-severe depressive symptoms and suicidal thoughts or attempts. Unhealthy relationship outcomes of interest included the presence of infidelity and the presence of violence, in each case by either the respondent or their partner.

KEY FINDINGS AND IMPLICATIONS

- Young, heterosexual adults who reported depressive or suicidal symptoms during adolescence are significantly more likely to report violence in their adult romantic relationships. These findings hold true controlling for age, gender, parent education, family structure, income, and race/ethnicity.
- This population is also more likely to report sexual infidelity—their own or a partner's—in their relationships.
- Findings from this study call attention to the long-term importance of helping adolescents dealing with depression or suicidal symptoms.
- Study authors recommend that researchers explore specific factors, like poor problem-solving or communications skills, or past victimization, that impact relationship outcomes for this population, and that practitioners use the results of that research to target interventions.
- Relationship violence is also not uncommon among young adults who did not report depressive or suicidal symptoms (20.4%), suggesting that many youth would benefit from a better understanding of how to establish and maintain healthy relationships.



BACKGROUND

Adolescents experiencing symptoms of depression or suicide have a much greater likelihood of reporting - or continuing to report - these maladies in adulthood.^{1,2,3} Recent research suggests that depressed or suicidal young adults are more likely to experience sexual and intimate partner violence,^{4,5} and are less likely to establish long-term, fulfilling romantic relationships.⁶ While research in this area is growing, studies are limited by a lack of nationally representative samples. Moreover, most studies exploring the relationship between depressive/suicidal symptoms in adolescence and unhealthy relationship outcomes examine data assessed at the same point in time and are therefore not able to assess change over time or examine whether depressive/suicide symptoms lead to unhealthy relationship outcomes.

To expand the knowledge base, Child Trends analyzed panel data obtained from a sample of 6,763 heterosexual young adults from Add Health (the National Longitudinal Study of Adolescent Health),⁷ which allowed us to examine whether symptoms of depression or suicide in adolescence predict unhealthy romantic relationship outcomes (relationship violence and sexual infidelity) in young adulthood. Our analyses extend previous research by examining the association over time between depressive or suicidal symptoms in adolescence and young adult romantic relationship outcomes, using a nationally representative sample of young adults.

METHODS

These analyses draw upon data collected by Add Health during Wave I (1994-1995), Wave II (1996), and Wave III (2001-2002). The same individuals were interviewed as they moved from adolescence into early adulthood. The sample consisted of 6,763 young adults, who were ages 12 to 17 at Wave I of the Add Health survey, had reported having been in sexual relationships with members of the opposite sex at Wave III, and who had participated in all three waves of the survey.

Respondents who, in adolescence, reported moderate-to-severe depressive symptoms in the previous week and/or suicidal thoughts or attempts in the past year, were coded as symptomatic. Those reporting no or mild depressive symptoms and no suicidal symptoms were coded as asymptomatic. We created a three-level variable categorizing respondents

- 1 Dunn, V., & Goodyer, I. A. (2006). Longitudinal investigation into childhood-and adolescence-onset depression: Psychiatric outcome in early adulthood. *The British Journal of Psychiatry*, 188 (3), 216-222.
- 2 Pine, D. S., Cohen, E., Cohen, P., & Brook, J. (1999). Adolescent depressive symptoms and predictors of adult depression: Moodiness or mood disorder. *American Psychiatric Journal of Psychiatry*, 156(1), 133-135.
- 3 Pine, D. S., Cohen, P., Brook, J., Gurley, D., Ma, Y. (1998). Anxiety and depression in adolescence as predictors of anxiety and depression in adulthood. *Archives of General Psychiatry*, 55, 56-66.
- 4 Barrios, L.C., Everitt, S.A., Simon, T.R., & Brener N.D. (2000) Suicide ideation among US college students. Associations with other injury risk behaviors. *Journal of American College Health*, 48, 229-233.
- 5 Gotlieb, I. H., Lewinsohn, P. M., & Seeley, J. R. (1998). Consequences of depression during adolescence: Marital status and marital functioning in early adulthood. *Journal of Abnormal Psychology*, 107(4), 686-690.
- 6 Kandel, D. B., & Davies, M. (1986). Adult sequelae of adolescent depressive symptoms. *Archives of General Psychiatry*, 43(3), 255-262.
- 7 Harris, K. M., Florey, F., Tabor, J., Bearman, P. S., Jones, J., & Udry, J. R. (2003). *The National Longitudinal Study of Adolescent Health: ResearchDesign*, Internet. 30 August 2004. Available: <http://www.cpc.unc.edu/projects/addhealth/design>.



as ‘asymptomatic’ (respondents did not report symptoms at either Waves I or II), ‘isolated’ (reported symptoms at Waves I or Wave II), or ‘recurring’ (reported symptoms at both Waves I and II).

The presence of infidelity and/or the presence of violence in sexual relationships were the unhealthy romantic relationship outcomes of interest. Sexual infidelity was defined as either the respondent reporting that they or their partner had sexual intercourse outside of their relationship; relationship violence was defined as either the respondent or their partner hitting, kicking, shoving, threatening, or insisting the other party have sexual intercourse.

We hypothesized that both recurring and isolated symptoms in adolescence would predict sexual infidelity and relationship violence. We also accounted for other factors that could be associated with sexual infidelity and relationship violence, including age, gender, parental education, family structure, family income, and race/ethnicity. For additional information about items used, scoring methods, and variable coding, see “Data Source and Methodology” on page 6.

Although our analyses took account of other factors that could affect sexual infidelity and relationship violence, caution in interpreting the results is necessary. For example, the scale used to measure depressive symptoms (CES-D) is not a diagnostic tool. Therefore, although we used previously-established measures of depressive symptoms, the coding of this measure may or may not indicate the presence of a mental health or psychiatric diagnosis. In addition, the conclusions could be strengthened by using additional sources of information, such as parents, guidance counselors, or mental health professionals, to offset issues such as reporter bias and memory lapses.

SAMPLE CHARACTERISTICS

Approximately 15 percent of the sample reported moderate-to-severe depressive symptoms, and 19.3 percent reported suicidal thoughts or attempts. The proportion of adolescents reporting moderate-to-severe depressive symptoms in this sample is higher than national prevalence rates, presumably because they are based on two waves of data collection, while the proportion of adolescents reporting suicidal symptoms in this sample is slightly lower than the national prevalence rate in 1995 (24 percent).⁸ Overall, approximately one out of four adolescent respondents reported symptoms of moderate-to-severe depressive and/or suicidal symptoms at one or both waves.

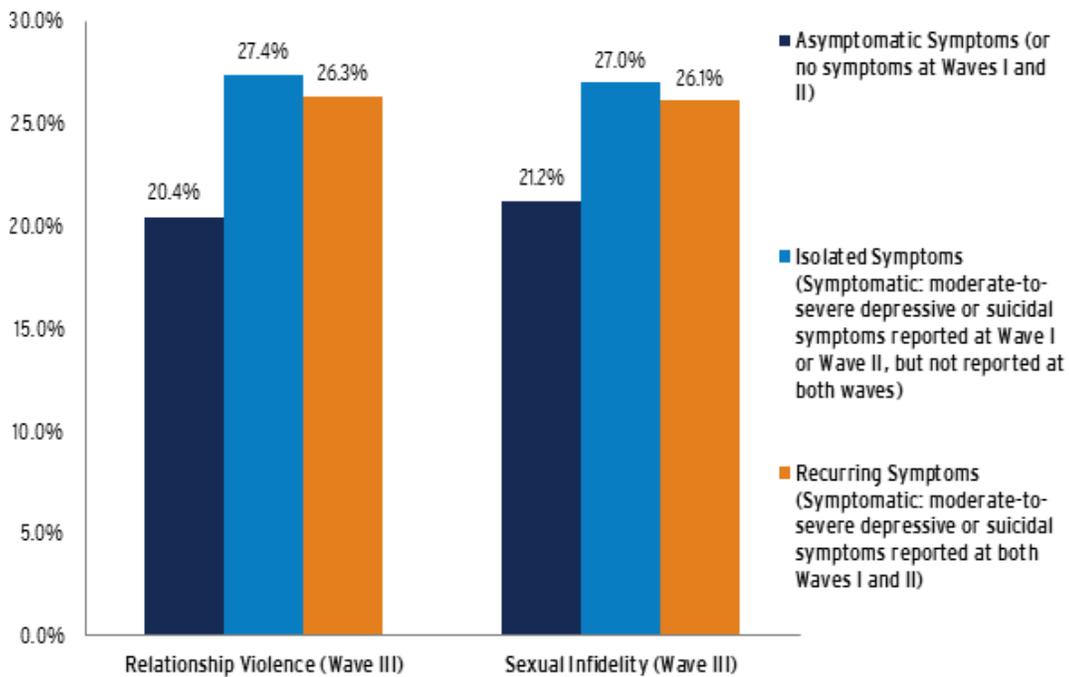
FINDINGS

Figure 1 illustrates the frequency of sexual infidelity and relationship violence, with and without the presence of depressive and/or suicidal symptoms. Our analyses indicate that young adults who experienced moderate-to-severe depressive or suicidal symptoms in adolescence were more likely to report violence and sexual infidelity in their relationships than those who were asymptomatic. These findings held after controlling for age, gender, parent education, family structure, family income, and race/ethnicity.

⁸ see CDC Youth Online -- High School YRBS at <http://apps.nccd.cdc.gov/youthonline>.



Figure 1: Weighted Probability of Reporting Unhealthy Romantic Relationship Outcomes During Young Adulthood



RELATIONSHIP VIOLENCE

Young adults who reported symptoms in adolescence (experiencing isolated or recurring depressive or suicidal symptoms) were significantly more likely to report violence in their young adult relationships (isolated: 27.4%; recurring: 26.3%) compared with young adults who had mild symptoms or were asymptomatic in adolescence (20.4%). When we examined all forms of relationship violence, young adults who were symptomatic in adolescence were more likely to have experienced violence than those who were asymptomatic (had no depressive symptoms or suicidal symptoms). [See page 5 for details on forms of relationship violence.]

SEXUAL INFIDELITY

Similarly, young adults who reported symptoms in adolescence were at a higher risk for reporting sexual infidelity in their romantic relationships, whether they reported that they themselves had been unfaithful or whether they had partners who had been unfaithful. Specifically, young adults who were symptomatic in adolescence were more likely to report sexual infidelity in their romantic relationships (isolated: 27.0%; recurring: 26.1%) than young adults who had not reported such symptoms (21.2%).



Data Source and Methodology

Child Trends used data from The National Longitudinal Study of Adolescent Health (Add Health), a nationally representative survey of U.S. students who were in 7th through 12th grades in 1994-1995. It was designed to provide a broad understanding of the health and well-being of adolescents and their subsequent development by following respondents over time into young adulthood. The third phase of the survey (Wave III) was conducted in 2001-2002, to collect information about unique areas of young adults' lives, including relationship and marital histories. The initial Wave III sample with valid longitudinal weights accounting for all waves of data was 10,828 young adults. We restricted the sample to 6,763 young adults who had reported having been in sexual relationships with members of the opposite sex, who had valid longitudinal weights at Wave III, and who were aged 12 to 17 at Wave I. The analytic sample (n=6,528) was slightly smaller because cases with missing data on the dependent variables of interest (n=235, or 3.5% of the study sample) were excluded.

Depression and suicide items from Waves I and II were combined to create a longitudinal variable. To assess symptoms of depression at Waves I and II, we used an abbreviated 18-item version of the Center for Epidemiological Studies of Depression Scale (CES-D), which is included in the Add Health Survey. We applied a gender-based, diagnostic threshold established in prior research using the CES-D scale with adolescents to identify moderate-to-severe depression, and adjusted for the absence of two items from the full CES-D scale. We used data from two items (During the past 12 months did you seriously consider committing suicide; How many times did you actually attempt suicide?) to construct a dichotomous measure of suicidality, with a value of "1" assigned if respondents had considered suicide in the past year or if they had attempted suicide one or more times, and a value of "0" was assigned if neither was the case. As mentioned above, the independent variable employed in this study combined Waves I and II depression or suicidal responses (0 = no depression symptoms or suicidal tendencies at either wave, 1= depression symptoms and/or suicidal tendencies at either wave, but not both waves and; 2 = depression symptoms and/or suicidal tendencies at both waves).

The relationship violence measure uses items from Wave III, Section 19 (Relationships in Detail): How often in the past year: have you threatened [partner] with violence, pushed or shoved [partner] or thrown something at [partner] that could hurt; have you slapped, hit, or kicked [partner]; has [partner] had an injury such as a bruise, sprain, or cut because of a fight with you; have you insisted on or made [partner] have sexual relations with you when [partner] did not want to; has [partner] threatened you with violence, pushed or shoved you or thrown something at you that could hurt; has [partner] slapped, hit, or kicked you; has [partner] insisted on or made you have sexual relations with you when you did not want to, or have you had an injury, such as a bruise, sprain, or cut because of a fight with [partner]? A summary variable was created; relationship violence was considered to be present if the sum of all items was greater than or equal to two.

The sexual infidelity measure uses items from Wave III, Section 19 (Relationships in Detail) relating to the respondent and the respondent's partner. Respondent's infidelity was assessed by whether the respondent reported having sexual partners outside of their current relationship. Partner's infidelity was assessed using the item: As far as you know, during the time that you and [partner] have been having a sexual relationship, has your partner had any other sexual partners? Infidelity was coded if the respondent reported being unfaithful or if the respondent perceived the partner to be unfaithful.

Multivariate analyses controlled for age, gender, parent education, family structure, family income, and race/ethnicity.

Age (Wave I) was categorized into two age groups, 12-14 and 15-17 years.

Gender (Wave II) was coded as male or female.

Parent level of educational attainment (Wave I), for either parent of the respondent, was categorized as less than high school, high school or GED, some college, or college completion or more.

Family structure (Wave I) was created by collapsing all categories into either a single parent or non-single parent household.

Family income (Wave I) was coded as low income (if in the bottom 25th percentile of the income distribution) and not low income (if in the top 75th percentile of the distribution).

Race/ethnicity (Wave I) was categorized as non-Hispanic black, white, Asian, and Hispanic/Latino.

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