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Parental Depressive Symptoms and Parenting: Associations with Children's Coping in Families of Depressed Parents

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SYNOPSIS

Objective. This multi-method study examined parental depressive symptoms and levels of harsh/intrusive and warm/responsive parenting as correlates of secondary control coping (acceptance, cognitive reappraisal, distraction) in children of parents with a history of depression. ***Design.*** The sample included 165 parents with a history of major depressive disorder and their 9- to 15-year-old children. Parents provided self-reports of their current depressive symptoms; videorecordings of parent–child interactions were coded to determine parenting behaviors; and children reported their use of secondary control coping strategies. ***Results.*** Harsh/intrusive parenting related to less, and warm/responsive parenting related to greater, use of secondary control coping strategies in children. Parents' current depressive symptoms were only conditionally related to children's use of secondary control coping strategies, such that depressive symptoms moderated the relation between warm/responsive parenting behaviors and child secondary control coping. When parental depressive symptoms were low or average, warm/responsive parenting was positively related to children's secondary control coping. When parental depressive symptoms were high, warm/responsive parenting was not associated with children's secondary control coping. ***Conclusions.*** The association between positive parenting behaviors and children's coping is contingent on current levels of parents' depressive symptoms. Efforts to enhance children's coping skills should target both parental depressive symptoms and parenting skills.

INTRODUCTION

Parental depression is a significant source of risk for the development of internalizing and externalizing symptoms and disorders in children (Goodman et al., 2011). This relation is partially influenced by children's exposure to high levels of stress in families of depressed parents (Hammen, Shih, & Brennan, 2004). Therefore, identifying factors that support and hinder children's ability to cope with stress and regulate emotions in response to stress is critical in families of depressed parents (e.g., Bettis et al., 2016; Dunbar et al., 2013). Positive parenting (e.g., warmth, support) serves as a resource for children and adolescents to develop skills to cope with stress (Hardy, Power, & Jaedicke, 1993; Watson et al., 2014); however, concurrent depressive symptoms in the parent may dampen or eliminate the adaptive effect of positive parenting on child coping. Conversely, negative parenting (e.g., harsh, intrusive) may impede the development of effective coping skills in children, and this relation may be

amplified in the presence of high parental depressive symptoms (Jaser et al., 2005; Langrock, Compas, Keller, Merchant, & Copeland, 2002). The present study investigates associations among parental depressive symptoms, parenting behaviors, and secondary control coping in children of parents with a history of depression.

Coping involves conscious, controlled, and purposeful efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to a stressful event (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). The model of coping that guides the current study organizes coping strategies around the perceived or actual controllability of a given stressor and one's responses to the stressor (e.g., Weisz, McCabe, & Dennig, 1994). This model has been validated in children and adolescents from diverse cultural backgrounds and exposed to a variety of stressors using confirmatory factor analysis (e.g., Benson et al., 2011; Compas et al., 2006; Wadsworth et al., 2004). The control-based model includes three types of coping responses: primary control coping (i.e., acting directly on a stressor or related emotions through problem-solving, emotion modulation, or emotion expression), secondary control coping (i.e., adapting to a stressor through acceptance, positive thinking, cognitive reappraisal, or distraction), and disengagement coping (i.e., efforts to avoid, deny, or wish away a problem or stressor) (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000). In a meta-analysis of associations between coping and emotion regulation and internalizing and externalizing symptoms in children and adolescents, primary control and secondary control coping were associated with lower levels of symptoms, and disengagement coping was associated with higher levels of symptoms (Compas et al., 2017). Most relevant to the current study, secondary control coping may be the most adaptive strategy for managing uncontrollable stress, including the stress associated with parental depressive symptoms (e.g., Bettis et al., 2016; Dunbar et al., 2013; Jaser et al., 2005).

Parenting is one potentially important factor associated with the ways that children and adolescents cope with stress (Power, 2004; Zimmer-Gembeck & Skinner, 2016). Positive parenting behaviors (e.g., warmth, support) are related to the use of more adaptive coping strategies in children, and negative parenting behaviors (e.g., harsh, intrusive) are related to the use of less adaptive coping strategies in children (Jaffe, Gullone, & Hughes, 2010; McIntyre & Dusek, 1995; Meesters & Muris, 2004; Watson et al., 2014). Parents who are warm and responsive may engage children in conversations about their emotions, providing informational, instrumental, and emotional support to aid in coping. Accordingly, children exposed to warm and responsive parenting behaviors may be more likely to seek parental support during stressful situations (Thompson & Meyer, 2007). When parents are harsh or intrusive, children may learn that emotions are threatening and should be suppressed, contributing to their use of disengagement coping strategies (Eisenberg, Fabes, & Murphy, 1996). Furthermore, negative parenting behaviors may contribute to children's reluctance to seek parental support when challenged with stress (Thompson & Meyer, 2007). Parenting may be an especially important factor for coping and emotion regulation among children of depressed parents; these children are faced with significant levels of stress within and outside of their families (e.g., Feurer, Hammen, & Gibb, 2016) and tend to use maladaptive strategies to cope with that stress (e.g., Blandon, Calkins, Keane, & O'Brien, 2008; Hoffman, Crnic, & Baker, 2006; Jaser et al., 2005; Silk, Shaw,

Skuban, Oland, & Kovacs, 2006). Depressed parents tend to display less warm and responsive behaviors and exhibit more disengaged (i.e., the absence of warmth) and intrusive parenting behaviors than non-depressed parents, which is especially true when parental depressive symptoms are current (Lovejoy, Graczyk, O'Hare, & Neuman, 2000).

Parenting behaviors are associated with the ways that children cope with stress, such that harsh or intrusive parenting is associated with lesser use of secondary control coping skills and warm and responsive parenting is associated with greater use of secondary control coping skills in children (e.g., Jaffe et al., 2010). However, the presence of depressive symptoms in the parent may disrupt this association. In families with a history of depression, current parental depressive symptoms may change the way that children perceive and interpret both negative (harsh and intrusive) and positive (warm and responsive) parenting behaviors (Parent et al., 2014); harsh and intrusive behaviors may be more salient, and warm and responsive behaviors may be less salient, to children when depressive symptoms are high. As such, the negative relation between harsh and intrusive behaviors and children's relative use of secondary control coping skills may be strengthened, and the positive relation between warm and responsive parenting behaviors and children's relative use of secondary control coping skills may be attenuated or extinguished, when parents' depressive symptoms are high. Additional research is needed to understand relations among parental depressive symptoms, parenting behaviors, and child coping.

To address these questions, the current study examined the relation between parenting behaviors and the use of secondary control coping strategies (relative to other coping strategies) in children, exploring the effect of parental depressive symptoms on that association. In this multi-method study, children reported on their coping behaviors, parents reported on their depressive symptoms, and parenting behaviors were videorecorded during a parent–child discussion task and later coded by trained raters. In regression analyses, we controlled for several variables that have been shown to impact the constructs and associations of interest, including parent marital status (e.g., Morris, Silk, Steinberg, Myers, & Robinson, 2007), education as an index of socioeconomic status (e.g., Chen & Miller, 2015), and ethnicity (e.g., Brantley, O'hea, Jones, & Mehan, 2002) and child gender (e.g., Nolen-Hoeksema, 2012) and age (e.g., Zimmermann & Iwanski, 2014).

First, we hypothesized that parents' current depressive symptoms would be positively associated with harsh/intrusive parenting behaviors and negatively associated with warm/responsive parenting behaviors. Second, we hypothesized that harsh/intrusive parenting behaviors would be negatively associated with children's relative use of secondary control coping strategies and warm/responsive parenting behaviors would be positively associated with children's relative use of secondary control coping strategies. Third, we hypothesized that parental depressive symptoms would be negatively associated with children's relative use of secondary control coping strategies. Fourth, we hypothesized that parental depressive symptoms would moderate the relation between parenting behaviors and children's relative use of secondary control coping strategies, such that the association between harsh/intrusive parenting and children's coping would be stronger, and the association between warm/responsive parenting and children's coping would

be weaker or extinguished, when parents reported higher as compared with lower levels of current depressive symptoms.

METHOD

Participants

The full study sample consisted of 180 families (180 parents with a history of depression and 242 children). Of the 180 families in the full sample, 15 had missing data on one or more key variables used in the current analyses and therefore were deleted listwise from the dataset. The 15 excluded families were not significantly different from the 165 included families with regard to several of the key study variables (harsh/intrusive parenting and child secondary control coping) and all of the demographic variables (parent education, ethnicity, and marital status and child age and gender). However, parents' depressive symptoms were significantly lower (M = 12.18, SD = 14.45) in the excluded families compared to families included in analyses (M = 19.74, SD = 12.33), $t(175) = -2.03$, $p = .04$. Further, observed warm/responsive parenting was significantly higher (M = 6.25, SD = .18) in excluded families compared to families included in analyses (M = 5.85, SD = 1.00), $t(9.36) = 3.40$, $p = .01$.

The final sample for analyses included 165 families with at least one parent with a history of depression (148 mothers and 17 fathers) and one child randomly selected per family (N = 165; 51.5% male). Parents had a mean age of 41.8 years (SD = 7.69) and children ranged in age from 9 to 15 years (M = 11.48, SD = 2.03). Parents' highest level of education varied, with 5.5% reporting less than high school, 9.1% high school, 30.3% some college or technical school, 31.5% 4-year college degree, and 23.6% education beyond 4-year college degree. Parents and children were primarily European American (81.8% parents, 73.3% children), with other ethnic groups including African American (11.5% parents, 13.9% children), Latin American (2.4% parents, 1.8% children), Asian American (1.2% parents, 2.4% children), Native American (.6% parents and children), and Mixed (2.4% parents, 7.9% children). Parents were primarily married or living with a significant other (61.2%), followed by divorced (21.8%), never married (10.9%), separated (4.8%), and widowed (1.2%).

Measures

Parental depression. To determine eligibility for inclusion in the study, parents' current and past histories of major depressive disorder (MDD) were assessed using the Structured Clinical Interview for DSM-IV (SCID-I; First, Spitzer, Gibbon, & Williams, 2001). The SCID-I is a semi-structured interview and was administered by trained postgraduate students and staff. To assess current depressive symptoms, parents completed the Beck Depression Inventory-II (BDI–II; Beck, Steer, & Brown, 1996b). The BDI-II is a 21-item self-report measure with a 4-point scale ranging from 0 to 3. The BDI-II has demonstrated adequate internal consistency and validity in distinguishing the severity of current MDD (Beck, Steer, Ball, & Ranieri, 1996a; Steer, Brown, Beck, & Sanderson, 2001).

Parenting behaviors. During two 15-min conversations, parents and children were videorecorded while discussing a recent pleasant and a recent stressful family event. These conversations were designed to elicit a range of positive and negative parenting behaviors. The conversations were guided using several targeted questions printed on a cue card and given to the family (e.g., When mom/dad is sad, down, irritable, or grouchy, what usually happens?). The two conversations were coded separately for observed parenting behaviors using the Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998). The IFIRS is a macro-level coding system that allows for parent and child behaviors to be rated on a 9-point Likert scale. A score of 1 indicates that the behavior is not at all characteristic of the participant during the interaction, and a score of 9 indicates that the behavior is mainly characteristic of the participant during the interaction. Scores are assigned based on the frequency, intensity, and duration of each behavior. Highly trained research assistants completed the coding. Two research assistants watched each video five times to assign IFIRS codes and met to reach consensus on codes for which there was more than a 1-point discrepancy. For codes with a 1-point discrepancy, the higher code was assigned. Validity of the IFIRS coding system has been established via correlational and confirmatory factor analyses (Alderfer et al., 2007; Melby & Conger, 2001).

Following procedures used previously (Gruhn et al., 2016; Watson et al., 2014), codes were selected to create composites representing two subtypes of parenting: harsh/intrusive and warm/responsive. To capture a wide sample of parenting behaviors, composites were created by summing the selected codes across both pleasant and stressful discussion tasks and dividing by the number of codes included; this rescaling facilitated the interpretation of means across composites. As such, composite scores range from 1 to 9. Interrater reliability was calculated for each IFIRS code in the present analyses using the intraclass correlation coefficient (ICC); ICCs ranged from .70 to .82. The harsh/intrusive composite was created using hostility (mean ICC = .82), intrusiveness (mean ICC = .73), and guilty coercion (mean ICC = .81) codes. Internal consistency for the harsh/intrusive composite in the current sample is $\alpha = .78$. The warm/responsive composite is a modification of the responsiveness/warmth composite used in previous studies (Watson et al., 2014). The present warm/responsive composite is composed of warmth (mean ICC = .72), communication (mean ICC = .70), prosocial behaviors (mean ICC = .73), and child-centeredness (mean ICC = .71) codes. Internal consistency for the warm/responsive composite in the current sample is $\alpha = .88$.

Child coping. Children reported their own coping behaviors using the Responses to Stress Questionnaire – Parental Depression version (RSQ-PD; Connor-Smith et al., 2000; Jaser et al., 2005). The 57-item measure assesses the ways in which children cope with and react to stress associated with their parents' depression. Three factors of coping have been confirmed in factor analytic studies (e.g., Compas et al., 2006; Connor-Smith et al., 2000): primary control coping, secondary control coping, and disengagement coping. The current analyses focus on secondary control coping (i.e., acceptance, cognitive reappraisal, and distraction), because, as noted above, previous research has shown that secondary control coping strategies are the most adaptive in dealing with uncontrollable stressors, including parental depression (e.g., Bettis et al., 2016; Dunbar et al., 2013; Jaser et al., 2005). To control for

response bias in item endorsement, a proportion score was calculated by dividing the secondary control coping score by the total score obtained on the RSQ-PD (Vitaliano, Maiuro, Russo, & Becker, 1987). As such, the dependent variable for child coping represents the child's use of secondary control coping strategies, relative to other strategies.

Procedures

Parents and their children were recruited to participate in a study examining the efficacy of an intervention designed to prevent the development of psychopathology in children of parents with a history of MDD. Recruitment efforts (i.e., advertisements in mental health-care settings, general medical practices, and public settings as well as outreach via local media) targeted families residing in a small northeastern city and a southern metropolitan area. After families initiated contact with the research team, a research assistant conducted a phone screen with the target parent to determine eligibility. Families identified as eligible from the phone screen were invited into the laboratory to participate in a baseline assessment that included semi-structured diagnostic interviews, a battery of questionnaires, and two 15-min parent–child videotaped interaction tasks (for additional details, see Compas et al., 2009). Families were compensated $40 for the baseline assessment.

Data Analytic Approach

As noted above, one child per family was selected at random for inclusion in the present analyses to avoid violations of independence among children from the same family. Bivariate Pearson correlations were calculated to examine associations among parental depressive symptoms, parenting behaviors, and child secondary control coping. Regression analyses were conducted using the PROCESS macro for SPSS (Hayes, 2013).

RESULTS

Descriptive Statistics

All variables were normally distributed with skewness between −1 and 1. Descriptive statistics for parental depressive symptoms, parenting behaviors, and child secondary control coping are provided in Table 1. Parents' depressive symptoms

TABLE 1
Descriptive Statistics for Study Variables

Measure	*M*	*SD*	1	2	3
1. Parent depressive symptoms	19.74	12.33	–		
2. Harsh/intrusive parenting	3.20	1.28	.17*	–	
3. Warm/responsive parenting	5.85	1.00	−.28***	−.56***	–
4. Child secondary control coping	.23	.05	−.07	−.22**	.24**

Note. Pearson coefficients.*$p < .05$. **$p < .01$. ***$p < .001$.

were elevated, with the mean BDI-II (Beck, Steer, Ball, & Ranieri, 1996a) score in the mild-to-moderate range (M = 19.76, SD = 12.36); 68% of participants were receiving treatment with medication and/or psychotherapy. As a point of comparison, this statistic falls within the range of symptoms that Garber, Ciesla, McCauley, Diamond, and Schloredt (2011) found for 129 parents in treatment for depression and 97 nondepressed parents ($M_{depressed}$ = 25.77, SD = 11.69; $M_{nondepressed}$ = 1.91, SD = 2.48). Observed parenting behaviors range from 1 to 9, with 1 indicating that the behavior was not at all characteristic of the participant during the interaction and 9 indicating that the behavior was mainly characteristic of the participant during the interaction. Warm/responsive parenting (M = 5.85, SD = 1.00) was somewhat characteristic of the current sample, and harsh/intrusive parenting was minimally characteristic of the current sample (M = 3.20, SD = 1.28). Children's relative use of secondary control coping strategies (M = .23, SD = .05) was similar to levels from other samples of children with uncontrollable stressors (e.g., cancer, Murphy et al., 2017; sickle cell disease, Prussien et al., 2017).

Bivariate Correlation Analyses

Bivariate Pearson correlations among parental depressive symptoms, parenting behaviors, and secondary control coping are presented in Table 1. Commensurate with the first hypothesis, parental depressive symptoms were significantly associated with parenting behaviors. Specifically, parental depressive symptoms were positively correlated with harsh/intrusive ($p < .05$) parenting behaviors, and parental depressive symptoms were negatively correlated with warm/responsive parenting behaviors ($p < .001$). The absolute value of the Bivariate Pearson correlations between parental depressive symptoms and parenting behaviors range from r = .17 to r = .28, suggesting that only 3–8% of the variance in parental depressive symptoms is shared with parenting behaviors. Corresponding with the second hypothesis, parenting behaviors were significantly associated with secondary control coping (all $p < .01$). Specifically, harsh/intrusive parenting behaviors were negatively correlated with secondary control coping, and warm/responsive parenting behaviors were positively correlated with secondary control coping. The third hypothesis was not supported in bivariate correlational analyses, as parental depressive symptoms and child secondary control coping were not significantly correlated.

Linear Regression Analyses

Two separate multiple linear regression models (i.e., harsh/intrusive and warm/responsive) were tested to understand the relation of each observed parenting behavior composite and parental depressive symptoms with child secondary control coping (Tables 2–3). For each model, regression analyses were conducted in three blocks. The associations among several demographic variables (i.e., parent education, ethnicity, marital status, and child age and gender) and child secondary control coping were tested in block one and controlled for in each of the two subsequent blocks of the regression analyses. In block two, the main effects of the associated parenting behavior composite (i.e., harsh/intrusive or warm/responsive) were added. In block three, a two-way interaction term was added, examining the product of parental depressive symptoms and the

TABLE 2
Parent Depressive Symptoms and Harsh/Intrusive Parenting Predicting Child Secondary Control Coping

Predictor	β	*t*	ΔR^2
Step 1			.08*
Parent education	.17	2.21*	
Parent ethnicity	−.12	−1.51	
Parent marital status	−.05	−.60	
Child age	−.11	−1.48	
Child gender	−.03	−.37	
Step 2			.03†
Parent education	.14	1.73	
Parent ethnicity	−.12	−1.48	
Parent marital status	−.01	−.13	
Child age	−.10	−1.32	
Child gender	−.02	−.31	
Parent depressive symptoms	.02	.21	
Harsh/intrusive parenting	−.18	−2.28*	
Step 3 Adjusted Total R^2 = .08			.02†
Parent education	.14	1.70	
Parent ethnicity	−.10	−1.31	
Parent marital status	−.02	−.22	
Child age	−.09	−1.21	
Child gender	−.02	−.25	
Parent depressive symptoms	−.01	−.17	
Harsh/intrusive parenting	−.21	−2.56*	
Parent depressive symptoms x harsh/intrusive parenting	.14	1.78†	

†p = .08. *p < .05.

associated parenting behavior composite (e.g., Parental Depressive Symptoms x Warm/Responsive Parenting for the warm/responsive model).

Parent education (β = .17, p = .03) was significantly positively associated with child secondary control coping in block one of both regression equations. This relation did not maintain in blocks two or three of either model. Neither parent ethnicity and marital status and child age nor gender were associated with child secondary control coping.

In block two of the harsh/intrusive parenting model (Table 2), the main effect for parental depressive symptoms was nonsignificant (β = .02, p = .83); however, harsh/intrusive parenting was a significant predictor of secondary control coping (β = −.18, p = .02). In block three, the interaction term Parental Depressive Symptoms x Harsh/Intrusive Parenting was added. The main effect of parental depressive symptoms on child secondary control coping remained nonsignificant (β = −.01, p = .87), and the main effect of harsh/intrusive parenting on child secondary control coping remained significant (β = −.21, p = .01). The two-way interaction between parental depressive symptoms and harsh/intrusive parenting approached significance (β = .14, p = .08). Overall, the harsh/intrusive parenting model was significant, $F(8, 156) = 2.74$, p = .01, adjusted R^2 = .08.

In block two of the warm/responsive parenting model (Table 3), the main effect for parental depressive symptoms (β = .02, p = .77) and warm/responsive parenting (β = .15, p = .10) were nonsignificant. In block three, the interaction term Parental Depressive Symptoms x Warm/Responsive Parenting was added. The main effect for

TABLE 3
Parent Depressive Symptoms and Warm/Responsive Parenting Predicting Child Secondary Control Coping

Predictor	β	*t*	ΔR^2
Step 1			.08*
Parent education	.17	2.21*	
Parent ethnicity	−.12	−1.51	
Parent marital status	−.05	−.60	
Child age	−.11	−1.48	
Child gender	−.03	−.37	
Step 2			
Parent education	.14	1.63	.02
Parent ethnicity	−.08	−1.02	
Parent marital status	−.03	−.41	
Child age	−.09	−1.07	
Child gender	−.03	−.40	
Parent depressive symptoms	.02	.30	
Warm/responsive parenting	.15	1.64	
Step 3 Adjusted Total R^2 = .09			.04**
Parent education	.12	1.44	
Parent ethnicity	−.09	−1.16	
Parent marital status	−.03	−.36	
Child age	−.09	−1.14	
Child gender	−.04	−.46	
Parent depressive symptoms	−.003	−.04	
Warm/responsive parenting	.22	2.37*	
Parent depressive symptoms x warm/responsive parenting	−.22	−2.76**	

*p < .05. **p < .01.

parental depressive symptoms remained nonsignificant (β = −.003, p = .97), and warm/responsive parenting became a significant predictor of child secondary control coping (β = .22, p = .02). Moreover, parental depressive symptoms significantly moderated the relation between warm/responsive parenting and child secondary control coping (β = −.22, p = .01). Overall, the warm/responsive model was significant, $F(8, 156) = 3.01$, p = .004, adjusted R^2 = .09.

Results of the regression analyses were plotted in PROCESS to better understand the nature of the interaction of parental depressive symptoms with warm/responsive parenting (see Figure 1). Warm/responsive parenting behaviors were only related to child secondary control coping when parental depressive symptoms were low or average. When parental depressive symptoms were low (b = .02, $t(164)$ = 4.15, p = .0001) or average (b = .01, $t(164)$ = 3.75, p = .0002), there was a significant positive association between warm/responsive parenting behaviors and child secondary control coping. When parental depressive symptoms were high, warm/responsive parenting behaviors were unrelated to child secondary control coping, b = .004, $t(164)$ = 0.89, p = .38.

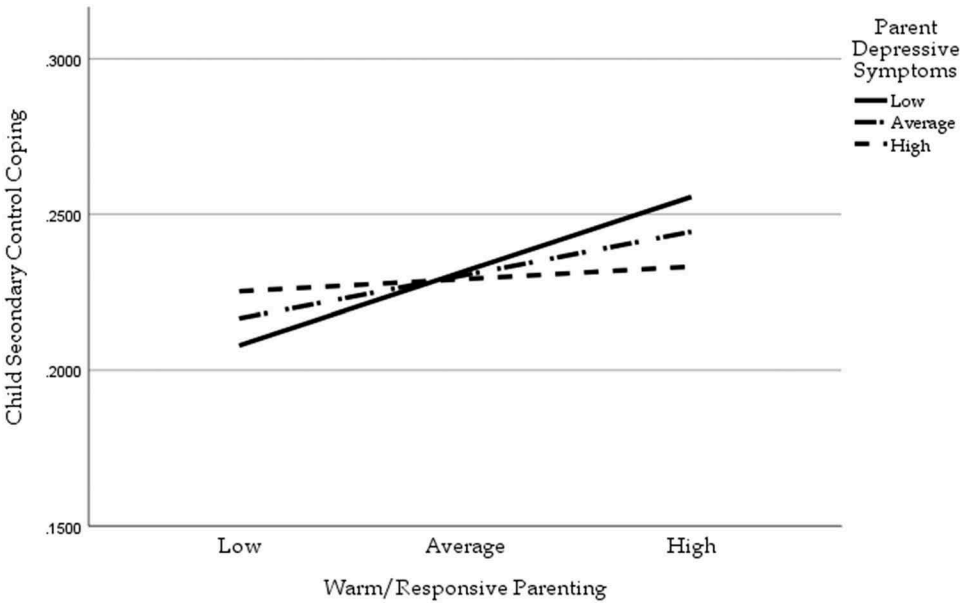

FIGURE 1.
Parent depressive symptoms and warm/responsive parenting predicting child secondary control coping.

DISCUSSION

The present study examined parental depressive symptoms and parenting behaviors as potential correlates of children's relative use of secondary control coping skills in a sample of children of parents with a history of depression. Children of depressed parents are faced with significant stress both within and outside of the family environment (Feurer et al., 2016). Therefore, it is important to understand factors that may support or impede the development and use of adaptive skills to cope with stress in this high-risk population. The current study provides new findings on the potential importance of the interplay between parenting behaviors and current depressive symptoms of parents with a history of depression in relation to children's coping.

With regard to the first hypothesis, and consistent with previous research (e.g., Lovejoy et al., 2000), parental depressive symptoms were positively associated with observed harsh/intrusive parenting behaviors and negatively associated with observed warm/responsive parenting behaviors. This study provides further evidence using multiple methods (i.e., parents' reports on their depressive symptoms and direct observations of parenting behavior) that parental depressive symptoms are associated with higher levels of problematic forms of parenting and lower levels of positive forms of parenting. However, in the current study, parental depressive symptoms accounted for only 3–8% of the variance in parenting behaviors.

Consistent with the second hypothesis, we found that harsh/intrusive parenting behaviors were related to children's relative use of secondary control coping strategies. Children reported using fewer secondary control coping strategies (e.g., acceptance, cognitive reappraisal, and positive forms of distraction), relative to other strategies,

when parents displayed harsh/intrusive parenting. Harsh and intrusive parenting behaviors may affect the degree to which children are able to turn to their parents as resources for coping with stress and affect the degree to which children are responsive to coaching and socialization in the use of these coping skills (Power, 2004; Thompson & Meyer, 2007). However, because this study is cross-sectional, it is also possible that the findings reflect the ways that children's use of poor coping skills may lead to more negative parenting behaviors. As noted below, the direction of these associations is an important target for future research. A different pattern emerged for warm/responsive parenting behaviors. We found that only under conditions of low or average depressive symptoms were these parenting behaviors related to children's coping, such that warm/responsive parenting was positively associated with children's relative use of secondary control coping. In the presence of high parental depressive symptoms, the association between parenting behaviors and child secondary control coping was extinguished.

Findings from the third hypothesis were contrary to prior research suggesting that children's coping and emotion regulation strategies would be related to parents' current depressive symptoms (Blandon et al., 2008; Jaser et al., 2005; Silk et al., 2006). Results from the present study indicate that parents' current depressive symptoms were not directly related to children's relative use of secondary control coping strategies. As demonstrated in testing the study's fourth hypothesis, parental depressive symptoms were only indirectly related to children's use of secondary control coping strategies, in that they moderated the relation between warm/responsive parenting behaviors and child secondary control coping.

Taken together, these findings suggest that harsh/intrusive parenting behaviors are related to the use of fewer secondary control coping skills, relative to other strategies, regardless of parents' current depressive symptoms. Under conditions of low or average parental depressive symptoms, warm/responsive parenting is related to relatively less use of child secondary control coping skills when warm/responsive parenting is low and relatively greater use of secondary control coping skills when warm/responsive parenting is high. However, when parental depressive symptoms are high, warm/responsive parenting is not associated with secondary control coping. Children's experience of high parental depressive symptoms may disrupt the positive association between warm/responsive parenting and children's use of secondary control coping skills, because depressive symptoms make positive parenting behaviors less salient to children. Children exposed to their parents' depressive symptoms may engage in less support-seeking when they are distressed and/or inaccurately receive and interpret parents' warmth and responsiveness (Parent et al., 2014). Parental depressive symptoms did not interact with parenting in the harsh/intrusive model, such that the association between harsh/intrusive parenting and child coping was stronger when parents reported higher as compared with lower levels of current depressive symptoms (the interaction approached but did not reach statistical significance); it is possible that the negative influence of harsh/intrusive parenting on children's ability to adaptively cope with stress may be sufficiently strong that, regardless of symptom levels, these parenting behaviors are one of the primary precipitants of reduced secondary control coping (Jaser et al., 2005; Langrock et al., 2002).

The current study had several notable strengths. The design of the study was methodologically strong, using standardized self-report measures of child coping

and parent depressive symptoms, reducing the likelihood that shared method variance accounted for significant effects. In addition, the sample size was large, especially considering our use of an observational measure of parenting, which allowed for enhanced statistical power.

Despite these strengths, the present study also had several limitations that can guide future research. First, the present analyses are cross-sectional, and so directionality of the effects cannot be inferred. Supposing that parenting behaviors influence child coping strategies should be met with an understanding that children's ability to cope with stress and regulate their emotions could also influence parenting behaviors. Second, the current sample consists primarily of partnered and moderately to well-educated European American mothers and only included children ages 9 to 15 years old. As such, results may not generalize beyond this population. Third, the sample is not completely representative of families with a parental depression history, as children who met criteria for developmental disorders or conduct disorder were excluded, children with a current diagnosis of MDD were put on hold until their depression remitted, and parents who were suicidal or had current alcohol/substance abuse or dependence with a Global Assessment of Functioning score ≤50 on the SCID-I were deferred for later assessment. The associations among parental depressive symptoms, parenting behaviors, and child coping would likely differ in a sample of youth with current psychopathology or parents with more severe impairments. Children with psychopathology may be more susceptible to the maladaptive effects of parental depression than children who are asymptomatic, and severe parental psychopathology may be a more salient stressor than depressive symptoms in the mild to moderate range. As such, in both of these types of samples, a direct relation between parents' symptoms and children's use of secondary control coping strategies may emerge. Further, although the study's focus was on parents' current depressive symptoms, parents' prior Major Depressive Episodes may have made their current depressive symptoms more salient to children, amplifying the effect of depressive symptoms on the relation between parenting behaviors and children's coping. Future research should include a sample of parents without histories of MDD to determine wither the present findings are unique to parents with a history of MDD. Last, the sample represents families with sufficient motivation to engage in a family cognitive behavioral intervention, but the broader population of families with a depressed parent is not represented.

In addition to conducting longitudinal analyses with diverse samples to better understand directionality between parenting behaviors and child coping strategies, future research could explore variables other than parenting behaviors that impact children's coping when parents are depressed. One candidate variable for further investigation is family stress. Depressed parents vacillate between withdrawn and harsh/intrusive behaviors when interacting with their children, making interactions with a depressed parent unpredictable and stress-inducing (Hammen, Brennan, & Shih, 2004; Jaser et al., 2008, 2005; Lovejoy et al., 2000). Parental depression is also related to elevated levels of marital discord, an added stressor for children of depressed parents (O'Leary, Christian, & Mendell, 1994; Whisman & Uebelacker, 2009). It is plausible that the association between parental depressive symptoms and children's coping skills may be mediated by stress in the family.

IMPLICATIONS FOR APPLICATION, PRACTICE, AND POLICY

The identification of correlates of coping skills in children and adolescents who are exposed to parental depression is a high priority for research to inform the development of preventive interventions for these at-risk youth. The current findings suggest that, when parents' current depressive symptoms are low or average, interventions that focus on improving parenting skills may be sufficient to increase child use of secondary control coping skills. However, in the context of high current depressive symptoms in parents, it may be important to include intervention components to reduce parents' depressive symptoms along with components focused on improving parenting skills. As such, multifaceted interventions that teach coping skills to children while also targeting current depressive symptoms and parenting skills in parents with histories of depression may be most effective in increasing the relative use of secondary control coping skills in children.

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