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Cross-situational coping with peer and family stressors in adolescent offspring of depressed parents

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Abstract

Offspring of depressed parents are faced with significant interpersonal stress both within their families and in peer relationships. The present study examined parent and self-reports of adolescents' coping in response to family and peer stressors in 73 adolescent children of parents with a history of depression. Correlational analyses indicated that adolescents were moderately consistent in the coping strategies used with peer stress and family stress. Mean levels of coping were similar across situations, as adolescents reported greater use of secondary control coping (i.e., acceptance, distraction) than primary control coping (i.e., problem solving, emotional expression) or disengagement coping (i.e., avoidance) with both types of stress. Regression analyses indicated that fewer symptoms of self-reported anxiety/depression and aggression were related to using secondary control coping strategies in response to family stress and primary control coping in response to peer stress. Implications for understanding the characteristics of effective coping with stress related to living with a depressed parent are highlighted.

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Introduction

Parental depression is a significant risk factor for emotional and behavioral problems in children and adolescents (Goodman & Gotlib, 1999). As one mechanism of risk, offspring of depressed parents are exposed to a number of stressors that significantly increase their chances of developing depression as well as other psychological disorders (Beardslee, Versage, & Gladstone, 1998; Hammen, 1997). Not only do these children experience high levels of stress in the home as a consequence of their parents' depression, but they also experience high levels stress in interactions with their peers (i.e., arguments with friends). It has been found that children of depressed parents contribute to the number of stressful events they experience because of increased interpersonal conflict (Adrian & Hammen, 1993; Hammen, Shih, & Brennan, 2004). This is thought to be the result of children learning maladaptive ways of relating to others from their depressed parents (Hammen, Shih, & Brennan, 2004).

Having established that children of depressed parents are exposed to stress in both family and peer relationships, research is needed to understand the methods these children use to cope with these two sources of stress. The broader literature on coping has shown that the ways in which children and adolescents cope with stress are important mediators and moderators of the emotional and behavioral outcomes of stressful situations (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Specifically, the present study was based on a model of coping that distinguishes among three types of coping (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000): primary control engagement coping (problem-solving, emotional expression, emotional modulation), secondary control engagement coping (cognitive restructuring, positive thinking, acceptance, distraction), and disengagement coping (avoidance, denial, wishful thinking). Both primary control and secondary control engagement coping have been shown to be associated with lower levels of emotional and behavioral problems, whereas disengagement coping has generally been associated with poorer adjustment (e.g., Connor-Smith et al., 2000; Wadsworth & Compas, 2002; Wadsworth, Raviv, Compas, & Connor-Smith, 2005). Most relevant to the current study, Jaser et al. (2005) studied the ways that adolescents cope with the stress of a depressed parent and found that the use of secondary control coping in dealing with the stress of parental depression was associated with significantly fewer self-reported and parent-reported symptoms of anxiety/depression. It is likely that secondary control coping was an adaptive way for these adolescents to cope because the stress of living with a depressed parent is largely uncontrollable, and therefore attempts to adapt to the environment are likely to be more effective than attempts to change the stressor.

In the present study, we examined adolescents' coping strategies when faced with family stress related to a parent's depression and coping with stress associated with peer relations. Family stressors related to parental depression (e.g., stressful parent–child interactions related to parental withdrawal and parental irritability/intrusiveness) may be particularly salient sources of stress in families of depressed parents because of the chronic and difficult nature of parent–child relationships in these families (Cummings & Davies, 1994). Peer stress, while important, may present fewer challenges because it does not involve direct interactions with their depressed parent. Consistent with this hypothesis, Adrian and Hammen (1993) found that children of depressed parents experienced more severe stress related to interactions with family members than

with peers. The demands of family stress and peer stress may differ, requiring different types of coping responses for these two types of stress; that is, there may be situational specificity in the ways that offspring of depressed parents cope with these sources of stress.

Relatively little research has examined patterns of coping across different types of stress in children and adolescents in general, and no studies have examined the ways that children/adolescents of depressed parents cope with stress with family versus peers. Consistency in coping with different types of stress has been examined both through correlations and comparisons of mean levels of coping strategies across types of stress. Research testing correlations in adolescents' coping in response to various combinations of family, peer, and academic stressors has generally found moderate levels of consistency in adolescents' reports of using the same coping strategy across situations, as correlations of coping across different stressors are typically moderate in magnitude, ranging from .35 to .70 (e.g., Brodzinsky et al., 1992; Causey & Dubow, 1993; Compas, Forsythe, & Wagner, 1987; Griffith, Dubow, & Ippolito, 2000; Hampel & Petermann, 2005; Wadsworth & Compas, 2002). Findings from comparisons of mean levels of coping across stressors have been less clear. Griffith, Dubow, & Ippolito, 2000 found that adolescents were more likely to use disengagement strategies with family stress than for school or peer stress. Hampel and Petermann (2005) found that children and adolescents used significantly more problem-focused coping (i.e., situation control) and maladaptive coping (i.e., passive avoidance, rumination, and aggression) with interpersonal stressors and significantly more problem-focused coping (i.e., support seeking) with academic stressors. In contrast, Wadsworth and Compas (2002) reported that mean levels of primary control, secondary control, and disengagement coping with economic strain and family conflict were not significantly different.

All of these studies have been limited, however, by the reliance on adolescents' self-reports for coping with different types of stress. As a consequence, estimates of consistency across different stressors may be inflated because of shared method variance in the assessment of coping; that is, consistency may be an artifact of measurement rather than true consistency in adolescents' coping. Studies are needed in which coping with different stressors is assessed using different methods (e.g., reports from adolescents and parents).

In the current study, we examined the coping responses of adolescent children of parents with a history of depression across two types of stressful situations, peer stress and family stress related to living with a depressed parent. To address limitations of previous studies, we obtained adolescents' reports of their coping with family stress and peer stress, and parents' reports of the ways that adolescents coped with family stress (parents did not report on the ways that their children coped with peer stress, as it was assumed that parents would be less aware of these responses). We tested three hypotheses: First, based on past findings, we expected that adolescents would be moderately consistent in their coping responses across family and peer stress as reflected in correlations that are moderate in magnitude. Next, we hypothesized that there would be differences in the mean level of coping strategies across the peer and family stress, in that adolescents would be more likely to use primary control coping strategies with peer stress than family-stress, and more likely to use secondary control coping with family stress than with peer stress, as it is a relatively uncontrollable stressor. Finally, based on prior findings (e.g. Langrock, Compas, Keller, & Merchant, 2002; Jaser et al., 2005), we expected that greater use of secondary control strategies would be associated with lower levels of internalizing and externalizing problems, as reported by adolescents and their parents.

Method

Participants

Participants were 73 adolescents between the ages of 10 and 16 ($M = 12.74$ years, SD = 1.5) with 52.1% male, and their parents ($n = 50$, 46 mothers, 4 fathers) who met criteria for a history of depression (see below). This age range has been used in other research with children of depressed parents (e.g., Anderson & Hammen, 1993; Rudolph & Hammen, 2000), and is consistent with the definition of adolescence as the "second decade of life" (Lerner & Steinberg, 2004). Participants were Caucasian, which is representative of the region in northern New England from which the sample was drawn (census data indicate that this region is 98% Caucasian). The mean age for parents was 42.6 (SD = 6.9), 60% were married, 38% were either divorced or separated, and 2% were single. On average, parents had some college education ($M = 14.3$ years of education). Based on the Hollingshead nine-point occupational scale (Hollingshead, 1975), the mean occupational status of the parents was 5.0 (SD = 1.9), which is characterized by clerical and sales workers and small business owners. When families had multiple children in the desired age range, data from all children were included. Fourteen families had multiple children; 12 families had 2 children and 2 families had 3 children.

Procedure

Families participating in this study were part of a larger study to pilot a preventive intervention with families in which one or both parents had a history of depression (see Compas, Langrock, Keller, Merchant, & Copeland, 2002 for a description of the intervention). All data reported here were collected prior to the intervention. Individuals were recruited for this study through direct mailings to Vermont Kaiser Permanente Family Health Care members, newspaper advertisements, physician referrals, and public service announcements. Interested families were directed to call a behavioral health office, and parents agreeing to participate returned a signed consent form; informed consent was also obtained for children. After the parent had received a copy of the consent form, a member of the research team conducted telephone interviews with the identified parent to assess for symptoms of Major Depressive Disorder (MDD) and Dysthymia (DYS), using the DSM-IVChecklist Interview (Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), 1994) (adapted from the checklist in Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R), 1987; Hudziak et al., 1993). All of the identified parents met criteria for a depressive disorder: 84% MDD, 5% DYS, and 11% met criteria for both disorders. Onset of participants' most recent depressive episode ranged from 1 to 48 months prior to the diagnostic interview. Because the intervention was designed for parents with a history of depression but who were not currently in a depressive episode, those parents who met criteria for current depression were screened out of the study.

Following the screening interview, packets of questionnaires for parents and adolescents were mailed to families; family members completed the questionnaires and returned them through the mail. Families were paid $40 upon return of the questionnaires.

Measures

Family and Peer Stressors and Adolescents' Coping. The Responses to Stress Questionnaire (Connor-Smith et al., 2000), consisting of 57 items that represent volitional coping and involuntary responses to stressors characteristic of adolescence, was used to assess coping. Two versions of the RSQ were used, one designed to assess adolescents' responses to stressors associated with living with depressed parent (Langrock, Compas, Keller, & Merchant, 2002) and one designed to assess adolescents' responses to stressors associated with peer relationships (Connor-Smith et al., 2000). For both versions, a set of initial questions ask respondents to report on the occurrence of each of a list of specific stressors (family or peer), its severity, and the adolescents' perceived control over these events. Following these initial questions, both forms include 57 questions that ask adolescents to report how they responded during the past 6 months to the stressors they endorsed. Items are comparable on each version but the wording is adjusted to focus the respondent on the source of stress (family vs. peer). Items cover 5 factors of coping and stress responses: primary control engagement coping (i.e., problem solving, emotional expression, emotional modulation), secondary control engagement coping (i.e., positive thinking, cognitive restructuring, acceptance, distraction), disengagement coping (i.e., avoidance, denial, wishful thinking); involuntary engagement (e.g., physiological arousal, rumination), and involuntary disengagement (e.g., emotional numbing) (Connor-Smith et al., 2000). Respondents were asked to rate each item on a Likert scale (1 = not at all; 2 = a little; 3 = some; 4 = a lot) to assess the degree to which or frequency with which the adolescent responded to the identified stressors.

The parental depression version of the RSQ includes 12 questions to reflect three areas of stressful parent–child interactions that previous research has shown to be related to parental depression, including the depressed parent's intrusiveness or irritability, withdrawal, and marital conflict (Gelfand & Teti, 1990). The peer stress version of the RSQ was designed to assess the adolescent's responses to stressors associated with peer relationships, and includes ten stressors related to peer relations (e.g., ''Being left out, rejected, or not included''). Reliability and validity for the parent and child versions of the RSQ are established with children ages 10–19 (Connor-Smith et al., 2000).

The RSQ has demonstrated internal consistency and test–retest reliability ranging from adequate to excellent (Connor-Smith et al., 2000). Moreover, discriminant and convergent validity were established by examining correlations with subscales from the COPE (Carver, Scheier, & Weintraub, 1989), a widely used measure of coping, and laboratory measures of stress reactivity (Connor-Smith et al., 2000) and in latent variable analyses of adolescent and parent reports (Compas et al., 2006)). In this sample, the internal consistency (Cronbach's alphas) for the first 3 factors of the parental depression RSQ were primary control coping (9 items), $\alpha = .81$; secondary control coping (12 items), $\alpha = .73$; and for disengagement coping (9 items), $\alpha = .67$. For the peer stress RSQ, internal consistency reliabilities were primary control coping, $\alpha = .84$; secondary control coping, $\alpha = .65$; and disengagement coping, $\alpha = .71$.

To control for response bias and individual differences in base rates of item endorsement (e.g., gender differences in response rates), proportion scores were used for all analyses (see Connor-Smith et al., 2000; Osowiecki & Compas, 1998; Vitaliano, Maiuro, Russo, & Becker, 1987). Proportion scores were calculated by dividing the total score for each factor by the total score for

the entire RSQ (Connor-Smith et al., 2000). For the present analyses, only the first three factors (primary control, secondary control, and disengagement coping) were used, as these represent volitional (coping) responses to stress.

Demographics: Parents completed a demographic form indicating age and ethnicity of parents, marital status, education, current employment, and ages of children.

Emotional and behavioral problems: The Child Behavior Checklist (CBCL, Achenbach, 1991) was used to assess parent reports of child's behavioral and emotional problems over the past 6 months. In the majority of cases, the parent with a history of depression completed this form. The CBCL is an 118-item checklist designed to assess the child's problem behaviors and competencies. Parents rate each item as 0 (*not true*), 1 (*somewhat or sometimes true*), or 2 (*very true* or *often true*). Data are reported as normalized T scores, based on separate norms for age and sex, but raw scores were used in all analyses to allow for maximum variance. Two of the syndromes, anxious/depressed and aggression, were selected for analysis, as these are the most prototypic indicators of internalizing and externalizing behaviors. The CBCL has been shown to have excellent reliability and validity (Achenbach & Rescorla, 2001).

The Youth Self-Report (YSR, Achenbach, 1991) was used to assess adolescents' views of their own functioning over the past 6 months. The YSR is an 112-item checklist designed to assess the youth's view of his/her own problems and competencies. Again, we examined the anxious/depressed and aggression syndromes as indicative of internalizing and externalizing behavior problems. The YSR has also been shown to have excellent reliability and validity (Achenbach & Rescorla, 2001).

Results

Preliminary analyses

Preliminary analyses were conducted to ensure that no significant differences existed as a function of some parents completing more than one set of questionnaires for their children (a possible violation of independence of informant). We conducted multiple mixed effect models on each of our critical variables (i.e., symptoms of anxiety/depression and aggression and coping factors) to test the average intraclass correlations (Shrout & Fleiss, 1979). The sample of 57 children (i.e., those with only one child per family) revealed associations comparable in direction and magnitude to those found for the full sample of 73 children (see also Langrock, Compas, Keller, & Merchant, 2002). In addition, correlations conducted with one child per family were virtually identical to those found using the full sample; however, because of the loss of statistical power, some of the correlations were no longer significant. In order to maximize the number of participants to ensure sufficient power to detect moderate size effects, all adolescent children were included in the reported analyses.

In addition, correlations were conducted to determine if there was a relationship between child age or gender and coping. There were no significant associations between child age and either parent- or child-report of coping, and only the relationship between parents' report of child's use of primary control coping and age approached significance ($r = .21$, $p < .10$). Similarly, there were no significant differences between males and females on either parent- or self-reported coping or

emotional/behavioral problems. There was a trend toward significance for self-reported use of disengagement coping with family stress, in that females were somewhat more likely to use disengagement coping than males ($t = 1.91$, $p = .060$), and there was a trend toward significance for parent-reported aggression, in that females were somewhat more likely than males to exhibit symptoms of aggression ($t = 1.93$, $p = .058$).

Table 1 presents the descriptive statistics for child and parent reports of coping with peer and family stress and symptoms of anxiety/depression and aggression. Mean levels of coping were fairly similar across the two situations and across informants, ranging from .17 to –.22 (proportion scores). Adolescents reported moderately elevated levels of anxiety/depression on the YSR (mean T score of 55.4 was one-half standard deviation above the normative mean) and their parents reported that adolescents exhibited significantly higher levels of anxiety/depression on the CBCL (mean T score of 60.6 was one standard deviation above the normative mean). A similar pattern was found in adolescent and parent reports of aggressive behavior problems; adolescents reported moderately elevated levels of aggression on the YSR (mean T score of 56.0 was one-half standard deviation above the normative mean) and parents reported significantly higher levels of aggression on the CBCL (mean T score of 59.7 was one standard deviation above the mean). Compared to the YSR and CBCL normative samples (Achenbach & Rescorla, 2001) the percentages of children who scored above the clinical cut-off were approximately 2–5 times greater than the expected rate; on the YSR, 5.5% of adolescents scored in the clinical range for symptoms of anxiety/depression and 11% scored in the clinical range for aggression, and on the CBCL, 13.7% of adolescents' parents rated them in the clinical range for symptoms of anxiety/depression and 10.9% rated them in the clinical range for aggression. These elevated levels of symptoms in the clinical range are consistent with previous research on rates of psychopathology for children of depressed parents (Beardslee, Versage, & Gladstone, 1998).

Cross-situational consistency of coping

To address the first hypothesis, that adolescents' coping would be moderately consistent across situations, we examined the correlations between adolescents' self-reported coping with peer and family stress. As shown in Table 1, based on adolescents' self-reports, the three coping factors (primary control engagement, secondary control engagement, and disengagement) were moderately and significantly correlated across the two stressors (r's range from .57 to .62, all $p < .001$). Therefore, adolescents were relatively similar in their reports of their use of the three types of coping in response to family stress and peer stress.

Because the cross-situational correlations based on adolescents' reports of coping with both peer and family stress may be inflated by shared method variance, we also examined the correlations of adolescents' reports of coping with peer stress with their parents' reports of adolescents' coping with family stress. These correlations were significant for primary control engagement coping, $r = .31$, $p < .01$, and disengagement coping, $r = .25$, $p < .05$; however, the correlation for secondary control engagement coping was non-significant.

Table 1
Correlations among adolescents' and parents' reports of adolescents' coping and symptoms

	1	2	3	4	5	6	7	8	9	10	11	12	13
Adolescents' reports													
1. Primary control family $M = .17$ (.04)	—												
2. Secondary control family $M = .22$ (.06)	.26*	—											
3. Disengagement family $M = .20$ (.03)	−.55***	−.31**	—										
4. Primary control peer $M = .17$ (.04)	.62**	.23*	−.46***	—									
5. Secondary control peer $M = .22$ (.05)	.35**	.57***	−.30*	.27*	—								
6. Disengagement peer $M = .20$ (.03)	−.40***	−.30*	.61***	−.51***	−.32**	—							
7. Anxiety/depression $M = 55.41$ (7.33)	−.08	−.51***	.08	−.27*	−.56***	.09	—						
8. Aggression $M = 55.95$ (7.11)	−.06	−.27*	.11	−.25*	−.32***	.10	.68***	—					
Parents' reports													
9. Primary control family $M = 17$ (.04)	.47***	.10	−.32**	.31**	.01	−.22	.10	.02	—				
10. Secondary control family $M = .20$ (.05)	−.03	.32**	−.02	.02	.02	−.03	−.20	−.09	.18	—			
11. Disengagement family $M = .20$ (.03)	−.22	−.17	.42***	−.15	−.01	.25*	−.05	.00	−.66***	−.15	—		
12. Anxiety/depression $M = 60.58$ (8.04)	−.15	−.18	.15	−.22	−.11	.12	.20	.30**	−.22	−.46***	.12	—	
13. Aggression $M = 59.71$ (9.25)	−.24*	−.14	.19	−.22	.00	.30**	.00	.27*	−.33**	−.31***	.15	.48***	—

Note: Means are *T* scores for the anxiety/depression and aggression syndromes; proportion scores for the coping factors. Correlations are with proportion scores for coping factors.
*$p < .05$. **$p < .01$. ***$p < .001$

Differences in coping across situations

To test the second hypothesis, that there would be mean differences in the levels of coping used by adolescents in different situations, we used a repeated measures analysis of variance. There was a significant main effect for adolescents' self-reported coping strategy, $F\,(71) = 32.54$, $p < .001$, which accounted for about 31% of the variance (partial $\eta^2 = .31$). However, there was no main effect for stressor, and the stressor × coping strategy interaction was not significant. Thus, there were no differences in the mean levels of the three types of coping across peer and family stress. Tests of simple effects indicated that adolescents were significantly more likely to report using secondary control coping strategies than primary control strategies, $F\,(1, 71) = 89.03$, $p < .001$, or disengagement coping strategies, $F\,(1, 71) = 15.41$, $p < .001$, and significantly more likely to report using disengagement coping than primary control coping, $F\,(1, 71) = 15.43$, $p < .001$, across situations.

To account for shared method variance, we also conducted a repeated measures analysis of variance to compare the levels of the three types of coping across adolescent reports of peer stress and parental reports of family stress. This analysis indicated that there was a main effect for stressor, in that adolescents reported using higher levels of coping with peer stress than parents reported their adolescents using with family stress, $F\,(1, 70) = 5.28$, $p = .025$, which accounted for about 7% of the variance (partial $\eta^2 = .07$). In addition, there was a main effect for coping strategy, $F\,(2, 69) = 30.91$, $p < .001$, which accounted for about 31% of the variance (partial $\eta^2 = .31$); tests of simple effects indicated that adolescents used greater levels of secondary control coping than either primary control coping ($F\,(1, 70) = 73.67$, $p < .001$ or disengagement ($F\,(1, 70) = 6.41$, $p = .014$) across situations, and that they used greater levels of disengagement coping than primary control coping. Finally, there was a significant stressor × coping interaction, $F\,(2, 69) = 4.47$, $p = .013$, and simple effects indicated that while adolescents reported using significantly more secondary control coping than disengagement coping to deal with peer stress, parents reported their children using similar levels of secondary control coping and disengagement coping to deal with family stress.

Coping and emotional/behavioral problems

To test the third hypothesis that coping is related to adolescents' behavioral and emotional problems, we examined correlations between the three types of coping strategies and parent and adolescent-reported scores on the anxiety/depression and aggression syndromes. We then conducted a series of hierarchical regressions to determine the relative contribution of adolescents' coping with family and peer stress in the prediction of adolescent and parent-reported symptoms of anxiety/depression and aggression.

Adolescents' self-reports of symptoms on the YSR were associated with their coping responses (Table 1). Self-reported symptoms of anxiety/depression were negatively correlated with secondary control coping with family stress and primary control and secondary control coping with peer stress. Adolescents' self-reported symptoms of aggression were negatively correlated with secondary control coping with family stress and peer stress and primary control coping with peer stress. There were no significant associations between disengagement coping with either type of stressor and adolescent reports of anxiety and depression or aggression. Parents' reports of

adolescents' functioning on the CBCL were also significantly associated with select aspects of adolescents' coping responses to the different stressors (see Table 1). Greater use of primary control coping with family stress was related to fewer symptoms of aggression on the CBCL. On the other hand, greater use of disengagement coping with peer stress was related to more symptoms of aggression on the CBCL.

Table 2 presents the regression equations predicting adolescents' anxiety/depression and aggressive symptoms from coping variables related to both family stress and peer stress. Because adolescents' coping was not correlated with parent-reported anxiety/depression, we did not conduct a regression equation to predict CBCL anxiety/depression. Adolescents' self-reports of coping with family stress were entered first, followed by their reports of coping with peer stress. The first step of the equation predicting symptoms of anxiety/depression on the YSR, coping with family stress, was significant, $R^2 = .27$, as was the full model, $R^2 = .47$. Within this equation, greater use of secondary control coping with both family stress and peer stress predicted fewer symptoms of anxiety and depression on the YSR. In addition, while greater use of primary control coping with peer stress predicted fewer symptoms, greater use of primary control coping with family stress predicted *more* symptoms of anxiety and depression in the full model. The first step of the equation predicting symptoms of aggression on the YSR, coping with family stress, did not predict a significant portion of the variance, but the full model was significant, $R^2 = .19$. Within this equation, only greater use of primary control coping with peer stress predicted fewer symptoms on the YSR. Adolescents' self-reports of coping with family and peer stress failed to account for a significant portion of variance on the aggression syndrome of the CBCL. Thus, coping was a predictor of self-reported but not parent-reported symptoms of emotional and behavioral problems.

Discussion

In the present study we found that the adolescent offspring of depressed parents were relatively consistent in their coping with peer stress and stress in the family related to living with a depressed parent. Moreover, the pattern of coping was similar across stressors, in that adolescents used secondary control coping most often in response to both types of stress. However, using different styles of coping to deal with the different stressors was related to better adjustment. When dealing with peer stress, greater use of primary control coping and secondary control coping were related to fewer internalizing and externalizing symptoms in adolescents. However, when dealing with family stress, only greater use of secondary control coping was associated with fewer symptoms in adolescents. As expected for children of depressed parents, the adolescents in this sample were at high risk for behavioral and emotional problems (Hammen, 1997; Langrock et al., 2002). These high rates of internalizing and externalizing symptoms in this sample indicate that the present findings have important implications for our understanding of coping and its relation to emotional and behavioral adjustment in adolescent offspring of depressed parents.

Similar to previous findings (e.g., Causey & Dubow, 1992; Reid, Dubow, & Carey, 1995), the correlations for coping strategies across stressors showed moderate levels of consistency, indicating that adolescents were somewhat more likely to use secondary control coping strategies across situations. These results suggest that adolescents may have their own preferred method of

Table 2
Regression equations predicting adolescents' adjustment from adolescents' reports of coping

Eq. (1)—YSR anxiety/depression	Final $R^2 = .47$ $F(6) = 9.85$, $p = .000$	
Step 1: R^2 change = .27***	β	sr
Primary control family	.01	.01
Secondary control family	−.54***	−.51
Disengagement family	−.08	−.07
Step 2: R^2 change = .21***		
Primary control family	.28*	.20
Secondary control family	−.31**	−.25
Disengagement family	−.05	−.04
Primary control peer	−.28**	−.27
Secondary control peer	−.44***	−.37
Disengagement peer	−.20	−.15
Eq. (2)—YSR aggression	Final $R^2 = .19$ $F(6) = 2.52$, $p = .029$	
Step 1: R^2 change = .08	β	sr
primary control family	.04	.03
Secondary control family	−.27*	−.25
Disengagement family	.05	.04
Step 2: R^2 change = .11*		
Primary control family	.26+	.19
Secondary control family	−.13	−.10
Disengagement family	.05	.03
Primary control peer	−.35*	−.25
Secondary control peer	−.27+	−.22
Disengagement peer	−.12	−.09
Eq. (3)—CBCL aggression	Final $R^2 = .06$ $F(6) = 1.81$, n.s.	
Step 1: R^2 change = .06	β	sr
Primary control family	−.18	−.15
Secondary control Family	−.07	−.07
Disengagement family	.07	.05
Step 2: R^2 change = .08		
Primary control family	−.19	−.14
Secondary control family	−.15	−.12
Disengagement family	−.09	−.06
Primary control peer	−.02	−.01
Secondary control peer	.22	.17
Disengagement peer	−.30+	.22

Note: β = standardized beta. sr = semi-partial correlation.
+ <.10. * <.05. ** <.01. *** <.001.

coping or specific coping strategies that they tend to use across situations. Further, if adolescents successfully manage a stressful situation by using one coping method, it is possible that they will be more likely to try it in other situations. Unlike previous studies, we utilized both parent- and self-reports of adolescents' coping in order to control for shared method variance. Analyses of adolescents' and parents' reports of adolescents' coping with family stress indicated low to moderate levels of cross-situational consistency (correlations ranged from $r = .02$ for secondary

control coping to $r = .31$ for primary control coping). These correlations were significantly lower than the correlations based on adolescents' self-reports of both types of stress (correlations ranged from $r = .57$ for secondary control coping to $r = .62$ for primary control coping). This suggests that previous studies may have overestimated the level of consistency in adolescents' coping, as the correlations in prior research may have been inflated by common method variance in the assessment of coping with different types of stress.

When comparing the mean level differences of coping across situations, there were no significant differences in adolescents' self-reported use of the three types of coping across peer and family stress. In response to both peer and family stress, adolescents were more likely to use secondary control coping than either primary control coping or disengagement coping. One reason for adolescents' preference for secondary control coping may be that this factor includes distraction strategies, such as listening to music or going for a walk, which may be commonly used by adolescents (Hampel & Petermann, 2005). Such distraction strategies may be readily available to adolescents and could have an immediate positive effect on their mood (Reijntjes, Stegge, & Terwogt, 2006). However, when we controlled for shared method variance by comparing reports of coping across stressors (parents reports of adolescents' coping with family stress to adolescents' own reports of coping with peer stress), we found a significant main effect for stressor and a significant stressor $\times$ coping interaction. Adolescents reported higher levels of coping with peer stress overall than their levels of coping with family stress as reported by parents. Moreover, while adolescents reported using significantly more secondary control coping than disengagement coping to deal with peer stress, parents reported their children using similar levels of secondary control coping and disengagement coping to deal with family stress. It is possible that some of these differences may be accounted for by the fact that many of the strategies categorized as secondary control coping are not observed by parents (e.g., cognitive reframing).

The results of the regression analyses relating internalizing and externalizing symptoms to coping strategies replicate and build on past research on coping and adjustment (e.g., Compas et al., 1987; Reid et al., 1995; Wadsworth & Compas, 2002). We found that adolescents' reports of coping were associated with self-reports of internalizing and externalizing symptoms. When coping with peer stress, greater use of primary control coping was related to fewer symptoms of self-reported anxiety/depression and aggression, and greater use of secondary control coping was related to fewer symptoms of anxiety/depression. When coping with family stress, greater use of secondary control coping was related to fewer symptoms of self-reported anxiety/depression. These results support the idea that better adjustment results from a good match between the stressor and the coping strategies used (Folkman, 1984; Forsythe & Compas, 1987); the present findings suggest that the most adaptive strategy for a relatively controllable stressor, such as peer stress, is the use of primary control coping, which attempts to change either the stressor or one's response to it, and was related to fewer internalizing and externalizing symptoms. On the other hand, it appears that the most adaptive strategy for a relatively uncontrollable stressor, such as the stress of a living with a depressed parent, is the use of secondary control coping, particularly for internalizing symptoms. While adolescents may become frustrated by trying to change an uncontrollable stressor, which could result in symptoms of anxiety and depression, it appears that attempts to adapt to the environment are related to fewer internalizing symptoms (Forsythe & Compas, 1987).

While the use of primary control coping to deal with family stress was uncorrelated with self-reported anxiety/depression and aggression, the regression equations indicated that greater use of primary control coping with family stress was related to *more* symptoms of anxiety/depression and aggression. These regression results should be interpreted cautiously, as the strong relationship between primary control coping with peer and family stress ($r = .62$) may have resulted in multicollinearity when both variables were entered in the same regression equation. Thus, further research is needed to determine the relationship between primary control coping with family stress and adolescents' symptoms.

Unlike previous studies that found the use of disengagement coping to be associated with poorer outcomes (e.g., Connor-Smith et al., 2000; Wadsworth & Compas, 2002), disengagement coping with either type of stressor was not significantly related to adolescents' symptoms in this study. This lack of association may be because disengagement coping has a smaller effect on symptoms in children of depressed parents, which we did not have sufficient power to detect. Alternatively, it may be that disengagement strategies were used proportionately less often by this population. Research comparing children of depressed and non-depressed parents may be necessary to understand differences in the effects of disengagement coping.

It is noteworthy that adolescents' coping with either type of stressor failed to predict parent-reported anxiety and depression or aggression, similar to the findings of Jaser et al. (2005). This pattern may reflect differences attributable to parent and adolescent reports of adolescents' coping and symptoms. Parents may be less able to observe and report on the ways that adolescents' cope with stress, as many aspects of coping involve covert, cognitive processes. Similarly, parents may be less aware of adolescents' symptoms, as adolescents spend more time with peers than family, and parents have fewer opportunities to observe adolescents' behavior (Furman, 1989). The use of latent variable analyses of coping is one step that may be used to overcome the problems of method effects that come from the use of single informants to measure coping and symptoms (Compas et al., 2006).

Some limitations to this study must be noted. First, because the design of this study was cross-sectional, causal inferences cannot be made regarding the relation between coping and adjustment. In addition, without a comparison group of parents without a history of depression and their children, we cannot know whether adolescents' use of different coping strategies with family and peer stressors is specific to this population. The lack of racial and ethnic diversity in this sample also limits the generalizations we can make regarding the findings. Further, the size of the present sample limited the power for finding significant effects, specifically for age and gender. While we found that females were somewhat more likely to use disengagement coping than males, given that the existing research in this area has mixed results (e.g., Griffith et al., 2000; Hampel & Petermann, 2005) gender differences in coping are likely to have small effect sizes. Larger samples of the different ages and ethnicities may be necessary to find significant individual differences in cross-situational coping.

Future research on cross-situational coping among adolescents is necessary to expand our understanding of the relationship between stress and coping and emotional and behavioral functioning. It will be important to examine the relationship between control and coping strategies in future studies; it seems that adolescents benefit more from using primary control coping strategies with peer stress, which may be perceived as more controllable, and benefit more from using secondary control coping with family stress, which may be perceived as less

controllable. Future studies should also include positive indicators of adjustment to determine which coping strategies are most adaptive. Further, results from this study have potential clinical implications. Given that children of depressed parents are at risk for emotional and behavioral problems, interventions for the offspring of depressed parents need to inform and teach the most adaptive coping strategies to children of depressed parents. Specifically, our results suggest that children of depressed parents should be taught to utilize secondary control coping strategies, such as distraction, positive thinking, and acceptance, to deal with the relatively uncontrollable stress of living with a depressed parent.

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