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Coping With Stressful Events in Older Children and Young Adolescents

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Both the capacity to generate alternative solutions to cope with stressful events and the strategies actually used to cope with interpersonal and academic stressors were examined in a sample of junior high school age youngsters. Subjects were moderately consistent in the generation and use of problem- and emotion-focused coping with the two types of events, and they adjusted the number of problem-focused alternative solutions they generated to match their appraisals of the controllability of the cause of interpersonal stressors. The number of alternative solutions generated and strategies used for interpersonal stressors was related to both self-reports and maternal reports of internalizing and externalizing emotional/behavioral problems. Specifically, the problem-focused alternatives generated and strategies used were negatively related to emotional/behavioral problems, whereas the emotion-focused alternatives generated and strategies used were positively related to emotional/behavioral problems. Coping with academic stress was not related to emotional/behavioral problems. Self-reported emotional/behavioral problems varied as a function of the match between perceived control and the generation of problem-focused alternatives for coping with social stressors but did not vary as a function of the match between perceived control and other coping strategies.

Stressful events of both major and minor magnitude in the lives of children and adolescents are significantly related to youngsters' emotional and behavioral problems (see reviews by Compas, 1987b; Johnson, 1986). However, substantial individual differences exist in the levels of problems that are associated with stressful experiences. This variability is due in part to differences in the resources available and methods used by children and adolescents to cope with adverse events (Compas, 1987a). Prior studies of child and adolescent coping have shown that cognitive and behavioral efforts to alter sources of stress as well as attempts to regulate the negative emotions associated with stressful circumstances are important in reducing the negative effects of a range of stressful events, including interpersonal problems and achievement-related stressors (Compas, 1987a).

At least four issues related to child and adolescent coping warrant further investigation. First, the types of coping strategies used by children and adolescents and the functions served by these strategies need to be examined. Of particular importance is the distinction between *problem-focused coping,* defined as efforts to act on the source of stress to change it, and *emotion-focused coping,* defined as efforts to regulate emotional states that are associated with or result from stressful events (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Although the extent to which children and adolescents use problem- and emotion-focused coping strategies has recently received increased attention (e.g., Tero & Connell, 1984; Wills, 1986), their relation to emotional and behavioral problems remains unclear (Compas, 1987a).

Children's abilities to conceptualize alternative solutions to stressful events and the relation of this skill to emotional and behavioral problems represents a second area in need of further research. Spivack and Shure and their colleagues have shown that the ability to generate a variety of alternative solutions to hypothetical interpersonal problems is an important component of social problem-solving and is related to behavioral adjustment in children and adolescents; that is, youngsters with emotional and behavioral problems have been found to generate fewer alternative solutions than control subjects (see reviews by Spivack & Shure, 1982, 1985). However, the importance of generating alternative solutions for coping with real-life stressors and the relation between the types of alternative solutions generated by a youngster and those actually used in coping with stress have not been investigated.

Third, the comparison of cross-situational consistency or variability in children's coping has been rare. This is due, to a great extent, to the absence of methods for assessing child and adolescent coping across different situations. For example, methodologies for assessing the solving of interpersonal problems (see Spivack & Shure, 1982, 1985) and coping with academic failure (Tero & Connell, 1984) rely on different techniques for obtaining data and assess different aspects of the coping process. In contrast, structured measures to assess the coping strategies used by adults (e.g., Billings & Moos, 1981; Folkman & Lazarus, 1980, 1985; Stone & Neale, 1984) have been used across a variety of stressful episodes and have shown considerable variability in coping across situations (e.g., Compas, Forsythe, & Wagner, in press; Folkman & Lazarus, 1980). In contrast, a recent study by Wills (1986) suggested that young adolescents may display greater consistency in coping than adults. Whether children and adolescents are more consistent in their coping than adults is an important question for continued research.

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A fourth, related area for investigation involves the relation between coping and cognitive appraisals of stressful situations. The variability observed in adults' coping may reflect individuals' attempts to match or fit their coping to differences in the perceived demands of stressful situations. Folkman and Lazarus (1980) and Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) found that individuals used more problem-focused coping in situations that they appraised as changeable and used more emotion-focused coping in situations that they appraised as unchangeable realities that they must accept. Forsythe and Compas (1987) found a similar pattern and, in addition, found that psychological symptoms were related to the degree of fit between appraisals of control and the relative amount of problem- and emotion-focused coping used. Psychological symptoms were higher when subjects used more emotion-focused coping with events perceived as controllable and more problem-focused coping with events perceived as uncontrollable. The relation between coping and cognitive appraisals has not been investigated in children or adolescents (Miller & Green, 1985).

The present investigation examined these four issues in a sample of older children and young adolescents. Youngsters reported the alternative solutions they generated and the strategies they used to cope with recent interpersonal and academic stressors. They were expected to generate and use both problem- and emotion-focused coping strategies in response to both types of events. The relation between coping and youths' self-reports and maternal reports of emotional/behavioral problems was also examined. Both the number of problem- and emotion-focused alternative solutions generated and the number of strategies used to cope with stressful events were expected to be inversely related to emotional/behavioral problems. Finally, youngsters were expected to adjust the number of alternative solutions they generated and the number of coping strategies they used to fit their appraisals of control over stressful events, emphasizing problem-focused coping with controllable events and emotion-focused coping with uncontrollable events. Emotional/behavioral problems were expected to be low when youngsters matched their coping with their perceptions of control (e.g., generating and using more problem-focused coping with controllable stressors) and high when appraisals and coping were mismatched (e.g., failing to generate and use problem-focused coping with controllable stressors).

Method

Subjects

Subjects were 130 children and young adolescents (73 girls and 57 boys) ranging in age from 10 to 14 years (M = 11.89, SD = 1.01) and enrolled in the sixth, seventh, and eighth grades in a rural area of northern New England. Representative of the population in this area, 98% of the subjects were White. Median family income was from $20,000 to $24,999 and ranged from less than $3,000 to more than $40,000. Mean number of hours worked per week outside the home was 25.89 (SD = 17.53) for mothers and 42.63 (SD = 16.62) for fathers. Fathers had a mean education level of 12.70 years of school (SD = 3.82) and mothers had a mean of 13.07 years (SD = 2.72). Family socioeconomic status based on education, occupation, gender, and marital status (Hollingshead, 1975) was as follows: Level 1, 21%; Level 2, 19%; Level 3, 21%; Level 4, 29%; and Level 5, 10%. Eighty-one percent of the youngsters were from two-parent families and 19% were from single-parent families. The mean number of children in the home was 2.60 (SD = 1.14).

Measures

Child/adolescent coping. Subjects completed an open-ended instrument developed for use in this study to assess coping with self-identified recent stressful events. Subjects described one particularly stressful interpersonal event and one stressful academic event that had occurred in the past 3 months and explained why they found the events to be upsetting. Examples of frequently listed social stressors included "illness of a friend or family member" and "arguments or fights with a friend or family member." Common school-related stressors included "receiving a poor grade" and "problems with homework." Next, subjects rated the degree of control they had over the cause of the event on a 5-point scale (1 = *complete control,* 5 = *no control*). No differences were found in perceptions of control of academic or social stressors as a function of age or gender. Using a format from previous measures of problem solving (e.g., Asarnow, Carlson, & Guthrie, 1987; Krantz, Clark, Pruyn, & Usher, 1985; Platt & Spivack, 1977), subjects then generated a list of all the possible ways that they could have handled or dealt with the event and placed a check mark next to each item that they actually used to cope with the event.

All responses were classified as problem-focused coping or emotion-focused coping by two research assistants. Raters were provided with brief definitions and examples of these two types of coping and instructed to classify all responses into one of the two categories (copies of the instructions for coding responses are available from the authors). Interrater agreement was calculated for all responses (number of agreements divided by the number of agreements plus the number of disagreements) and was found to be 96% (κ = .88) for academic stressors and 94% (κ = .87) for social stressors. Examples of problem-focused coping strategies included "studied more," "did more homework," and "talked things over with the other person involved in the problem." Emotion-focused strategies included "calmed myself down" and "ignored the situation" as well as potentially less adaptive strategies such as "hit the other person," "yelled at the other person," and "threw things." In keeping with Lazarus and Folkman's (1984) conceptualization of coping, we chose to include all efforts that youngsters reported, and we did not attempt to distinguish a priori between effective coping and maladaptive responses (cf. Asarnow et al., 1987). Furthermore, we recognized that some strategies may have served both problem- and emotion-focused functions (e.g., "talked about the problem with a friend or family member").

The long-term stability of subjects' responses on the measure was analyzed by comparing the data reported here with subjects' reports of coping with different social and academic stressors 9 months later. Significant correlations were found for the total number of alternatives generated for the two stressful events, $r(92) = .30$, $p = .002$; for the number of emotion-focused alternatives generated, $r(91) = .26$, $p = .007$; and for the number of problem-focused alternatives generated, $r(91) = .35$, $p < .001$. The total number of strategies used for the two events was not related to the number of strategies used for two events 9 months later, $r(66) = .17$, $p = .074$, but the number of emotion-focused strategies used, $r(65) = .26$, $p = .016$, and the number of problem-focused strategies used, $r(65) = .25$, $p = .021$, were significantly associated over 9 months.

This open-ended format was selected over the more traditional checklist method of assessing coping used in adult measures for two reasons. First, an objective of this study was to assess subjects' abilities to generate alternative solutions to stressful situations. Presenting subjects with a predetermined list of coping strategies does not allow for accurate assessment of this skill. Second, no surveys of coping strategies used by this age group have been reported in the literature. Thus, it was not possible to present subjects with a representative list of coping strategies for them to endorse.

In the present study, subjects completed the coping measure twice: once in reference to a school or academic stressor and once in reference to a social or interpersonal stressor. The order of presentation of the two forms was counterbalanced.

Child/adolescent behavior problems. Two measures were used to assess emotional/behavioral problems in this sample: the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) and the Youth Self-Report version of the CBCL (YSR; Achenbach & Edelbrock, 1987). Subjects' mothers completed the CBCL as part of a battery of other questionnaires not reported here. The CBCL includes 118 behavior problem items that are rated by a parent as *not true, sometimes true,* or *very true or often true* for their child. Narrow-band problem scores (e.g., depressed, hyperactive) were used in the present analyses.

Subjects completed the Youth Self Report (YSR) as a measure of self-reported emotional/behavioral problems. The YSR includes 102 behavior-problem items rated *not true, somewhat or sometimes true,* and *very true or often true* by the respondent (Achenbach & Edelbrock, 1987). Narrow-band scores reflecting subtypes of behavior problems (e.g., depressed, delinquent, aggressive) were used in the present analyses.

Procedure

All students in the sixth through eighth grades in six public schools were given a letter requesting informed consent to deliver to their parents. Voluntary participation was invited, with $25 remuneration provided to each family upon the completion of several questionnaires by children and parents. Approximately 50% of the families volunteered to participate. Once informed consent was obtained, students completed their questionnaires during two 50-min sessions at school. The YSR was completed during the first session and the coping questionnaires were completed during the second session (additional measures not reported here were also completed at each session). At the end of the first session, students were given a packet of questionnaires to deliver to their parents, and parents were instructed to have their child return the completed forms in a sealed envelope in time for the second session.

Results

All analyses are presented separately for boys and girls because previous studies of coping have suggested the importance of examining for gender differences (Compas, 1987a) and because both the YSR and CBCL are normed separately for boys and girls. To control for familywise error rates, the number of significant correlations expected to occur by chance (.05) was determined for each matrix, and the lowest statistically significant correlations, up to that number, were regarded as nonsignificant and were not reported (cf. Achenbach & Edelbrock, 1981; Feild & Armenakis, 1974; Sakoda, Cohen, & Beall, 1954).[1]

Descriptive Analyses

Means and standard deviations for the number of coping alternatives generated are presented by grade and sex in Table 1. Multivariate analyses of variance (MANOVAs) were conducted with grade and sex as the independent variables and coping alternatives as the dependent variables. With regard to alternatives generated for the two events, the overall MANOVA for sex was not significant; there was a significant effect for grade, $F(6, 198) = 2.63$, $p = .018$; and the Grade × Sex interaction was not significant. Univariate analyses indicated that emotion-focused alternatives increased as a function of grade, $F(2, 101) = 5.64$, $p = .005$, but that total alternatives and problem-focused alternatives did not. Post hoc analyses (Student-Newman-Keuls procedure) indicated that eighth graders generated more emotion-focused alternatives than both sixth and seventh graders ($p < .05$). Analyses of the alternatives generated for social stressors indicated a significant MANOVA for grade, $F(6, 200) = 2.97$, $p = .008$, but no main effect for sex and no Grade × Sex interaction. Univariate analyses showed that problem-focused alternatives decreased as a function of grade, $F(2, 102) = 5.41$, $p = .006$, and that emotion-focused alternatives, $F(2, 102) = 4.72$, $p = .011$, increased as a function of grade. Post hoc analyses indicated that eighth graders generated fewer problem-focused alternatives ($p < .05$) and more emotion-focused alternatives than sixth and seventh graders ($p < .05$). Finally, alternatives generated for academic stressors also differed as a function of grade; specifically, emotion-focused alternatives increased significantly with grade, $F(2, 105) = 3.88$, $p = .024$, with eighth graders reporting more alternatives ($p < .05$).

Table 1
Means and Standard Deviations for Alternative Solutions Generated for Coping With Stressful Events

	Grade 6		Grade 7		Grade 8	
Coping alternative	*M*	*SD*	*M*	*SD*	*M*	*SD*
Girls ($n = 73$)						
Total events						
Total	5.80	1.78	6.40	2.30	5.60	2.45
Problem-focused	4.73	1.86	4.72	2.54	2.80	1.39
Emotion-focused	1.07	1.01	1.68	1.90	2.80	2.57
Academic events						
Total	2.96	1.16	3.44	1.35	3.60	1.35
Problem-focused	2.55	1.18	2.56	1.60	1.90	.99
Emotion-focused	.40	.69	.88	1.16	1.70	1.82
Social events						
Total	2.74	1.02	2.96	1.30	2.00	1.33
Problem-focused	2.07	1.32	2.16	1.40	.90	.99
Emotion-focused	.66	.83	.80	.86	1.10	1.19
Boys ($n = 57$)						
Total events						
Total	4.78	1.65	6.00	3.03	7.36	3.29
Problem-focused	3.73	2.18	4.68	2.54	4.54	2.20
Emotion-focused	1.05	1.68	1.31	2.52	2.72	2.24
Academic events						
Total	2.95	1.52	2.93	1.48	4.00	2.60
Problem-focused	2.59	1.76	2.31	1.30	3.27	1.67
Emotion-focused	.36	.58	.62	1.31	.72	1.79
Social events						
Total	2.10	1.32	3.06	1.76	3.36	1.43
Problem-focused	1.47	1.17	2.37	1.66	1.27	1.10
Emotion-focused	.63	1.38	.68	1.44	2.00	1.41

[1] An alternative approach to controlling for familywise error rates involves a multistage or ordered Bonferroni procedure (e.g., Larzelere & Mulaik, 1977; Rosenthal & Rubin, 1984). However, this procedure may be overly conservative for matrices of dependent correlations such as those presented here. When this procedure was used with the present data, only two of the correlations between coping and YSR scores and only one of the correlations between coping and the CBCL were significant.

Table 2
Means and Standard Deviations for Coping Strategies Used for Stressful Events

Coping alternative	Grade 6		Grade 7		Grade 8	
	M	*SD*	*M*	*SD*	*M*	*SD*
Girls (n = 73)						
Total events						
Total	3.53	2.35	3.32	2.07	3.60	3.80
Problem-focused	2.61	2.17	2.48	1.93	1.50	1.90
Emotion-focused	.92	.97	.84	1.06	2.10	2.51
Academic events						
Total	1.59	1.24	1.84	1.10	2.20	2.30
Problem-focused	1.29	1.26	1.40	1.15	.90	1.10
Emotion-focused	.29	.54	.44	.71	1.30	.39
Social events						
Total	1.88	1.28	1.48	1.26	1.40	1.71
Problem-focused	1.25	1.13	1.08	1.15	.60	1.07
Emotion-focused	.63	.79	.40	.64	.80	1.13
Boys (n = 57)						
Total events						
Total	2.78	1.61	3.25	1.73	4.45	2.97
Problem-focused	2.36	1.70	2.75	1.88	3.09	2.80
Emotion-focused	.47	.69	.50	1.09	1.36	.92
Academic events						
Total	1.81	1.25	1.56	1.15	2.27	2.19
Problem-focused	1.59	1.33	1.31	1.07	2.09	2.21
Emotion-focused	.27	.45	.25	.57	.18	.40
Social events						
Total	.94	.91	1.68	1.07	2.18	.98
Problem-focused	.78	.78	1.43	1.20	1.00	1.00
Emotion-focused	.15	.37	.25	.68	1.18	.75

Means and standard deviations for the number of coping strategies used as a function of grade and sex are presented in Table 2. The MANOVA for the number of strategies used in total for the two events indicated a significant effect for grade, $F(6, 198) = 2.43$, $p = .027$. Specifically, the number of emotion-focused strategies used increased with grade, $F(2, 101) = 1.42$, $p = .002$, with post hoc analyses indicating that eighth graders used more strategies than sixth and seventh graders ($p < .05$). With regard to the number of strategies used with social stressors, a Grade × Sex interaction was found for the total number of strategies used, $F(2, 102) = 4.36$, $p = .015$, with girls reporting more strategies than boys in Grade 6, $F(1, 44) = 7.55$, $p = .009$. Post hoc analyses revealed that sixth grade boys used fewer strategies than seventh and eighth grade boys ($p < .05$), whereas girls' scores did not change with age. A main effect was found for grade, with the number of emotion-focused strategies used increasing as a function of grade, $F(22, 102) = 6.47$, $p = .002$. Finally, with regard to the number of strategies used with academic stressors, the MANOVA indicated a significant effect for sex, $F(3, 103) = 3.61$, $p = .016$. The number of emotion-focused strategies used with academic stressors varied for boys and girls, $F(1, 105) = 8.14$, $p = .005$, with girls reporting more strategies.

Cross-Situational Consistency in Coping

The degree of cross-situational consistency in the number of problem- and emotion-focused alternatives generated and strategies used for social and academic stressors is represented by Pearson correlations in Table 3. Three of the 16 correlations in the matrices for boys and for girls were expected to be significant by chance. Thus, the three significant correlations that were smallest in magnitude were not considered significant. Both boys and girls displayed low-to-moderate levels of consistency in the alternatives they generated and in the strategies they used across the two situations, with 5 of the 8 correlations reaching significance. For example, the number of emotion-focused alternatives generated for social and academic stressors was significantly correlated for girls, $r(70) = .42$, $p = .006$, and boys, $r(53) = .43$, $p = .001$. Correlations between the two types of coping for the two stressful events (e.g., problem-focused alternatives for academic stressors and emotion-focused alternatives for social stressors) were either negative or nonsignificant.

Coping and Emotional/Behavioral Problems

Pearson correlations were calculated between scores generated from the coping measure and the narrow-band scale scores of the CBCL and YSR. Scores from the coping measure completed with reference to social/interpersonal stressful events are presented. All of the matrices involving coping with social/interpersonal stressors contained more significant correlations than would be expected by chance, whereas none of the matrices involving coping with academic stressors reached this criterion. Four correlations were expected to reach significance by chance in each matrix; thus, the four significant correlations of lowest magnitude in each matrix were not considered significant.

For both boys and girls, positive correlations were found between emotion-focused coping and YSR scale scores, whereas negative correlations were found between problem-focused coping and YSR scale scores (see Table 4). Specifically, positive

Table 3
Pearson Correlations Between Coping With Academic and Interpersonal Stressors

Academic stressors	Interpersonal stressors			
	Alternatives		Strategies used	
	Problem-focused	Emotion-focused	Problem-focused	Emotion-focused
Girls				
Alternatives				
Problem-focused	.30**	−.11	.11	−.04
Emotion-focused	−.03	.42***	.09	.27[a]**
Strategies used				
Problem-focused	.37***	−.02	.43***	.08
Emotion-focused	−.02	.24[a]**	.08	.25**
Boys				
Alternatives				
Problem-focused	.29*	.05	.33**	.16
Emotion-focused	−.07	.43***	−.23[a]**	.38**
Strategies used				
Problem-focused	.28[a]**	.03	.30*	.12
Emotion-focused	−.24[a]**	.42***	−.36**	.36**

[a] Considered significant by chance.
* $p < .05$. ** $p < .01$. *** $p < .001$.

correlations for girls were found between the emotion-focused alternatives generated and the Aggressive subscale, $r(69) = .28$, $p = .009$, and between the emotion-focused strategies used and the Depressed, $r(69) = .24$, $p = .025$, and Delinquent, $r(69) = .24$, $p = .022$, scales. Regarding the problem-focused alternatives generated, significant negative correlations were found with the Thought Disorder, $r(69) = -.24$, $p = .023$, scale, and the problem-focused strategies used were negatively correlated with the Depressed, $r(69) = -.23$, $p = .027$, Thought Disorder, $r(69) = -.26$, $p = .017$, and Aggressive, $r(69) = -.23$, $p = .029$, scales. Results of the YSR for boys showed a positive relation between the emotion-focused alternatives generated and the Aggressive, $r(48) = .33$, $p = .011$, scale. The problem-focused alternatives generated and problem- and emotion-focused strategies used were not significantly related to boys' self-reported behavioral/emotional problems.

The correlations between CBCL scale scores and scores from the coping measure displayed a pattern similar to results with the YSR (see Table 5). For girls, the emotion-focused alternatives generated were positively correlated with the Immature/Hyperactive, $r(26) = .42$, $p = .015$, Aggressive, $r(64) = .37$, $p = .001$, and Cruel, $r(63) = .25$, $p = .022$, scales. The emotion-focused strategies used were positively related with the Anxious-Obsessive, $r(63) = .27$, $p = .022$, and the Immature/Hyperactive, $r(26) = .35$, $p = .036$, scales. Problem-focused alternatives were negatively correlated with the Aggressive, $r(64) = -.25$, $p = .022$, scale, and the problem-focused strategies used were negatively related to the Depressed-Withdrawal, $r(26) = -.32$, $p = .054$, scale. A similar pattern emerged for boys. Emotion-focused alternatives were positively related to the Obsessive–Compulsive scale, $r(46) = .37$, $p = .005$. The emotion-focused strategies used were negatively related to immature behavior, $r(30) = -.33$, $p = .035$, but positively related to the Obsessive–Compulsive scale, $r(46) = .31$, $p = .016$. Significant negative correlations were found between problem-focused alternatives and the Obsessive–Compulsive, $r(46) = -.33$, $p = .011$, and Delinquent, $r(46) = -.35$, $p = .008$, scales. The Problem-focused strategies used did not relate to CBCL scale scores for boys.

Table 4
Pearson Correlations Between Coping Scores and Youth Self-Report Subscales

Youth Self-Report Scale	Coping score: Alternatives: Emotion-focused	Alternatives: Problem-focused	Strategies used: Emotion-focused	Strategies used: Problem-focused
Girls				
Depressed	.14	−.14	.04	−.10
Unpopular	.21[a]**	−.18	.24*	−.23*
Somatic Complaints	.11	−.08	.21[a]*	−.16
Thought Disorder	.19	−.24*	.21[a]*	−.26*
Delinquent	.19	−.20[a]*	.19	−.23*
Aggressive	.28***	−.07	.24*	−.11
Boys				
Depressed	−.07	11	−.11	−.13
Unpopular	−.14	.07	−.20	−.04
Somatic Complaints	−.06	−.05	−.15	−.07
Self Destructive	−.10	.10	−.19	.09
Thought Disorder	−.20	.15	−.30[a]*	.06
Delinquent	.31[a]**	−.21	.23	−.25[a]*
Aggressive	.33***	−.16	.24[a]*	−.22

[a] Considered significant by chance.
* $p < .05$ ** $p < .01$ *** $p < .001$.

Table 5
Pearson Correlations Between Coping Scores and Child Behavior Checklist

Child Behavior Checklist subscale	Coping score: Alternatives: Emotion-focused	Alternatives: Problem-focused	Strategies used: Emotion-focused	Strategies used: Problem-focused
Girls				
Anxious–Obsessive	.25	−.10	.27[a]	.09
Somatic Complaints	.04	.04	.02	.09
Depressed Withdrawal	−.08	.04	−.06	−.32*
Immature/Hyperactive	.42*	−.31	.35*	−.12
Delinquent	.13	−.21[a]*	.12	−.18
Aggressive	.37***	−.25[a]*	.20[a]*	−.24[a]*
Cruel	.27*	−.07	.25[a]*	−.15
Boys				
Obsessive–Compulsive	.37**	−.33**	.31*	−.27[a]*
Somatic Complaints	−.06	−.21	−.07	−.26[a]*
Uncommunicative	.01	−.24**	−.06	−.11
Immature	−.10	.10	−.33*	.10
Delinquent	.02	−.35*	−.11	−.27[a]*
Aggressive	.02	−.20	−.08	−.09
Hyperactive	−.07	−.01	−.05	−.02

[a] Considered significant by chance.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Coping and Perceived Control

Both girls, $t(70) = 2.48$, $p = .016$, and boys, $t(53) = 2.33$, $p = .024$, reported that they had more control over the cause of academic events than social events. Consistent with these differences in perceptions of control, boys, $t(53) = 3.21$, $p = .002$, and girls, $t(70) = 3.16$, $p = .002$, generated more problem-focused alternatives for academic stressors than for social stressors. No differences were found for emotion-focused coping.

The relation of emotional/behavioral problems to the match between appraisals of control and coping was examined in a series of 2 × 2 analyses of variance for social and academic stressors. Appraisals of control and each of the coping variables (problem- and emotion-focused alternatives, problem- and emotion-focused strategies used) were dichotomized using median split procedures, which created a set of independent variables with two levels (high and low) each.[2] Total behavior-problem T scores on the YSR and the CBCL were used as dependent variables.

[2] The distribution for emotion-focused strategies used with social stressors was extremely skewed, with a mean of 0.55 with 78 subjects (62% of the sample) reporting that they did not use any emotion-focused strategies. Thus, subjects could not be split at the median on this variable and it was excluded from these analyses.

With regard to the YSR, there were no main effects for perceived control or any of the coping variables for either social or academic stressors. One interaction was significant, that between perceived control of the cause of social stressors and the number of problem-focused alternatives generated for coping with social stressors, $F(1, 72) = 6.59$, $p = .012$. Behavior problems were highest when subjects mismatched their coping and appraisals of control by either generating few problem-focused alternatives when they believed they had control over the stressor (mean total behavior problem T score = 54.40, $n = 15$) or by generating many problem-focused alternatives when they believed they did not have control over the stressor ($M = 55.38$, $n = 13$). Behavior problems were lower when perceptions of control and coping were matched by subjects either generating few problem-focused alternatives when they believed they did not have control ($M = 50.24$, $n = 33$) or by generating more problem-focused alternatives when they believed they had control ($M = 47.93$, $n = 15$). When the total behavior problem T scores on the CBCL were used as the dependent variable, no significant main effects or interactions were found.

Discussion

The present findings indicate that problem- and emotion-focused coping strategies are used by older children and young adolescents in response to both academic and interpersonal stressors. Thus, it appears that the model of coping developed by Lazarus and Folkman (1984) and others for adults has considerable utility for studying coping processes in younger age groups. Furthermore, this framework appears to be useful for describing the alternative solutions generated for coping with stressful situations as well as the strategies actually used. That these findings are based on youngsters' spontaneous reports lends additional strength to the application of this framework to children and adolescents and helps to identify the types of coping strategies generated and used by younger age groups. The generation of emotion-focused solutions and the use of emotion-focused coping strategies increased from sixth to eighth grade, whereas the generation and use of problem-focused coping was relatively consistent. Strong gender differences in the generation and use of coping strategies were not found, although girls used more emotion-focused strategies than did boys in response to academic events.

Correlational analyses across academic and interpersonal stressors revealed significant relations for the generation of alternative solutions and the use of both problem- and emotion-focused coping. However, these correlations were moderate in magnitude, with 11 of 16 correlations below .40. Although these correlations might have been higher if coping had been sampled across a larger number of stressors (cf. Epstein, 1986), they were greater in magnitude than those reported by Compas et al. (in press) in a study of college students but were considerably lower than those reported by Wills (1986) in a sample of young adolescents. Although these findings are difficult to integrate given the different measures used in these studies, it appears that children and young adolescents may display more cross-situational consistency in their coping than do older adolescents and adults, an observation that warrants further investigation.

Coping and emotional/behavioral problems were modestly related, but several unexpected findings emerged. First, significant correlations occurred between emotional/behavioral problems and coping with social but not with academic stressors. This is not consistent with the significant relation between coping with school stressors and self-reported anxiety and self-esteem reported by Tero and Connell (1984). The present sample may have had more at stake in coping with social stress and, thus, coping with social stress may have been more important in relation to problematic behaviors and emotions (cf. Lazarus & Folkman, 1984, pp. 315–316).

Second, as hypothesized, the number of problem-focused alternatives generated and strategies used were negatively related to self-reports and maternal reports of emotional/behavioral problems. That is, youngsters who were less adept at generating and using problem-focused coping experienced more adjustment problems. However, the number of emotion-focused coping alternatives generated and strategies used was positively related with the emotional/behavioral problems reported by both subjects and mothers. This positive association between emotion-focused coping and emotional distress is similar to the results of several studies both of community samples of adults (e.g., Folkman, Lazarus, Dunkel-Schetter et al., 1986; Folkman, Lazarus, Gruen et al., 1986) and of clinically depressed adults (e.g., Billings, Cronkite, & Moos, 1983; Billings & Moos, 1984; Fondacaro & Moos, 1987). We do not take this to mean that emotion-focused coping strategies are inherently counterproductive in managing stressful situations. Rather, it appears that the particular alternatives generated and strategies used by this sample reflect a number of maladaptive efforts at coping (e.g., "hit the other person"; "yelled at the other person"). These findings suggest that adaptive problem-focused coping strategies are more fully developed in older children and young adolescents, whereas emotion-focused coping strategies are not as well-developed in these age groups. Prospective longitudinal studies of the development of coping are necessary to address this issue (Miller & Green, 1985; Mischel, 1981).

The patterns of significant correlations between youngsters' self-reports of coping and both their own and their mothers' reports of emotional/behavioral problems indicate that the relation between self-reports of coping and emotional/behavioral problems is not simply the result of common method variance shared by the measures of these two variables (i.e., self-report). Furthermore, the pattern of correlations indicates that coping is related to both internalizing and externalizing problems as reported by youngsters and their mothers. Thus, coping appears to serve as a risk or protective factor for a variety of emotional and behavioral difficulties in this age group. The modest level of these correlations indicates that the effects of coping with a single stressor are relatively small. Whether this association would be stronger when coping is sampled with a larger number of stressors warrants further investigation.

Some support was found for the hypotheses that youngsters would match their coping to fit their appraisals of control over the stressful events and that the nature of this match would be related to emotional/behavioral problems. Specifically, these findings were limited to the generation of problem-focused alternatives. Subjects perceived the causes of academic stressors as more controllable than the causes of social stressors and generated more problem-focused alternatives for coping with academic stress. The number of problem-focused alternative solutions generated for social stressors interacted with the perceived

controllability of these events in relation to self-reported emotional/behavioral problems, with more problems associated with a mismatch between perceived control and coping (generating more problem-focused alternatives in response to stressors perceived as uncontrollable and generating fewer problem-focused alternatives for stressors perceived as controllable). However, the findings regarding the match between coping and appraisals of control need to be interpreted cautiously because they were found for only one type of coping in response to one type of stressful event.

References

Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children. *Monographs of the Society for Research in Child Development, 46* (1, Serial No. 188).

Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile.* Burlington, VT: University of Vermont, Department of Psychiatry.

Achenbach, T. M., & Edelbrock, C. (1987). *Manual for the Youth Self-Report and Profile.* Burlington, VT: University of Vermont, Department of Psychiatry.

Asarnow, J. R., Carlson, G. A., & Guthrie, D. (1987). Coping strategies, self-perceptions, hopelessness, and perceived family environments in depressed and suicidal children. *Journal of Consulting and Clinical Psychology, 55,* 361–366.

Billings, A. G., Cronkite, R. C., & Moos, R. H. (1983). Social-environmental factors in unipolar depression: Comparisons of depressed patients and nondepressed controls. *Journal of Abnormal Psychology, 92,* 119–133.

Billings, A. G., & Moos, R. H. (1981). The role of coping responses in attenuating the impact of stressful life events. *Journal of Behavioral Medicine, 4,* 139–157.

Billings, A. G., & Moos, R. H. (1984). Coping, stress, and social resources among adults with unipolar depression. *Journal of Personality and Social Psychology, 46,* 877–891.

Compas, B. E. (1987a). Coping with stress during childhood and adolescence. *Psychological Bulletin, 101,* 393–403.

Compas, B. E. (1987b). Stress and life events during childhood and adolescence. *Clinical Psychology Review, 7,* 275–302.

Compas, B. E., Forsythe, C. J., & Wagner, B. M. (in press). Consistency and variability in causal attributions and coping with stress. *Cognitive Therapy and Research.*

Epstein, S. (1986). Does aggregation produce spuriously high estimates of behavior stability? *Journal of Personality and Social Psychology, 50,* 1199–1210.

Feild, H. S., & Armenakis, A. A. (1974). On use of multiple tests of significance in psychological research. *Psychological Reports, 35,* 427–431.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged sample. *Journal of Health and Social Behavior, 21,* 219–239.

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: A study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48,* 150–170.

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50,* 992–1003.

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology, 50,* 571–579.

Fondacaro, M. R., & Moos, R. H. (1987). Social support and coping: A longitudinal analysis. *American Journal of Community Psychology, 15,* 653–673.

Forsythe, C. J., & Compas, B. E. (1987). Interaction of cognitive appraisals of stressful events and coping: Testing the goodness of fit hypothesis. *Cognitive Therapy and Research, 11,* 473–485.

Hollingshead, A. B. (1975). *Four factor index of social status.* New Haven, CT: Yale University, Department of Sociology.

Johnson, J. H. (1986). *Life events as stressors in childhood and adolescence.* Beverly Hills, CA: Sage.

Krantz, S. E., Clark, J., Pruyn, J. P., & Usher, M. (1985). Cognition and adjustment among children of separated or divorced parents. *Cognitive Therapy and Research, 9,* 61–77.

Larzelere, R. E., & Mulaik, S. A. (1977). Single-sample tests for many correlations. *Psychological Bulletin, 84,* 557–569.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer.

Miller, S. M., & Green, M. L. (1985). Coping with stress and frustration: Origins, nature, and development. In M. Lewis & C. Saarni (Eds.), *The socialization of emotions* (pp. 263–314). New York: Plenum Press.

Mischel, W. (1981). Metacognition and the rules of delay. In J. H. Flavell & L. Ross (Eds.), *Social cognitive development: Frontiers and possible futures* (pp. 240–271). Cambridge, England: Cambridge University Press.

Platt, J. J., & Spivack, G. (1977). *Measures of interpersonal cognitive problem-solving for adults and adolescents.* Philadelphia, PA: Hahnemann Medical College and Hospital.

Rosenthal, R., & Rubin, D. B. (1984). Multiple contrasts and ordered Bonferroni procedures. *Journal of Educational Psychology, 76,* 1028–1034.

Sakoda, J. M., Cohen, B. H., & Beall, G. (1954). Test of significance for a series of statistical tests. *Psychological Bulletin, 51,* 172–175.

Spivack, G., & Shure, M. B. (1982). The cognition of social adjustment: Interpersonal cognitive problem-solving thinking. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical child psychology* (Vol. 5, pp. 323–372). New York: Plenum Press.

Spivack, G., & Shure, M. B. (1985). ICPS and beyond: Centripetal and centrifugal forces. *American Journal of Community Psychology, 13,* 226–243.

Stone, A. A., & Neale, J. M. (1984). New measure of daily coping: Development and preliminary results. *Journal of Personality and Social Psychology, 46,* 892–906.

Tero, P. F., & Connell, J. P. (1984, April). *When children think they've failed: An academic coping inventory.* Paper presented at the Annual Conference of the American Educational Research Association, New Orleans, LA.

Wills, T. A. (1986). Stress and coping in early adolescence: Relationships to substance use in urban school samples. *Health Psychology, 5,* 503–529.

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