Journal of Youth and Adolescence, Vol. 11, No. 5, 1982

Depression and Suicidal Ideation in Early Adolescents

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Received June 30, 1982

This study sought to determine to what extent depression in young adolescents could be predicted by a variety of demographic and personality measures. A sample of 132 adolescents enrolled in junior high school completed a biographical data sheet, short forms of the Beck Depression Inventory (BDI), a Sensation-Seeking Scale (SSS), the Family Environment Scale (FES), a social support index (SSI), and a life stress inventory (LSI). The nondepressed group differed from the depressed group on a variety of variables, and stepwise multiple regression suggested a significant relationship between depression and life stress and an inverse relationship between depression and family cohesion.

INTRODUCTION

Although considerable debate exists as to the nature of depression in adolescents and its similarity to adult depression, interest is growing in determining the etiological factors in adolescent depression. Part of this interest is stimulated by the fact that suicide rates among early and middle

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0047-2891/82/1000-0403$03.00/0

adolescents have doubled from 1961 to 1975 (Holinger, 1979). A recent study concluded that the syndrome of adolescent depression overlaps considerably with the adult syndrome, but acting out and social abandonment are two factors more characteristic of depressed adolescents (Mezzich and Mezzich, 1979). Little research has examined the relationship of depression to life stress and other variables in the adolescent's family, social network, and personality style. However, a multivariate study of these variables is an appropriate step in determining their interaction. This approach will be used in predicting adolescent depression and suicidal ideation in normal samples of early adolescents. The purpose of this study was to identify variables that may have etiological importance in the phenomenon of depression in early adolescents.

The sample consisted of 132 White eighth- and ninth-graders (59 males, 73 females) from six classes in a suburban junior high school outside Seattle, Washington. These students ranged in age from 13 to 16 (M = 14.4) and were tested during a regular class period in either psychology or health. The students were primarily from upper middle class families (Hollingshead Index M = 1.9). They completed a biographical data sheet, a life stress index (LSI) developed for adolescents (Coddington, 1972), a social support index (SSI; Chan and Perry, Note 1), and the short forms of the Family Environment Scale (FES; Moos, 1974), the Beck Depression Inventory (BDI; Beck and Beamesderfer, 1974), and the Sensation Seeking Scale (SSS; Zuckerman, 1972). A single total score was obtained from the SSI, BDI, and SSS. Stressful events recorded on the LSI were scored as a total number of nonweighted events. The FES assesses the social climate of families and has 10 subscales (e.g., Cohesion, Conflict, Achievement Orientation). On the BDI, the students were instructed to endorse the response most representative of their current feelings. The self-harm item was included in the BDI and measured four levels of suicidal ideation and intent, ranging from the absence of thoughts of harming oneself to agreeing that given the chance, one would kill oneself. The subjects were grouped into four levels of depression based on their BDI score (range 0-39): nondepressed ($\leqslant$4), N = 73; mild, ($\leqslant$7), N = 20; moderate ($\leqslant$15), N = 25; and severe ($\leqslant$16), N = 13.

No between-sex difference in total BDI score was noted (male M = 5.3, female M = 5.9, $t(130) = 0.54$. One-way ANOVAs were computed along level of depression on demographic and psychological variables. Significant between-group differences were noted on maternal education $F(3, 128) = 2.99$, $p < 0.05$; maternal occupation $F(3, 128) = 4.43$, $p < 0.005$; paternal occupation $F(3, 128) = 3.64$, $p < 0.01$; social support $F(3, 128) = 3.33$, $p < 0.02$; FES Cohesion $F(3, 128) = 14.56$, $p < 0.00001$; FES Conflict $F(3, 128) = 2.68$, $p < 0.05$; FES Active Recreational Orientation $F(3, 128) = 5.30$, $p < 0.002$; and LSI $F(3, 128) = 6.73$, $p < 0.0003$. These

differences indicated that greater depression was associated with a lower level of maternal education and occupation; a slightly lower level of paternal occupation; less social support; a less cohsive, less active-recreational, and more conflicted family; and with greater life stress.

The 13 independent variables measuring psychological dimensions and the criterion variables (depression as measured by the BDI) were submitted to a stepwise multiple regression analysis. Two variables, life stress and FES Cohesion, were significant predictors of depression, overall $F(2, 129) = 114.5\, p < 0.00001$. A multiple correlation of 0.84 indicated that these two variables accounted for 71% of the total variance (R^2). The primacy of life stress was supported in a follow-up analysis, where Cohesion was entered first and Life Stress entered second. Life Stress contributed 60% additional unique variance to Cohension's 16.7%. The stability of this relationship was noted in a stepwise analysis with a random sample of 90 of the 132 subjects, overall $F(2, 87) = 103.5, p < 0.00001$, with Life Stress entered first and followed by Cohesion. The 10 independent demographic variables and the criterion variable (BDI) were also submitted to a stepwise multiple regression analysis. Four variables, paternal occupation, maternal and paternal education, and grades were significant predictors of depression, overall $F(4, 127) = 20.70, p < 0.0001$. The lower these four variables, the greater the level of depression. A multiple correlation of 0.72 indicated that these four variables accounted for 52% of the total variabce.

These 6 best predictors, 2 psychosocial and 4 demographic, were entered in a stepwise fashion with depression as the dependent variable. Three variables—life stress, FES Cohesion, and paternal occupation—were significant predictors of depression, overall $F(3, 128) = 90.35, p < 0.0001$. A multiple correlation of 0.88 indicated that these three variables accounted for 78% of the total variance. It appeared that paternal occupation accounted for 7% of unique variance over and above life stress and family cohesion.

The psychosocial variables were also regressed in a stepwise fashion with the criterion variable of suicidal ideation (four levels as measured by the self-harm item on the BDI). Four FES variables, Cohesion, Independence, Organization, and Achievement Orientation, were significant predicators of severity of suicidal ideation, overall $F(4, 127) = 11.93$, $p < 0.0001$. A multiple correlation of 0.58 indicated that these four variables accounted for 34% of the total variance.

When the demographic variables were regressed in a stepwie fashion with the criterion variable of suicidal ideation, only the variable of grades was a significant predictor, overall $F(1, 130) = 4.0, p < 0.01$. A multiple R of 0.22 indicated that it only accounted for less than 5% of the total variance.

These analyses suggest that depression in early adolescence is very strongly related to the amount of recent life stress the adolescent has experienced, with greater life stress linked to greater depression. The measure in this study was a simple count of life events, which accounted for 68.7% of the variance. In addition, a measure of family cohesion appeared inversely related to depression. Moos (1974) has described this scale as measuring concern and commitment to the family and revealing the family's supportive equality. Finally, the employment status of the adolescent's father contributed some unique variance. A lower level of employment, and presumably family income, was related to depression. This finding parallels that of Lefkowitz, Tesiny, and Gordon (1980), who noted an inverse relationship between childhood depression and family income. The nature of this contribution is difficult to explain in that these children are primarily from upper middle class families and the Hollingshead Index did not differ significantly between depressed and nondepressed groups.

In this sample suicidal ideation appears to be a highly different phenomenon than depression. Recent life stress was not related. Increasing severity of suicidal ideation was related to family social climate variables, namely, less cohesiveness, independence, and organization and a greater achievement orientation. These findings suggest that depression in this group is more situational and stress related, while suicidal ideation is related more to the family social climate. It is interesting that sensation seeking and social support were not related to depression or suicidal ideation. These variables were included to tap the acting out and social abandonment that have been seen as characteristic of depressed adolescents (Mezzich and Mezzich, 1975). Despite its lack of predictive power, the more depressed groups did report significantly less social support ($p < 0.02$).

Depression in a nonpsychiatric sample of young adolescents appears related to recent life experiences (suggesting a situational aspect to the depression) and lower family cohesion and paternal income (both suggesting a more long-term contributor to the depression). Clearly, the recent life stress was the critical variable; this finding underscores the fact that although depression is a measurable phenomenon in early adolescents, it appears to be primarily related to recent stresses, which is certainly suggestive of a more transient nature of depression in this age group.

ACKNOWLEDGMENTS

The authors would like to thank Jim Denison, Karen Hamill, Mike Christiansen, and Gail Novito for their cooperation in this study.

REFERENCE NOTE

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