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Attributional Style and Depressive Symptoms Among Children

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The reformulation of helplessness theory proposes that an insidious attributional style accompanies and predisposes depressive symptoms. To date, all research investigating the reformulation has used adult subjects. In the present study, we investigated predictions of the reformulation among 8–13-year-old children. Children who attributed bad events to internal, stable, and global causes were more likely to report depressive symptoms than were children who attributed these events to external, unstable, and specific causes. This depressive attributional style predicted depressive symptoms 6 months later, suggesting that it may be a risk factor for depression. Finally, children's style for bad events and their depressive symptoms converged with those of their mothers, but not with those of their fathers.

According to the reformulated helplessness model, depressive symptoms are associated with a characteristic style of explaining bad events by internal, stable, and global causes (Abramson, Seligman, & Teasdale, 1978). Empirical support for the reformulation has been controversial (see review by Peterson & Seligman, in press), and further research seems warranted.

To date, all studies have used adult subjects. We now report an investigation of depression in school children and of its relationship to attributional style. Three questions guided our research: (a) Are depressive symptoms in children associated with internal, stable, and global attributions for bad events? (b) Does this style precede and put children at risk for later depressive symptoms? (c) Might children learn attributional style from their parents?

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Method

Subjects and Procedure

Ninety-six children were recruited from two Philadelphia elementary schools for a study of the children's thoughts, moods, and behavior. These schools consist predominantly of white, middle-class students. Approximately equal numbers of boys ($n = 50$) and girls ($n = 46$) and of third, fourth, fifth, and sixth graders participated. The children ranged in age from 8 to 13 years. They completed the Children's Depression Inventory (CDI; Kovacs & Beck, 1977) and the Children's Attributional Style Questionnaire (CASQ) at two times, separated by a 6-month interval. The questionnaires were filled out during classtime. The researcher read each aloud while the children silently read their copies.

Within 2 weeks of the second (Time 2) questionnaires, parents of the children were contacted and were asked to complete the Beck Depression Inventory (BDI; Beck, 1967) and the adult Attributional Style Questionnaire (ASQ; Peterson et al., 1982). Forty-seven mothers and 36 fathers (representing 51 different families) did so.

Instruments

The CDI contains 27 items, each consisting of three self-report statements graded in severity from 0 to 2. A sample item is as follows: *I am sad once*

in a while (0); *I am sad many times* (1); *I am sad all the time* (2). The child is instructed to complete the CDI based on how he or she has been feeling during the preceding 2 weeks. The BDI is the analogous instrument for assessing depressive symptoms in adults.

The CASQ[1] has 48 items, each of which consists of a hypothetical good or bad event involving the child and two possible causes of the event. Respondents pick the cause from the pair that better describes why the event occurred. The two causes provided hold constant two of the attributional dimensions while varying the third. A sample item from the CASQ that measures internality versus externality (while holding constant stability and globality) is as follows: A good friend tells you that he hates you; (a) My friend was in a bad mood that day (external); (b) I wasn't nice to my friend that day (internal). Sixteen questions pertain to each of the three dimensions (internality, stability, and globality). Half of the questions provide good events to be explained, and half of the questions provide bad events. The CASQ is scored by assigning a 1 to each internal, stable, or global response (when that dimension is varied), and a 0 to each external, unstable, or specific response. Subscales are formed by summing these scores across the appropriate questions for each of the three causal dimensions, separately for good events and for bad events.

The Attributional Style Questionnaire (ASQ) used with parents asks respondents to write in their own words the major cause for each of 12 hypothetical events involving themselves, 6 good and 6 bad. Then the respondent rates each of these causes along 7-point scales in accord with its internality (versus externality), stability (versus instability), and globality (versus specificity). Internality, stability, and globality subscales are formed separately for good and for bad events, by averaging ratings over the events. Overall composite scores for good events and for bad events result from combining the subscales.

Results[2]

Attributional style and depressive symptoms among children correlated strongly with each other. Furthermore, attributional style for bad events predicted subsequent depressive symptoms, with initial level of depression held constant. Finally, children's style for bad events and their depressive symptoms converged with the corresponding scores of their mothers, but not with those of their fathers.

Attributional Style and Depressive Symptoms

Table 1 presents the means, standard deviations, reliabilities, and stabilities of the instruments completed by the children at Time 1 and Time 2. CASQ subscale scores possessed only modest reliabilities. Although internal consistencies mostly exceeded scale intercorrelations, indicating that the scales were empirically distinguishable (Campbell & Fiske, 1959), they were not high. Higher reliabilities were obtained by combining the subscales (separately for good events and for bad events) to form a composite, as is done with the ASQ (Peterson et al., 1982). The CASQ scores were fairly consistent over the 6-month interval (composite $rs = .71, .66$, $ps < .001$), showing attributional style to be a somewhat stable individual difference among children, just as it is among adults (Peterson et al., 1982).

CDI scores were highly reliable and quite stable over the 6 months. At both administrations, CDI scores were skewed, with most of the children at the lower end. An intriguing aspect of these data is that girls tended to report more depressive symptoms than did boys (Time 1: 8.88 vs. 6.43, $t(94) = 1.94$, $p < .10$; Time 2: 8.26 vs. 5.96, $t(94) = 1.92$, $p < .10$), suggesting that the adult sex difference in depression (e.g., Radloff, 1975) may be present as early as 8 to 13 years of age (cf. Dweck & Licht, 1980).

Table 1 shows that attributional style among children, as measured by the CASQ, correlated with depressive symptoms as predicted by the helplessness reformulation. The attribution of bad events to internal, stable, and global causes covaried with CDI scores (composite $rs = .51, .40$, $ps < .001$), as did the reverse style for good events (composite $rs = -.53, -.54$, $ps < .001$).

Predisposing Role of Attributional Style

According to the helplessness reformulation, causal attributions do not simply correlate with depressive symptoms, but more important, put one at risk for them. Thus, we predicted CDI scores at Time 2 from attributional style scores at Time 1, after first removing initial depression (i.e., CDI scores at Time 1), sex of the child, grade of the child, and the interaction of sex and grade in a hierarchical multiple regression analysis. This procedure assesses whether attributions predict subsequent depression above and beyond any correlation with initial depression. Because of the modest reliabilities of the CASQ, we performed these analyses only with the composites. Composite style for bad events predicted subsequent depressive symptoms, $F(1, 90) = 4.76$, $p < .05$, whereas composite style for good events did not, $F(1, 90) = .62$, *ns*).

[1] The CASQ has elsewhere been referred to as the KASTAN.

[2] All statistical tests are two-tailed.

(Attributional style at Time 2 could not be predicted from CDI scores at Time 1, after controlling attributional style at Time 1.)

Origins of Attributional Style

Do children learn their attributional style from their parents? To explore this question, we correlated attributional style scores of parents and their children, as well as their depression inventory scores. (The children's scores were obtained by averaging across the two administrations of the questionnaires.) Children whose parents completed questionnaires did not differ from the other children with respect to attributional style or depression. The major findings were (a) mother's composite style for bad events correlated with her child's composite style for bad events ($r = .39$, $p < .01$) and with her child's depressive symptoms ($r = .42$, $p < .005$), (b) mother's depressive symptoms correlated with her child's depressive symptoms ($r = .37$, $p < .01$), and (c) father's attributional style and depression were not related to scores of his mate or their child. Intercorrelations between scores of mother and child on the individual attributional dimensions suggest that the bulk of the relationship among the composite measures resulted from the contributions of the internality and globality subscales.

Discussion

These results extend the empirical support for the attributional reformulation of helplessness theory. As predicted, children with depressive symptoms were more likely than the nondepressed to endorse internal, stable, and global explanations for bad events. The opposite style for good events was also associated with depressive symptoms. In contrast, among adults, attributional style for good events is only weakly correlated with depression.

Furthermore, an internal, stable, and global way of construing the causes of bad events predicted

Table 1
Attributional Style and Depressive Symptoms Among Children

Measure	*M*	*SD*	Reliability	Stability[a]	*r*[b]
Attributional style					
For good events					
Internality					
Time 1	4.61	1.48	.32	.53**	−.34**
Time 2	4.71	1.61	.43		−.31*
Stability					
Time 1	4.21	1.91	.55	.61**	−.47**
Time 2	3.91	1.89	.54		−.54**
Globality					
Time 1	4.67	1.58	.40	.54**	−.35**
Time 2	4.81	1.78	.55		−.39**
Composite					
Time 1	13.49	3.72	.66	.71**	−.53**
Time 2	13.43	4.10	.73		−.54**
For bad events					
Internality					
Time 1	2.30	1.57	.43	.63**	.45**
Time 2	2.47	1.73	.56		.28*
Stability					
Time 1	2.40	1.40	.42	.52**	.31*
Time 2	2.01	1.17	.13		.26*
Globality					
Time 1	1.88	1.27	.31	.64**	.21*
Time 2	1.61	1.26	.39		.26*
Composite					
Time 1	6.58	2.77	.50	.66**	.51**
Time 2	6.09	2.80	.54		.40**
Children's Depression Inventory					
Time 1	7.71	6.28	.86	.80**	
Time 2	7.16	5.92	.85		

Note. $N = 96$. Reliability is estimated by Cronbach's (1951) alpha.
[a] *r* with same measure in 6 months. [b] With concurrent Children's Depression Inventory.
* $p < .05$. ** $p < .001$.

depressive symptoms in children 6 months later, with initial level of depression held constant. Again, this supports an important prediction of the reformulation. Future research measuring intervening bad events and using causal modeling might be able to specify the path by which attributional style leads to later depressive symptoms.

Finally, a mother's attributional style for bad events and her depressive symptoms correlated with the corresponding style and symptoms of her child. The intrapsychic vicious circle of the depressive (Beck, 1967) may therefore be embedded in an interpersonal vicious circle. The child may learn attributional style and/or depressive symptoms from the mother, and these may then maintain each other. The means of this convergence are not known at the present time, and the child may influence the mother as much as she influences the child.

This research has several limitations. It relied on relatively new questionnaires to assess both depressive symptoms and attributional style. The CDI is the most widely used assessment technique for childhood depression (Kazdin, 1981), but it is still a preliminary instrument. It is best used to assess the severity of depressive symptoms, not to diagnose the presence or the absence of depressive disorder. Furthermore, the best interpretation of low scores on the CDI is presently unclear (Kovacs, 1980/1981), and most of the children in the present investigation had low scores.

The CASQ was developed for the present research, so the present findings are its major validity evidence. CASQ scores were not as stable as CDI scores, and this may reflect either differential reliability of the instruments or differential stability of the constructs they measure. Still, the present findings were in accord with our predictions, justifying our decision to use this questionnaire. Several other studies using the CASQ have since corroborated our findings (e.g., Kaslow, Rehm, Pollack, & Siegel, 1984; Kaslow, Rehm, & Siegel, in press; see also Leon, Kendall, & Garber, 1980).

On the whole, our research participants were not severely depressed. Whether our results generalize to more seriously disturbed children, or to depression considered as a syndrome, remains to be seen (but see Kaslow et al., 1984). Doubts have been raised about the similarity of mild and severe depressive symptoms (Depue & Monroe, 1978), but the issue is an empirical one, at least with regard to specific correlates such as attributional style.

In conclusion, children with depressive symptoms share some characteristics of adults with depressive symptoms. Both have an attributional style in which bad events are seen as caused by internal, stable, and global factors. Both may be put at risk for future depression by processing information about bad events through this insidious attributional style. A child may learn how to explain bad events from the mother, and we speculate that this way of explaining events may persist into adulthood, rendering the individual more vulnerable to depression once bad events occur.

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