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How to Feel Better When it Feels Bad: Children's Perspectives on Coping With Everyday Stress

Eve Brotman Band and John R. Weisz
University of North Carolina at Chapel Hill

When confronted with stress, adults tend to respond with primary control coping (trying to change the stressful circumstances), secondary control coping (trying to adjust to circumstances as they are), or relinquished control (trying neither to change circumstances nor to adjust to them). Applying this notion to children, we asked 6-, 9-, and 12-year-olds to recall stressful episodes involving six different situations (e. g., separation, medical stress, school failure) and to describe how they responded in each instance. Responses were coded as *primary* or *secondary coping* or as *relinquished control.* The responses indicated reports of active coping; only 3.5% of all descriptions involved relinquished control. Styles of coping, however, differed across situations, with school failure evoking high levels of primary coping and medical stress, high levels of secondary coping. Styles also differed with age: As age increased, self-reports of primary coping declined and of secondary coping increased, particularly in stressful medical circumstances. Overall, the results suggest that elementary-school children report that they cope with everyday stress and that their coping approaches are influenced by situational constraints and cognitive development.

It is common knowledge that children experience stress, but we know surprisingly little about the nature of stress and coping among most children in everyday life. Most relevant child research has focused on the extraordinary: youngsters who are ill or handicapped (e. g., Shapiro, 1984), have lost significant caregivers (e. g., Rutter, 1981), or face serious socioeconomic and psychological risks (e. g., Garmezy, 1985). Most of the remaining research on stress and coping involves adults. That research suggests that everyday stresses can be important and, indeed, that a "multiplier effect" can even make several concurrent everday stresses more threatening than individual instances of major stress (Kanner, Coyne, Schaefer, & Lazarus, 1981; Rutter, 1979).

The adult literature cannot tell us how children respond to stress, but it does provide conceptualizations that may help guide research with children. Two theoretical perspectives that seem particularly relevant are the adult-based *ways of coping* model (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984), and the *primary–secondary control* model (Rothbaum, Weisz, & Snyder, 1982; Weisz, Rothbaum, & Blackburn, 1984a, 1984b). The ways-of-coping model distinguishes relatively specific coping approaches, classified as either *problem-focused* coping (trying to manage or modify the source of the problem) or *emotion-focused* coping (trying to manage or reduce emotional distress). The primary–secondary model distinguishes between relatively broad approaches: *primary control* (coping aimed at influencing objective conditions or events) and *secondary control* (coping aimed at maximizing one's goodness of fit with conditions as they are). The primary–secondary model provides a framework for thinking about broad, overarching approaches and places special emphasis on the goals underlying behavior. The ways-of-coping model provides a framework for thinking about an array of specific strategies and places relatively more emphasis than the primary–secondary model on the descriptive content of the various strategies. Actually, the two models may offer complementary perspectives on coping.

Both the primary–secondary and the ways-of-coping models emphasize that coping approaches are not trait-like and uniform within individuals, but that approaches vary depending on the perceived demands of particular situations. One purpose of the present study was to assess whether such situational differences in coping approaches exist among children. In addition, we sought to learn whether the overall frequencies of various styles of coping might change with age.

Of particular interest was the possibility of developmental differences in the relative frequency of primary versus secondary control coping. Secondary control, as described in the model, involves a number of subtle psychological means of reducing stress, means such as lowering one's expectations so as to minimize future disappointment and reinterpreting unfortunate events so as to find meaning or purpose in them. Because such secondary approaches tend to be hidden from view and often abstract in nature, their recognition and use would seem to require more cognitive maturity than the more visible, concrete modes of coping embodied in primary control. Moreover, because secondary control approaches tend to be hidden from view or internal, they are less likely to be learned by observation than are primary control approaches and, thus, might be acquired over a longer period of development than that required for acquisition of primary control approaches. For these reasons, we suspected that older children would be more likely than younger ones to report the use of secondary control approaches to coping.

Correspondence concerning this article should be addressed to Eve Brotman Band, University of North Carolina, Davie Hall 013A, Chapel Hill, North Carolina 27514.

To explore situational and developmental differences in children's coping, we interviewed 6-, 9-, and 12-year-olds, asking them to describe their coping efforts in several common stressful situations. Responses were coded along several dimensions patterned after the ways-of-coping and primary–secondary control models. We also coded childrens' and adults' judgments as to the efficacy of their various coping responses. Finally, because girls and boys may be exposed to rather different social expectations and different coping models, we included sex as a factor in our design.

Method

Subjects and Experimental Design

The 73 youngsters sampled were drawn in approximately equal numbers from two private elementary schools in semirural North Carolina. There were three age groups: 24 first and second graders (12 girls) averaging 6.6 years of age (SD = .64), 25 third and fourth graders (16 girls) averaging 9.4 years (SD = 1.0), and 24 sixth and seventh graders (15 girls) averaging 12.0 years (SD = .78). The sample formed a 3 (age group) × 2 (sex) design, with nonorthogonal factors due to unequal sample sizes.

Interview Procedure

Most major models of coping emphasize its inherently subjective nature, and several prominent models (including the two of major interest here) focus on people's goals and on intrapsychic coping methods that are not directly observable (e. g., Lazarus & Folkman, 1984; Rothbaum, Weisz, & Snyder, 1982; Vaillant, 1977). Assessment of these difficult-to-observe aspects of coping appears to require attention to individuals' self-reports, at least in the initial stages of research. Accordingly, we carried out structured interviews to elicit children's reports on how they coped with stress of various types and on what their goals were in each instance.

All children were interviewed individually. Children's responses were transcribed verbatim for later coding. In an initial discussion to establish rapport, the interviewer asked the child to tell some "fun and happy things that happen to kids your age." Next, the child was asked to identify some "things that make kids your age feel bad, unhappy, or scared." Then, to assess coping approaches, children were asked to tell about "a time when *you yourself* felt this way. What happened that made *you* feel bad, unhappy, or scared?" The experimenter asked the child to consider this question within the following six different domains of experience, all suggested by previous literature as potential sources of everyday (as opposed to extraordinary) stress: (a) separation from a friend, caused by moving away or moving "to a different school or a different class"; (b) going "to the doctor's office to get a shot"; (c) "a time when your mom or dad, or your teacher, was mad at you"; (d) "a time when another kid said mean things to you"; (e) getting "a grade on an exam or your school report card that you didn't like"; and (f) "a time when you had an accident and got hurt." To maximize the reliability of the self-reports, the children were asked to describe each coping episode in detail and to describe only those events occurring within the past year.

For each situation that called forth a memory, the child was asked to give details of what happened, to report how it felt, then to ". . . tell me, what did you do and think when _____ happens? Think, and tell me *all* the things that you did and thought." To assess underlying goals, each strategy description was followed by the query "How did you think that _____ would help or make things better?" For each strategy, children were also asked "Did it work?" in order to assess their perceptions of the efficacy of their approach. As with all self-report data, there was some possibility of social desirability effects. However, the standard probes described above were used uniformly in all interviews to minimize differential effects of social cues on the children's responding across stimuli.

Data Coding

Systems were developed for coding coping strategies and efficacy judgments. Interrater reliabilities were assessed for each system, with ratings made by the first author and three research assistants, all blind to children's age and sex.

Coping approaches: Primary–secondary control coding. After identifying their stressful events, children described their behavior in response to the events. These descriptions were coded via broad primary, secondary, and relinquished control categories designed to reflect those constructs as described by Rothbaum et al. (1982) and Weisz et al. (1984a, 1984b). Following the model, behavior was construed as reflecting *primary control* if the underlying goals involved efforts to modify or otherwise influence events, circumstances, objects, or other people so as to enhance rewards by bringing objective conditions into line with the child's wishes. Behavior was regarded as reflecting *secondary control* attempts if the underlying goals involved efforts to modify or otherwise influence the child's own subjective, psychological state (e. g., mood, attributions, expectations, wishes, interpretations) so as to enhance rewards by achieving comfortable accommodation, or goodness-of-fit, with respect to conditions as they are. Behavior was coded as reflecting *relinquished control* if it involved no apparent goal-directed behavior and no apparent effort to enhance rewards or reduce punishments; in fact, relinquished control could be considered a failure to cope. To illustrate the coding process, let us suppose that a child reported being "yelled at" by his mother. The child might have responded to this stressor by yelling back, with the goal of trying to convince his mother not to be so mean to him (primary control); by understanding that his mother was under a lot of pressure and had had a hard day, with the goal of feeling less upset about her yelling (secondary control); or by just feeling bad and doing nothing (relinquished control).

We complemented the broad primary–secondary and relinquished categories with a more fine-grained, descriptive set of categories patterned after the ways-of-coping model (Folkman & Lazarus, 1980). Because approximately 40% of the children's responses fell outside the adult ways-of-coping categories identified by Folkman and Lazarus (1980), new categories had to be developed. The newly developed system groups specific coping categories under the three overarching categories of primary, secondary, and relinquished control. Of the 10 fine-grained categories, 4 are classified as primary control strategies: (a) *direct problem solving*—that is, efforts to change stressful circumstances in an immediate way (e. g., studying to improve one's grades, telling others to stop teasing, putting a bandaid on a cut); (b) *problem-focused crying*—crying to elicit instrumental assistance from others (e. g., crying so that a parent intervenes on a child's behalf when he or she is being bullied); (c) *problem-focused aggression*—efforts to resolve problems through physical or verbal aggression (e. g., beating up a child who has been taunting or name-calling); (d) *problem-focused avoidance*—efforts to directly avoid experiencing a stressful situation (e. g., staying away from kids who fight or tease, making efforts to avoid being taken to the doctor for a shot). Five additional categories were classified as secondary control approaches. These included: (e) *social/spiritual support*—efforts to buffer distress through social or spiritual means (e. g., praying, or telling one's problem to friends or parents in the hope that they will provide support or encouragement); (f) *emotion-focused crying*—crying to release pent-up feelings or to elicit comfort from others (e. g., crying in order to just "let the bad feelings out"; (g) *emotion-focused aggression*—physical or verbal aggression to release pent up feelings (e. g., kicking a

wall after being embarrassed to "let it out"); (h) *cognitive avoidance*—efforts to avoid thinking about a stressful situation (e. g., watching TV so as to forget about or keep one's mind off the problem); (i) *pure cognition*—efforts to reduce stress through fantasy or a shift in one's way of thinking (e. g., daydreaming, hoping for the best, telling oneself that it wasn't such a bad grade after all). Finally, under the heading of relinquished control (reflecting the absence of apparent goal-directed behavior) was the category (j) *doing nothing*, that is, giving up or making no effort to deal with the stressful circumstances or to reduce their stressful impact.

Reliability assessment for coping ratings. Reliabilities for the 10 fine-grained categories were assessed by having all four raters independently judge 32 responses from 3 randomly selected children. Pairwise kappas ranged from 0.84 to 0.94, with a mean of 0.90. As a further check we focused on the broad primary, secondary, and relinquished categories independently of their fine-grained subcategories. Four raters coded 32 total responses independently. In those instances where a single response included both primary and secondary control components, raters made a judgment as to which was more prominent. In three instances, where the primary and secondary components were judged to be equally prominent, the response was ruled uncodable. Across pairs of raters, Kappas ranged from .82 to .91, with a mean of .87.

Efficacy ratings. Children's descriptions of their coping behavior were all rated as to their likely efficacy, that is, whether they seemed likely, in general, to contribute to reduced stress in the situation described. Coping descriptions were classified as either effective, ineffective, or uncodable. To assess reliability, four raters judged 23 responses, drawn from 6 randomly selected children. Pairwise Kappas ranged from .86 to .92, with a mean of .89.

Results

The analyses of variance (ANOVAs) reported below involved unequal cell sizes and, thus, nonorthogonal age and sex factors. To correct for the nonorthogonality, procedures recommended by Appelbaum and Cramer (1974) for unbalanced designs were followed. General linear models (GLM) significance tests for main effects were computed in two different orders, with age first (thus eliminating or controlling for sex), then with sex first (thus eliminating age). In each analysis the significance level reported is the more conservative of the two.

Coping Approaches: Primary–Secondary Control Analyses

Of the 653 responses that children described themselves as making in stressful episodes, only 23 (3.5%) were coded as relinquished control.[1] Given their rarity, relinquished control responses were dropped from further analyses. In a preliminary analysis for the 21 children who recalled a stressful episode in all six situations, we conducted a 3 × 2 × 6 (Age × Sex × Situation) repeated measures ANOVA of the arc sine transformed percentage[2] of primary control strategies, with age and sex as between-subjects factors and situation as a within-subjects factor. First, however, we conducted a check on whether the 21 subjects available for this analysis (those responding to all six situations) were representative of the sample. We conducted *t* tests to compare the 21 with the remaining 52 subjects on age and percentage of primary control strategies and we compared the sex composition of the two groups using a chi-square test. These tests yielded no significant differences. The 3 × 2 × 6 ANOVA conducted on the 21 subjects revealed a significant main effect for situation, $F(5, 15) = 4.93$, $p < .001$. All possible pairwise comparisons were made among the situations using two-tailed *t* tests. These revealed that the medical situation was significantly less likely to evoke primary control responses than were peer difficulty, school failure, or loss (all $ps < .01$), but no other pairwise difference was significant.

The 3 × 2 × 6 ANOVA also yielded an Age × Situation interaction, $F(10, 15) = 2.53$, $p < .05$. However, because of the limitations posed by testing for simple effects on only 21 subjects, we instead explored the effects of age within each situation separately, thus permitting use of the entire sample. To this end, we conducted a 3 × 2 (Age × Sex) multivariate analysis of variance (MANOVA) on the arc sine transformed percentages of primary and secondary control strategies for each stressful situation.[3] These analyses revealed a significant main effect of age in the medical situation, $F(4, 110) = 2.80$, $p < .05$. To define the specific nature of this effect, we followed up with univariate tests of primary and secondary control coping in the medical situation. A main age effect emerged for primary coping, $F(2, 58) = 5.34$, $p < .01$. Newman-Keuls tests of age effects (family confidence level of alpha = 0.05) indicated that the 12-year-olds differed significantly from the 6- and 9-year-old children, $p < .05$, with group means showing a *decline* in the proportion of primary coping responses with age, from 46% to 40% to 13% for 6-, 9-, and 12-year-olds, respectively. No differences were found between the 6- and 9-year-old subjects. A main age effect was also found for secondary coping, $F(2, 58) = 2.88$, $p < .05$. Again, Newman-Keuls tests of age effects indicated that the 12-year-olds differed significantly from the 6- and 9-year-old children, $p < .05$, with group means showing an *increase* in the proportion of secondary coping responses with age, from 47% to 57% to 78% for 6-, 9- and 12-year-olds, respectively. Again, no differences were found between the 6- and 9-year-old subjects. Finally, neither the preliminary 3 × 2 × 6 ANOVA nor the 3 × 2 MANOVAs revealed evidence of main or interaction effects involving sex.

To complement these analyses exploring the relative uses of primary and secondary coping, we also conducted a procedure focusing on the patterns of coping described in all the children's responses across all situations. We sought to explore whether, with all responses considered concurrently, the use of secondary control responses (alone or in combination with primary control) increased with age. We performed a 3 (age) × 2 (response

[1] Responses classified as *relinquished control* were distributed as follows: 6-year-olds made a total of six responses, 9-year-olds made nine, and 12-year-olds made eight; four responses were in response to "loss/separation" stressful situations, seven were in response to "medical" stressors, five were in response to "authority conflicts," two were in response to "peer difficulties," three were in response to "school performance failures," and two were in response to "physical accidents."

[2] The arc sine transformation is a standard procedure when the dependent variable is a proportion (see Neter, Wasserman, & Kutner, 1985).

[3] As noted previously, the relinquished control category was excluded from analysis because of its rarity. It was also excluded from these MANOVAs because performing MANOVAs with three exhaustive categories that sum to 100% violates statistical assumptions.

pattern) generalized least squares procedure, using chi-square statistics (see SAS Institute, 1985), that focused on two patterns of response: (a) secondary control responses alone or in some combination with primary control and (b) primary control responses alone (seen as the less sophisticated pattern). The analysis yielded a significant main effect for age, $\chi^2(4, N = 438) = 11.72, p < .05$. Contrast coefficients, comparing each age group with each other, revealed two significant patterns. First, 6-year-old children used secondary control strategies, either alone or in some combination with primary control, to a significantly lesser extent than did 9- or 12-year-old children—$\chi^2(1, N = 294) = 10.37, p < 0.001$, for 6- and 9-year-olds, and $\chi^2(1, N = 288) = 10.43, p < .001$, for 6- and 12-year-olds. Second, 6-year-old children used primary control strategies alone to a significantly greater extent than 9- or 12-year-old children—$\chi^2(1, N = 294) = 4.39, p < .05$, for 6- and 9-year-olds, and $\chi^2(1, N = 288) = 6.83, p < .01$ for 6- and 12-year-olds, respectively. No significant differences emerged between the 9- and 12-year-old children.

Finally, we performed several additional tests to ensure that the results of the analysis discussed above could not be attributed merely to differential response frequencies related to age and situation. Tests indicated that the 6-year-olds had a significantly lower mean response frequency than did 9- and 12-year-olds in three of the six situations (authority conflict, peer difficulty, and school failure). However, MANOVAs revealed no significant age differences in primary or secondary coping in these situations, which could have affected the generalized least squares analysis. As a further precautionary measure, we also performed a 3 (age) × 2 (response or no response) chi-square analysis for each situation to test for relations between age and responding. None of these analyses revealed a significant relation between age and responding to a given situation.

Specific Coping Approaches: Ways of Coping Analyses

The next set of analyses focused on the more fine-grained categories patterned after the ways-of-coping model. Two waves of MANOVAs were performed, one for the ways of coping classified under the overarching primary control category and the other for those classified within the secondary control category. For each stressful situation, we conducted two 3 × 2 (Age × Sex) MANOVAs. One MANOVA focused on the arc sine transformed percentages of responses falling into the four specific primary control ways of coping; the other MANOVA focused on the five specific secondary control ways of coping.[4] Because of their near-zero frequency, the categories of emotion-focused crying, problem-focused crying, and emotion-focused aggression were uniformly excluded from these and follow-up analyses.

The MANOVAs for the primary control ways of coping revealed significant main effects of age in the medical situation, $F(4, 132) = 2.74, p < .05$, in the authority conflict situation, $F(4, 132) = 2.43, p < .05$, in the peer conflict situation, $F(4, 132) = 2.44, p < .05$, and in the school performance situation, $F(4, 132) = 2.51, p < .05$. Among the MANOVAs of the secondary control ways of coping, a significant Age × Sex interaction was found only in the school failure situation, $F(4, 132) = 3.36, p < .01$. To determine the specific nature of these multivariate effects, we followed up with univariate tests of the specific ways of coping. The results of the analyses are summarized in Table 1 and described below.

Direct problem solving. Main age effects for direct problem solving emerged in the medical situation, $F(2, 67) = 3.69, p < .05$, and in the school failure situation, $F(2, 67) = 4.45, p < .01$; group means indicated an increase in the proportion of such problem-solving responses with age. A main age effect for direct problem solving, $F(2, 67) = 3.03, p < .05$, also emerged in the authority conflict situation. In this case Student-Newman-Keuls tests of age effects (family confidence level of alpha = .05) indicated significant differences between the 6- and the 9-year-old children, $p < .05$.

Problem-focused aggression. A main age effect for problem-focused aggression was revealed in the peer difficulty situation, $F(2, 67) = 3.29, p < .05$, with group means indicating an increase in the proportion of problem-focused aggression with age.

Problem-focused avoidance. A main age effect for problem-focused avoidance emerged in the medical situation, $F(2, 67) = 2.63, p < .05$, with group means indicating a decline in the proportion of problem-focused avoidance responses with age.

Emotion-focused avoidance. A univariate Age × Sex interaction for emotion-focused avoidance, $F(2, 67) = 6.03, p < .005$, emerged in the school failure situation. We performed Student-Newman-Keuls tests of age and sex effects (family confidence level of alpha = .05) to follow up this interaction. These analyses revealed significant sex differences only at age 9 ($p < .01$) and significant age differences only among the boys ($p < .05$) between the 6- and 9-, and between the 9- and 12-year-old boys, respectively. It appeared, in short, that the significantly greater proportion of emotion-focused avoidance responses evident in the 9-year-old boys accounted for the observed Age × Sex interaction.

Efficacy of Coping Approaches

In a preliminary analysis of the 21 children who recalled a stressful episode in all six situations, we conducted a 3 × 2 × 6 (Age × Sex × Situation) repeated measures ANOVA on the ratings of coping effectiveness for each situation, with Situation as a within-subjects factor and Age and Sex as between-subjects factors. No significant differences were apparent in this analysis. However, given our objective of examining coping efficacy in each situational context, we proceeded with tests of age and sex within each situation. These tests, considered separately, revealed an Age × Sex interaction in the medical situation, $F(2, 55) = 6.17, p < .005$, and a main age effect in the authority conflict situation, $F(2, 63) = 6.13, p < .005$. Newman-Keuls follow-up tests (family confidence level of alpha = .05), revealed that 9-year-olds were more likely to cope effectively in the au-

[4] Each situation was considered separately because of the unworkably small total number of subjects that would have resulted if Situation had been treated as a within-subjects factor in a repeated measures ANOVA.

Table 1
Age Trends in the Use of Ways of Coping

Situation/way of coping	Percentage			p
	Age 6	Age 9	Age 12	
Loss/separation (Situation 1)				
Total primary coping	82	73	82	
Direct problem solving	79	73	82	
Problem-focused aggression	0	0	0	
Problem-focused avoidance	3	0	0	
Total secondary coping	14	23	17	
Social/spiritual support	3	4	8	
Emotion-focused avoidance	10	15	9	
Pure cognition	1	4	0	
Did nothing/relinquished	4	4	1	
Medical procedure (Situation 2)				
Total primary coping	46	40	13	<.05[a]
Direct problem solving	2	5	12	<.05[a]
Problem-focused aggression	20	17	1	
Problem-focused avoidance	24	18	0	<.05[a]
Total secondary coping	47	57	78	<.05[a]
Social/spiritual support	9	12	19	
Emotion-focused avoidance	30	33	44	
Pure cognition	8	12	15	
Did nothing/relinquished	7	3	9	
Conflict with authority (Situation 3)				
Total primary coping	60	60	57	
Direct problem solving	33	54	45	<.05[a]
Problem-focused aggression	10	3	6	
Problem-focused avoidance	17	3	6	
Total secondary coping	35	36	40	
Social/spiritual support	14	13	15	
Emotion-focused avoidance	10	10	10	
Pure cognition	11	13	15	
Did nothing/relinquished	5	4	2	
Peer difficulty (Situation 4)				
Total primary coping	87	80	73	
Direct problem solving	58	47	42	
Problem-focused aggression	9	18	25	<.05[a]
Problem-focused avoidance	20	15	6	
Total secondary coping	13	18	24	
Social/spiritual support	3	7	8	
Emotion-focused avoidance	0	2	4	
Pure cognition	10	9	12	
Did nothing/relinquished	0	2	3	
School failure (Situation 5)				
Total primary coping	90	85	89	
Direct problem solving	33	45	58	<.05[a]
Problem-focused aggression	18	9	12	
Problem-focused avoidance	39	31	19	
Total secondary coping	4	13	9	
Social/spiritual support	4	7	7	
Emotion-focused avoidance	0	8	2	<.005[b]
Pure cognition	0	0	0	
Did nothing/relinquished	6	2	2	
Physical accident (Situation 6)				
Total primary coping	70	72	58	
Direct problem solving	67	65	53	
Problem-focused aggression	0	0	0	
Problem-focused avoidance	3	7	5	
Total secondary coping	30	24	38	
Social/spiritual support	10	7	16	
Emotion-focused avoidance	17	10	17	
Pure cognition	3	7	4	
Did nothing/relinquished	0	4	5	

[a] Univariate main effect for age.
[b] Univariate Age × Sex interaction.

thority conflict situation than were 6- or 12-year-old children, $p < .005$. Similar follow-up tests in the medical situation revealed that boys and girls were equally likely to cope effectively at ages 6 and 9; at age 12, however, the boys and girls showed a marked difference in efficacy ($p < .005$). Specifically, at age 12 the effectiveness of the girls was significantly greater than that of the boys ($p < .05$).

Additionally, in order to explore whether primary or secondary control coping was associated with differences in efficaciousness, we compared the children's mean effectiveness for stressful episodes in which only primary control strategies were reported with that of episodes in which only secondary control strategies were reported. Comparisons using two-tailed t tests in each the three age groups revealed no significant differences for either the 9-, or the 12-year-old children. For the 6-year-olds, however, primary control strategies alone were significantly more efficacious than were secondary control strategies alone, $t(86) = 6.39, p < .001$.

Discussion

Our findings suggest that reports of coping behavior are not confined to groups of children facing extraordinary kinds of stress. Instead, we found evidence of coping behavior among normal children confronting everyday stressors. The responses suggest that even children as young as 6 years are sufficiently aware of stress and coping in their own lives to report conditions and events that they find stressful, describe their own efforts to cope, and evaluate the efficacy of those efforts. Moreover, the children we sampled reported a strong inclination to make efforts to cope (96.5% of all responses) rather than relinquish control (3.5%) and thus fail to cope. It is possible that relinquishing control is frowned on in our culture and that children learn this value rather early in life. Overall, the coping efforts of the children we sampled appeared efficacious; adult ratings classified children's coping as "ineffective" in only 7.7% of all stressful episodes.

Styles of coping, however, differed as a function of the situation being confronted and the age of the child involved. Consistent with the literature on the situational specificity of adult coping (e. g., Folkman & Lazarus, 1984), we found that children varied their reported strategies across various situations. Perhaps the situations that evoked the greatest percentages of primary coping (loss/separation, peer difficulty, and school failure) were perceived by the children as more controllable than less familiar situations (e. g., medical circumstances or physical accidents) or conflicts with authority figures. Coping with school failure, for example, was almost always reported in primary control terms, with children describing various efforts to modify objective circumstances and outcomes—for example, by improving their grades or otherwise upgrading their performance. With medical stressors, by contrast, children most often described secondary control approaches, approaches aimed at controlling the psychological impact of stressful events without changing the events as such–for example, thinking happy thoughts to distract oneself from the pain of "getting a shot."

The predominance of secondary control coping in medical situations grew significantly stronger with increasing age of the

children sampled. In fact, among the youngest children, primary and secondary control coping were described with equal percentages. Six- and 7-year-old children were about as likely to use such primary control strategies as screaming, to avoid getting a shot as they were to use such secondary control strategies as the distraction approach described above.

The pattern identified with respect to medical coping was characteristic of the data as a whole when all situations were pooled. Reports of secondary control coping tended to increase with age. This is consistent with the idea, discussed earlier, that secondary control coping may develop more slowly than primary control coping, in part because secondary coping is more often hidden from view (e. g., in the form of cognitions) and thus more difficult to learn through observation (e. g., of parents, teachers, siblings, and peers). It is also possible that the subtlety of many secondary control approaches makes them relatively difficult for 6- and 7-year-olds to comprehend given the early concrete operational level of their cognitive development (see Fischer & Lazerson, 1984; Piaget, 1970).

This possibility is supported by the fact that among 6-year-olds, but not among the two older groups, primary control coping strategies were rated as significantly more efficacious than were secondary control strategies. In other words, children in our youngest group appeared to be better at generating effective primary control strategies than they were at generating effective secondary control strategies. Thus, it could be argued that the tendency of 6-year-olds in our sample to rely on primary control approaches is appropriate and adaptive.

Yet another possibility is that primary control is indeed "primary," in the sense that most people would prefer to cope with stressful situations by altering the objective circumstances that they find stressful. It may be that secondary control results from efforts to provide *some* measure of control when primary approaches have failed or are deemed unworkable (see discussion in Rothbaum et al., 1982). If this is the case, then it is possible that development is associated with increased use of secondary control, because it is only with development that children come to appreciate the unworkability of primary control in various situations (e. g., learning that screaming and crying in the doctor's office will not prevent a shot). This idea is consistent with several findings indicating that young children are highly susceptible to "illusory contingency," and that recognition of noncontingency is difficult prior to the mid- to late-elementary school years (Weisz, 1986; Weisz, Yeates, Robertson, & Beckham, 1982). Finally, it is possible that secondary control approaches to coping are generally more difficult to describe verbally than are primary approaches. If this were the case, the developmental increase in reports of secondary control coping might reflect, in part, developmental increments in children's verbal facility.

Having offered these interpretations of the overall developmental decline in percentages of primary control responses and of increase in percentages of secondary control responses, we should add that not all of the specific primary control responses declined with age. When we focused on the fine-grained ways-of-coping categories, we found that such strategies as direct problem solving and problem-focused aggression were actually reported more frequently with increasing age in some situations. Such findings qualify the overall trend described in the preceding paragraph in potentially important ways. They suggest that for an appropriately precise analysis, a broad-based system for classifying general strategies—such as the primary–secondary system employed here—needs to be complemented by a more fine-grained system for classifying the specific content of those general strategies. The rich array of specific adult strategies described by the Berkeley group (e. g., Lazarus & Folkman, 1984) provides a fine starting point.

This study, overall, could be criticized for its reliance on children's self-reports. Such procedures, although valuable, are naturally limited by the reliability of interview data and must be treated with caution. We view the children's self-reports of coping as social cognitions, mediating between stressful events, emotions, and coping activities. Moreover, the patterns identified here suggest an important possibility that some of the most often-used of children's strategies may involve cognitive-psychological processes that are internal and thus not exhibited for direct observation by others. If this is the case, investigators interested in studying children's coping may face the important challenge of developing methods that are sensitive to "underground" processes but that do not rely exclusively on self-reports. In the meantime, information derived from children's reports of their own coping may provide useful grist for the investigator's mill.

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Call for Nominations for *JEP: Learning, Memory, and Cognition*

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