Maternal Emotional Distress and Diminished Responsiveness: The Mediating Role of Parenting Efficacy and Parental Perspective Taking

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The present study examined whether the inverse relation between maternal emotional distress and maternal responsiveness was mediated by mothers' parenting efficacy and parental perspective taking. Questionnaire and observational data were gathered from 94 nonclinical mother—adolescent dyads. Emotional distress was measured with multiple indicators of negative affectivity, and responsiveness was measured with self-report and observational indicators of maternal acceptance and psychological autonomy promotion. Analyses indicated that maternal emotional distress was associated with lower levels of mother- and adolescent-reported responsiveness. Moreover, the association was mediated by mothers' perceptions of their parenting efficacy. Processes by which emotional distress may affect parenting efficacy, parental perspective taking, and parenting were discussed.

A consistent finding in the developmental literature is that parental responsiveness predicts a positive self-concept and emotional well-being in children and adolescents. In brief, youngsters who are appropriately nurtured have high levels of self-esteem and identity development, and they have low levels of depressed and anxious feelings (for reviews, see Holmbeck, Paikoff, & Brooks-Gunn, 1995; Maccoby & Martin, 1983; Silverberg, Tennenbaum, & Jacob, 1992; Steinberg, 1990).

Given the importance of responsiveness to healthy child and adolescent development, it is essential to discover why some parents show high levels of responsiveness and others do not. Although the literature on the determinants of parenting remains sparse, the extant research suggests that parental emotional adjustment is an important predictor of responsiveness. In particular, parents who experience emotional distress tend to display lower levels of responsiveness than do nondistressed parents. Mothers with clinical depression, for example, have been described as more rejecting, hostile, and intrusive than mothers who are not depressed (for reviews, see Cummings, 1995; Cum-

mings & Davies, 1994; Downey & Coyne, 1990; Gelfand & Teti, 1990), especially when depression is protracted (Campbell, Cohn, & Meyers, 1995). Parents who experience more general negative emotionality have also been described as less nurturant and less affectively positive than parents who are emotionally well-adjusted (e.g., Belsky, Crnic, & Woodworth, 1995; Conger, McCarty, Yang, Lahey, & Kropp, 1984; Elder, Liker, & Cross, 1984).

Although the negative relation between emotional distress and responsiveness has been repeatedly documented, several key questions about the association remain. First, because most of the extant research has focused on parents who experience affective disorders such as depression, it is unclear whether mild emotional distress is also associated with lower levels of responsiveness. It is important to address this gap in the literature because although most parents do not have affective disorders, many parents do experience mild levels of emotional distress, especially at key developmental transitions such as the transition of one's children to adolescence (Small, Eastman, & Cornelius, 1988). At issue is whether the negative relation between emotional distress and responsiveness will be obtained when mild distress is considered or whether the relation exists only at the high end of the distress continuum. In the present research, this question is addressed by examining the connection between mild emotional distress and responsiveness in a nonclinical sample of mothers and their early adolescents.

A second limitation in the literature is that there has been virtually no discussion of the processes that underlie the connection between emotional distress and responsiveness. Implicit in much of the related research is the assumption that emotional distress spills over to affect parenting directly (e.g., Weissman & Paykel, 1974). Researchers have appeared to accept this assumption and have not explored potential mediating relationships. In particular, researchers have ignored cognitive processes that may mediate the connection between negative affective

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states and parenting. The present research addresses this gap by examining whether the association between emotional distress and responsiveness is mediated by two cognitive constructs: perceived parenting efficacy and parental perspective taking.

The decision to select parenting efficacy and parental perspective taking as mediators derives from several research areas that link these variables to responsiveness and to emotional distress. Perhaps most important, a growing body of research indicates that a positive sense of parenting efficacy and a consideration of the child's perspective are central to responsive parenting. In general, parents with high levels of parenting efficacy and parental perspective-taking have been described as warm, supportive, and sensitive (e.g., Dekovic & Gerris, 1992; Teti & Gelfand, 1991), whereas parents with low levels of efficacy and perspective taking have been described as abusive or likely to use harsh discipline (e.g., Bugental, 1994; Engfer & Schneewind, 1982; Fesbach, 1989; Letourneau, 1981).

Additional research provides support for the suggestion that parenting efficacy and parental perspective-taking may mediate the connection between emotional distress and responsiveness. In a sample of mothers and their young infants, Teti and Gelfand (1991) found that parenting efficacy mediated the negative relation between depressive symptoms and behaviors reflecting responsiveness (e.g., warmth and sensitivity). More specifically, although depression and parenting efficacy were related to parenting at the bivariate level, the relation between depression and parenting was reduced to nonsignificance when both predictors were included in a multiple regression analysis. This pattern of results led Teti and Gelfand to conclude that efficacy was an important mediator of the relation between depression and parenting competence among mothers of infants.

Although no studies have directly tested the mediating role of parental perspective taking, correlational studies have indicated that maternal emotional distress is associated with low perspective taking and that low perspective taking is associated with low responsiveness. Weissman and Paykel (1974), for example, found that clinically depressed mothers were more likely than nondepressed mothers to report difficulty in listening to and understanding their children. The depressed mothers in this sample were also more likely to show parenting styles that were hostile and intrusive. In a study of mothers in a community sample, Longfellow, Zelkowitz, and Saunders (1982) found that mothers who experienced depression were likely to focus on their own feelings when their children misbehaved, whereas nondepressed mothers were likely to consider the source of the child's difficulty from the child's point of view. In turn, the depressed mothers tended to treat their children more harshly than did the nondepressed mothers.

In the present research, we examined the potential mediating role of parenting efficacy and parental perspective taking. Each proposed mediator was examined in a separate model. Embedded in the proposed models were the following directional hypotheses: (a) mothers' reports of emotional distress would be negatively correlated with mother, adolescent, and observer reports of maternal responsiveness, (b) mothers' reports of emotional distress would be negatively correlated with mothers' reports of their parenting efficacy and parental perspective taking, and (c) parenting efficacy and parental perspective taking

would be positively correlated with mother, adolescent, and observer reports of maternal responsiveness.

Method

Sample

Data were gathered from 94 mother-adolescent dyads living in intact, two-parent (n = 50) or single-mother (n = 44) households. These dyads were obtained as part of a larger study regarding early adolescence and parenting in single- and two-parent households. Participants were recruited by contacting a large school district in Tucson, Arizona. A list was obtained of names and addresses of seventh graders (and the parents in their households) from two junior high schools in the district, and letters were mailed that provided a brief description of the study. Following the mailing, graduate research assistants made personal contacts by phone with 371 mother-adolescent dyads from the list. Of those contacted, 125 met the two inclusion criteria: that the seventh grader be the family's oldest child and that the dyad was part of either a nondivorced two-parent family or a single-mother family. Ninety-four (75%) of these eligible dyads completed the study, a participation rate comparable to other parent-adolescent studies (e.g., Flannery, Montemayor, Eberly, & Torquati, 1993; Smetana, 1989).

Dyads in the sample were primarily Caucasian (76%), although Hispanic (17%), Asian American (2%), African American (1%), and Native American (1%) dyads were also represented. At the time of data collection, all adolescents attended eighth grade; most were age 13. Fifty of the adolescents were boys, and 44 were girls. Mothers in the sample ranged from 30 to 55 years of age (M = 37.99, SD = 5.02). Six percent of the mothers had not graduated from high school, 14% were high school graduates, 50% had some training beyond high school, 7% had a 4-year college degree, and 22% had some education beyond college. Eighty percent of the mothers were employed in part-time or full-time jobs. According to Hollingshead's (1975) classification scheme, the status of mothers' jobs ranged from menial and unskilled to major professional. Most of the single mothers were divorced (n = 36); 3 were separated, 1 was widowed, and 4 had never been married. The divorced and separated mothers had been single for an average of 6 years 6 months (range = 1 through 13 years, SD = 3.97). None of the single mothers went through a divorce or a separation close to the time of data collection (i.e., within the past 6 months).

Procedure

The participants completed a 1 hr 30 min visit to a university research facility. During the visit, mothers and adolescents first independently completed a packet of self-report instruments. Next, they were videotaped while discussing issues that had caused recent conflict between them. Each dyad was paid \$25.00 for participation.

Topics for the videotaped discussions were selected from a self-report measure completed by mothers and adolescents. Adapted from Steinberg's (1987) conflict checklist, the measure listed topics frequently discussed by parents and adolescents (e.g., chores). The participants indicated whether they had discussed each topic over the past 2 weeks, and, if so, described how angry or upset they were during the discussion, using a 4-point scale ranging from 1 (very calm) to 4 (very angry or upset). After reviewing the completed conflict measures, a research assistant identified the two topics that were described as generating the most angry-upset discussion by both the mother and the adolescent; these topics were subsequently used for the videotaped discussions.

The discussion segment began with a 3-min warm-up during which the participants discussed what they would choose if they could select one item from a music store. After the warm-up, the dyad was presented with the first and then the second topic that had been selected from their conflict measures; each topic was discussed for 6 min. The dyad was alone during all discussions, with monitoring done from an adjacent control room. All discussions were videotaped. When the discussion segment was completed, a research assistant joined the dyad and spent approximately 10 to 15 min talking about neutral or pleasant topics (e.g., how the \$25.00 compensation would be spent). Each dyad was sent home with a packet that contained a list of local counselors and agencies specializing in adolescent and family issues.

Measures

Measures included (a) four emotional distress indicators as reported by mothers, (b) mothers' reports of parenting efficacy and parental perspective taking, and (c) two maternal responsiveness indicators as reported by mothers, adolescents, and observers.

Maternal emotional distress. Consistent with previous research focused on emotional distress and parenting (e.g., Conger et al., 1984), emotional distress was defined as the tendency to experience various negative affects. Indicators of emotional distress included mothers' self-reported depressive symptoms, anxiety, low self-efficacy, and overwhelmed feelings.

Depressive symptoms were measured with selected items from the 13-item short form of the Beck Depression Inventory (BDI; Beck & Beck, 1972). The short-form BDI has good psychometric properties and has been widely used as a depression screening instrument (Beck, Steer, & Garbin, 1988). Two of the original 13 items (i.e., feelings about appearance; experience of weight loss) were not used for the present study to maintain optimal internal consistency of the scale (Cronbach's $\alpha = .79$).

Anxiety was measured with selected items from the Costello and Comrey (1967) Anxiety subscale and with items written for the present research. Mothers used a 4-point scale to rate how often each item described them, ranging from 1 (almost never) to 4 (most of the time). Costello and Comrey reported that their original 9-item subscale had adequate internal consistency. In the present study, internal consistency was improved by deleting one original item ("I am more sensitive than most other people") and by adding two positively worded items that were included to reduce negative response set ("I am an easygoing kind of person" and "If something goes wrong, I remain calm and confident"). Cronbach's alpha for the subscale was .84.

Mothers' self-efficacy was measured with the 6-item Self-Efficacy subscale from Gecas and Schwalbe's (1986) self-esteem scale. The Self-Efficacy subscale consists of pairs of adjectives reflecting global appraisals of self-competence, such as "do most things well—do few things well" and "confident—lack confidence." For each item, mothers indicated which point on a 5-point scale best described them. For the present study, items were scored such that high scores indicated low self-efficacy. Cronbach's alpha for the subscale was .75.

Mothers' feelings of being overwhelmed by daily tasks were measured with a 5-item scale designed for the present research. A sample item is "I feel I have so much to do, I don't know where to begin." Mothers used a 5-point scale to rate how often they experienced each item, ranging from 1 (never) to 5 (almost always). Cronbach's alpha for the scale was .68.

Parenting efficacy. Parenting efficacy was measured with a 5-item scale developed by Wells-Parker, Miller, and Topping (1990). The scale is intended to measure parents' perceptions of capability, influence, and skill in handling parenting challenges when they compare themselves to other parents or to people facing similar challenges; for example, "I am as capable as most people of altering my child's beliefs and values if I find them objectionable." Mothers rated each item on a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Wells-Parker

et al. reported that the scale demonstrated good internal consistency and good convergent and discriminant validity, with the scale sufficiently distinct from measures of global self-efficacy and depression. In the present study, Cronbach's alpha for the subscale was .66.

Parental perspective taking. Parental perspective taking was measured with a 13-item scale designed for the present research. The scale was adapted from a self-report measure of dyadic perspective taking in marital and other partner relationships called the Self Dyadic Perspective-Taking Scale (SDPTS; Long, 1990). The SDPTS is intended to measure the cognitive features of empathy such as global understanding of the partner and active participation in perspective taking. Long reported that the SDPTS was internally consistent and correlated with other measures of general perspective taking. The 13 original SDPTS items were adapted for the current research by changing the words "my partner" to "my child." For example, "I sometimes try to understand my child better by imagining how things look from his or her perspective." Mothers rated each item on a 5-point scale, ranging from 0 (does not describe me well at all) to 4 (describes me very well). The internal consistency of the measure was good (Cronbach's $\alpha = .87$).

Maternal responsiveness. Following previous theoretical descriptions by Baumrind (1991) and Maccoby and Martin (1983), responsiveness was defined as the degree to which a mother demonstrated acceptance of her adolescent and promoted her adolescent's psychological autonomy. These two dimensions of responsiveness were measured with mother and adolescent reports and with observer ratings of the mother—adolescent discussions.

Maternal and adolescent reports. Maternal and adolescent reports of the mother's parenting were gathered with two subscales from the revised short form of the Child's Report of Parental Behavior Inventory (CRPBI; Schludermann & Schludermann, 1970). The CRPBI is a widely used measure of the child's perceptions of parenting practices that includes three subscales: Acceptance/Rejection, Psychological Autonomy (vs. Psychological Control), and Firm Control (vs. Lax Control). Previous research has indicated that the CRPBI subscales demonstrate good internal consistency and test-retest reliability, and good construct, convergent, and discriminant validity (for review, see Jacob & Tennenbaum, 1988). In the present study, adolescents and their mothers each completed the CRPBI with reference to the mother's parenting behavior (see Fauber, Forehand, Thomas, & Wierson, 1990). Participants rated each item on a 3-point scale ranging from 1 (not at all like my mother/me) to 3 (a lot like my mother/me). For the present analyses, only the Acceptance/Rejection and the Psychological Autonomy (vs. Psychological Control) subscales were used.

The Acceptance/Rejection subscale contains 10 items that assess the degree to which the parent has a warm, nurturing involvement with the child. In the present study, items were scored such that higher scores reflected greater acceptance. A sample item is "my mother always listens to my ideas and opinions" (positively scored). One item ("my mother makes her whole life center around her children") was eliminated from the adolescent and mother versions of the subscale, yielding alphas of .78 and .63, respectively.

The Psychological Autonomy (vs. Psychological Control) subscale contains 10 items that assess the degree to which the parent uses open, democratic methods of control versus covert methods of control that inappropriately restrict the adolescent's autonomy through intrusiveness and guilt- and anxiety-induction. Items were scored such that higher scores indicated greater psychological autonomy. A sample item from this subscale is "My mother will not talk to me when I displease her" (negatively scored). For the present study, two items pertaining to behavioral monitoring ("my mother wants to know exactly where I am and what I am doing" and "my mother keeps a careful check to make sure that I have the right kinds of friends") were dropped from the adolescent

and mother versions of the subscale, yielding alphas of .74 and .69, respectively.

Observer ratings. Maternal acceptance and psychological autonomy promotion were also measured with global ratings of the mother's behavior during the mother-adolescent discussions. The rating system used in the present research was adapted from a similar scheme developed by Fauber et al. (1990). Acceptance was defined as the extent to which the mother demonstrated a positive, nurturing involvement with the adolescent, and psychological autonomy was defined as the extent to which the mother actively and genuinely encouraged the adolescent's independent self-expression.

Acceptance and psychological autonomy were rated on 6-point scales ranging from 1 (low) to 6 (high). For each dimension, raters assigned a score to each of the two 6-min interactions and then averaged the scores to yield a summary score. Two doctoral students were paired with two advanced undergraduate students to serve as raters; each pair was responsible for coding either acceptance or psychological autonomy. Coding began with an extensive training period that ended when each pair of raters could maintain perfect agreement on the summary score for at least 80% of randomly selected training cases. Each rater then coded approximately half of the remaining cases in the sample. When all coding was completed, interrater reliability was assessed by computing Pearson correlations between scores from pairs of raters who had independently coded a number of the same cases. The correlation between scores for the acceptance raters (based on 34 cases) was .73 (p < .001), and the correlation between scores for the psychological autonomy raters (based on 26 cases) was .95 (p < .001). These reliability estimates are comparable to those reported for similar global coding schemes (e.g., Fauber et al., 1990). Analysis of variance (ANOVA) procedures were also used to determine whether there were mean differences between raters. These analyses revealed that there were no significant differences; the means for the warmth coders were 3.79 and 3.71, respectively, F(1,66) = 0.07, p = .79, and the means for the psychological autonomy coders were 3.29 and 3.06, respectively, F(1, 50) = 0.49, p = .49.

Results

Descriptive Statistics

Descriptive statistics are presented in Table 1. The means, standard deviations, and observed ranges of the measures indicate that the mothers in this sample were not currently experiencing severe emotional distress and that mothers and adolescents reported relatively high levels of maternal acceptance and psychological autonomy promotion. For example, using all of the original 13 BDI items and on the basis of cut-off scores (Beck & Beck, 1972), 64% of the mothers had no or minimal depressive symptoms (score 0 to 4); 25% had mild symptoms (score 5 to 7); 10% had moderate symptoms (score 8 to 15), and only 1 mother had severe symptoms (score 16+).

Correlation of the Measures and Creation of the Emotional Distress and Responsiveness Composites

Pearson correlations among the measures are reported in Table 2. As seen, the four measures of emotional distress were significantly intercorrelated. On the basis of these significant relations and in line with the present conceptual definition of emotional distress, the total scores of each of the four measures were standardized and added together to form the emotional distress composite (Cronbach's $\alpha = .89$). Similarly, Table 2

Table 1 Descriptive Statistics for Measures (N = 94)

Variable	М	SD	Possible range	Observed range 0-18	
Depression	2.85	2.90	0-33		
Anxiety	20.45	4.96	10-40	11-35	
Low self-efficacy	11.70	3.04	6-30	6-20	
Overwhelmed feelings	12.62	2.99	5-25	6-22	
Parenting efficacy	16.28	2.74	5-20	9-20	
Parental perspective taking	33.70	7.16	0-52	18-50	
Acceptance (M)	21.86	2.60	9-27	16-27	
Psychological autonomy (M)	20.09	2.68	8-24	9-24	
Acceptance (A)	21.31	3.57	9-27	13-27	
Psychological autonomy (A)	18.70	3.46	8-24	10-24	
Acceptance (O)	3.65	1.23	1-6	1-6	
Psychological autonomy (O)	2.97	1.25	1-6	1-6	

Note. M = mother's report; A = adolescent's report; O = observer rating.

shows that for both mothers and adolescents, the acceptance and psychological autonomy scores were significantly correlated. On the basis of these relations and in accord with previous theoretical descriptions of responsiveness, two responsiveness composites were created, one composed of the sum of mothers' acceptance and psychological autonomy scores (Cronbach's α = .72) and the other composed of the sum of adolescents' acceptance and psychological autonomy scores (Cronbach's α = .82). Finally, Table 2 reveals that the observational measures of acceptance and psychological autonomy were significantly correlated. On the basis of this relation and consistent with the present conceptual definition of responsiveness, the observed acceptance and psychological autonomy scores were added together to form the observed responsiveness composite (Cronbach's α = .72).

Primary Analyses

To test the proposed mediating effects models, a series of correlational and multiple regression analyses were conducted according to procedures recommended by Baron and Kenny (1986). Following Baron and Kenny's criteria for establishing mediation, parenting efficacy and parental perspective taking would be considered mediators only if the following four conditions were met: (a) a significant bivariate relation existed between emotional distress and responsiveness, (b) significant bivariate relations existed between emotional distress and parenting efficacy and between emotional distress and parental perspective-taking, and when both emotional distress and the

The coding system followed closely after the scheme described by Fauber et al. (1990) but was refined on the basis of the review of other coding systems (e.g., Hetherington, Hagan, & Eisenberg, 1990), review of the literature on parenting styles and parent-adolescent interaction (Silverberg, Tennenbaum, & Jacob, 1992; Steinberg, 1990), and a preliminary examination of mothers' behaviors during the mother-adolescent discussions. Further information about the development and content of the coding system is available from Susan B. Silverberg.

Table 2
Intercorrelation of Measures

Note. M = mother's report; A = adolescent's report; O = observer rating. $\dagger p < .10$. *p < .05. **p < .01. *** p < .001, two-tailed.

presumed mediator (either efficacy or perspective-taking) were regressed on responsiveness, (c) the previously significant relation between emotional distress and responsiveness was reduced to nonsignificance, and (d) the relation between the presumed mediator and responsiveness remained significant.

As a first step, Pearson correlations among the model variables were examined. Consistent with hypotheses, Table 3 shows that mothers who experienced greater emotional distress had lower levels of both self- and adolescent-reported responsiveness and lower perceived parenting efficacy and parental perspective taking. Also consistent with hypotheses, mothers with higher parenting efficacy and parental perspective taking had higher levels of self- and adolescent-reported responsiveness.

Table 3 also reveals that although observer-rated responsiveness was significantly related to mothers' reports of parenting efficacy and parental perspective taking, it was not significantly related to mothers' reports of emotional distress (r = -.11, p = .27). Because the relation between observer-rated responsiveness and emotional distress was not significant, it was not appropriate to proceed further with a mediational effects model for this particular index of responsiveness. In all subsequent regression analyses, therefore, we used mother and adolescent reports of responsiveness as the dependent variables.

To test for mediation, four standard (simultaneous) multiple regression analyses were undertaken. In the first two analyses, emotional distress and either parenting efficacy or parental perspective taking were regressed on mother-reported responsiveness. Results of these analyses indicated that the relation between maternal emotional distress and responsiveness was mediated by parenting efficacy but not by parental perspective taking.

When emotional distress and parenting efficacy were regressed on mother-reported responsiveness, the previously significant bivariate relation between emotional distress and responsiveness (r = -.36, p < .001) was reduced to nonsignificance ($\beta = -.16$, p = .12). The relation between parenting efficacy and responsiveness remained significant ($\beta = .43$, p < .0001), $R^2 = .27$, F(2, 91) = 17.01, p < .0001.

In contrast, when emotional distress and parental perspective

taking were jointly considered, the relation between emotional distress and mother-reported responsiveness remained significant ($\beta = -.26$, p = < .05). The relation between parental perspective taking and responsiveness was also significant ($\beta = .42$, p = < .0001), $R^2 = .29$, F(2, 91) = 18.65, p < .0001.

In the next two analyses, emotional distress and either efficacy or perspective taking were regressed on adolescent-reported responsiveness. A strong mediating effect of parenting efficacy was found. When emotional distress and parenting efficacy were regressed on adolescent-reported responsiveness, the bivariate relation between emotional distress and responsiveness (r = -.22, p < .05) was reduced to nonsignificance ($\beta = -.04$, p = .69). The relation between parenting efficacy and responsiveness remained significant ($\beta = .38$, p < .001), $R^2 = .16$, F(2, 91) = 8.76, p < .001.

A modest mediating effect of parental perspective taking was also found. When emotional distress and parental perspective taking were jointly considered, the relation between emotional distress and adolescent-reported responsiveness was reduced to nonsignificance, although the magnitude of the reduction in the beta weight was small ($\beta = -.17$, p = .10). The relation between parenting efficacy and responsiveness approached significance ($\beta = .19$, p = .07), $R^2 = .08$, F(2, 91) = 3.98, p < .05.

Demographic Covariates

Because the present sample was diverse with respect to family structure, socioeconomic status, and adolescent gender and because these demographic variables might be related to our model constructs, all analyses were repeated, controlling for these factors. These analyses revealed that the pattern of results was unchanged when the demographic variables were controlled. In addition, all possible two-way interactions among the model constructs and the demographic variables were examined. No interactions were significant (ps > .10).

Discussion

A body of literature suggests that emotional distress is associated with less competent parenting, including lower levels of

Table 3
Intercorrelation of the Model Constructs

Variable	1	2	3	4	5
1. Emotional distress					
2. Mother-reported responsiveness	36 * **				
3. Adolescent-reported responsiveness	−.22 *	.44***	_		
4. Observer-rated responsiveness	11	.34**	.47***		
5. Parenting efficacy	46 ***	.50***	.40***	.18†	
6. Parental perspective taking	24*	.48***	.23*	.26*	.29**

† p < .10. * p < .05. ** p < .01. *** p < .001, two-tailed.

responsiveness. The present study revealed that this well-established association is not direct; rather, the findings suggest that the association is mediated by mothers' perceptions of their parenting efficacy, and, to a lesser extent, by mothers' perceptions of their perspective-taking skill in the parenting role. To date, only one prior study has focused on parenting efficacy as a mediator of the relation between emotional distress and parental responsiveness (Teti & Gelfand, 1991), and no reported research has examined the mediating role of parental perspective taking. The present study thus adds to the understanding of intrapersonal processes that underlie the relation between parental mood and responsiveness.

As expected, mothers who experienced higher levels of emotional distress had lower levels of parenting efficacy. These results are consistent with the idea that as part of a generalized negativity, mothers who experience emotional distress may come to see themselves as ineffective in several roles or domains, including parenting (e.g., Davenport, Zahn-Waxler, Adland, & Mayfield, 1984; Fleming, Ruble, Flett, & Shaul, 1988; Lewinsohn, Steinmetz, Larson, & Franklin, 1981; Webster-Stratton & Hammond, 1988).

Also as predicted, mothers who believed that they were effective parents were described by themselves, their adolescents, and observers as warmer, more accepting, and more encouraging of their youngster's psychological autonomy. Why should a positive sense of parenting efficacy promote these aspects of maternal responsiveness? Perhaps the simplest explanation is that parents who think that they are effective derive more enjoyment from interaction with their children than do parents who enter the interaction with a sense of helplessness or inadequacy. In turn, parents' enjoyment may be reflected in greater warmth and acceptance and a greater willingness to promote their children's concerns. Another possibility is that parents who are confident about their parenting skills may be less threatened by their child's individually or self-promotion (tasks that are key to the period of adolescence) and may feel that they can guide their child without psychological coercion or harsh parenting practices (see Bugental, 1994; Engfer & Schneewind, 1982).

Mothers who experienced higher emotional distress also had lower perceived perspective-taking skill. This relation is consistent with previous research indicating that emotional distress is associated with a self-preoccupation that impairs a mother's ability or willingness to adopt her child's perspective (Downey & Coyne, 1990; Longfellow et al., 1982; Susman, Trickett,

Iannotti, Hollenbeck, & Zahn-Waxler, 1985; Weissman & Paykel, 1974).

As hypothesized, mothers who reported that they were willing and able to understand their youngsters' point of view also tended to have higher levels of responsiveness. These findings are consistent with the notion that a parent's ability or willingness to decenter may be especially crucial to the expression of sensitive, nurturant parenting (Belsky, 1984; Dix, 1991; Vondra & Belsky, 1993). We add that perspective taking might be especially predictive of warm and autonomy-promoting parenting at adolescence. Not recognizing an adolescent's perspective is likely to result in increased parental anger, increased parentadolescent conflict, and heightened resistance on the part of the teen. In turn, increased anger, conflict, and resistance may set the stage for parenting that is harsh and coercive (Dix, 1991).

Although the relations among the model constructs were consistent with the study hypotheses, four limitations of the data merit consideration. First, because the data were cross-sectional, the causal pathways implied by the models must be considered exploratory. Moreover, the path-analytic techniques as applied in the present study cannot rule out the possibility of alternative causal mechanisms or reciprocal effects. Second, although we reduced method variance by collecting mother, adolescent, and observer reports of maternal responsiveness, only maternal reports were used to operationalize emotional distress, parenting efficacy, and parental perspective taking. Third, measurement of maternal emotional distress was based on a single assessment period rather than multiple assessments that would indicate a mother's emotional well-being across time. Finally, characteristics of the adolescent that might also affect parenting, such as temperament or emotional adjustment, were not assessed.

These limitations notwithstanding, the present study makes a number of important contributions. First, the study centers on the prediction of a key dimension of parenting, responsiveness. Understanding more about the determinants of responsiveness is extremely important, as responsiveness is highly predictive of psychological adjustment and competence in childhood and adolescence (Holmbeck, Paikoff, & Brooks-Gunn, 1995; Maccoby & Martin, 1983; Silverberg, Tennenbaum, & Jacob, 1992; Steinberg, 1990).

Second, the study provides information about parenting in nonclinical samples and parenting at adolescence. Much of the extant research has focused on parenting practices in depressed, abusive, or other clinical samples and has focused on parents of infants and young children. The present findings indicate that individual differences in mood predict individual differences in parenting, even when nonclinical levels of emotional distress are considered. The present study also reflects the growing recognition that it is important to study the determinants of parenting during adolescence as well as during infancy and toddlerhood.

Finally, the present study goes beyond simply demonstrating that there is an association between emotional distress and responsiveness, consistent with the trend toward more sophisticated, process-oriented models for these relations (e.g., Zahn-Waxler, lannotti, Cummings, & Denham, 1990). Future researchers could extend the present findings by gathering longitudinal data, by obtaining independent reports of parenting efficacy and parental perspective taking from spouses or other adults who have a close relationship with the mother, and by assessing characteristics of the adolescent that are likely to affect parenting.

References

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baumrind, D. (1991). Effective parenting during the early adolescent transition. In P. A. Cowan & M. Hetherington (Eds.), Advances in family research: Vol. 2. Family transitions (pp. 111-163). Hillsdale, NJ: Erlbaum.
- Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice: A rapid technique. *Postgraduate Medicine*, 52, 81– 85.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. Clinical Psychology Review, 8, 77-100.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83-96.
- Belsky, J., Crnic, K., & Woodworth, S. (1995). Personality and parenting: Exploring the mediating role of transient mood and daily hassles. Journal of Personality, 63, 905-929.
- Bugental, D. B. (1994, February). Caregiver attributions and child characteristics as sources of influence on caregiving transactions: Implications for abuse. Paper presented at the biennial meeting of the Society for Research on Adolescence, San Diego, CA.
- Campbell, S. B., Cohn, J. F., & Meyers, T. (1995). Depression in first-time mothers: Mother-infant interaction and depression chronicity. *Developmental Psychology*, 31, 349-357.
- Conger, R. D., McCarty, J. A., Yang, R. K., Lahey, B. B., & Kropp, J. P. (1984). Perception of child, child-rearing values, and emotional distress as mediating links between environmental stressors and observed maternal behavior. *Child Development*, 55, 2234-2247.
- Costello, C., & Comrey, A. (1967). Scales for measuring depression and anxiety. *Journal of Psychology*, 66, 303-313.
- Cummings, E. M. (1995). Security, emotionality, and parental depression: A commentary. Developmental Psychology, 31, 425-427.
- Cummings, E. M., & Davies, P. T. (1994). Maternal depression and child development. *Journal of Child Psychology and Psychiatry*, 35, 73-112.
- Davenport, Y. B., Zahn-Waxler, C., Adland, M., & Mayfield, A. (1984).
 Early child-rearing practices in families with a manic depressive parent. *American Journal of Psychiatry*, 141, 230-235.
- Dekovic, M., & Gerris, J. R. M. (1992). Parental reasoning complexity,

- social class, and child-rearing behaviors. Journal of Marriage and the Family, 54, 523-541.
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, 110, 3-25.
- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. Psychological Bulletin, 108, 50-76.
- Elder, G. H., Liker, J. K., & Cross, C. E. (1984). Parent-child behavior in the great depression: Life course and intergenerational themes. In P. B. Baltes & O. G. Brim (Eds.), Life-span development and behavior (Vol. 6, pp. 109-158). New York: Academic Press.
- Engfer, A., & Schneewind, K. A. (1982). Causes and consequences of harsh parental punishment: An empirical investigation in a representative sample of 570 German families. *Child Abuse and Neglect*, 6, 129-139.
- Fauber, R., Forehand, R., Thomas, A., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent adjustment in intact and divorced families: The role of disrupted parenting. *Child Development*, 61, 1112-1123.
- Fesbach, N. D. (1989). The construct of empathy and the phenomenon of physical maltreatment of children. In D. Cicchetti & V. Carlson (Eds.), Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect (pp. 349-373). New York: Cambridge University Press.
- Flannery, D., Montemayor, R., Eberly, M., & Torquati, J. (1993). Unraveling the ties that bind: Affective expression and perceived conflict in parent-adolescent interactions. *Journal of Social and Personal Relationships*, 10, 495-509.
- Fleming, A. S., Ruble, D. N., Flett, G. L., & Shaul, D. L. (1988). Post-partum adjustment in first-time mothers: Relations between mood, maternal attitudes, and mother-infant interactions: *Developmental Psychology*, 24, 71-81.
- Gecas, V., & Schwalbe, M. (1986). Parental behavior and adolescent self-esteem. *Journal of Marriage and the Family, 48,* 37-46.
- Gelfand, D. M., & Teti, D. M. (1990). The effects of maternal depression on children. Clinical Psychology Review, 10, 329-353.
- Hetherington, E. M., Hagan, M. S., & Eisenberg, M. M. (1990). Family interaction global coding system. Unpublished manuscript, University of Virginia, Department of Psychology.
- Hollingshead, A. (1975). Four-factor index of social status. Unpublished manuscript, Yale University.
- Holmbeck, G. N., Paikoff, R. L., & Brooks-Gunn, J. (1995). Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 1. Children and parenting* (pp. 91-118). Hillsdale, NJ: Erlbaum.
- Jacob, T., & Tennenbaum, D. L. (1988). Family assessment: Rationale, methods, and future directions. New York: Plenum.
- Letourneau, C. (1981). Empathy and stress: How they affect parental aggression. Social Work, 26, 383-389.
- Lewinsohn, P. M., Steinmetz, J. L., Larson, D. W., & Franklin, J. (1981). Depression-related cognitions: Antecedent or consequence? *Journal of Abnormal Psychology*, 90, 213-219.
- Long, E. C. J. (1990). Measuring dyadic perspective-taking: Two scales for assessing perspective-taking in marriage and similar dyads. *Educa*tional and Psychological Measurement, 50, 91-103.
- Longfellow, C., Zelkowitz, P., & Saunders, G. (1982). The quality of mother-child relationships. In D. Belle (Ed.), Lives in stress: Women and depression (pp. 163-176). Beverly Hills, CA: Sage.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Vol. Ed.), Handbook of child psychology: Vol. 4. Socialization, personality, and social development (pp. 1-101). New York: Wiley.
- Schludermann, S., & Schludermann, E. (1970). Replicability of factors

- in Children's Report of Parental Behavior (CRPBI). Journal of Psychology, 39, 39-52.
- Silverberg, S. B., Tennenbaum, D. L., & Jacob, T. (1992). Adolescence and family interaction. In V. B. Van Hasselt & M. Hersen (Eds.), Handbook of social development: A lifespan perspective (pp. 347– 370). New York: Plenum.
- Small, S. A., Eastman, G., & Cornelius, S. (1988). Adolescent autonomy and parental stress. *Journal of Youth and Adolescence*, 17, 377-391.
- Smetana, J. (1989). Adolescents' and parents' reasoning about actual family conflicts. Child Development, 60, 1052-1067.
- Steinberg, L. (1987). Impact of puberty on family relations: Effects of pubertal status and pubertal timing. *Developmental Psychology*, 23, 451–460.
- Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman & G. Elliot (Eds.), At the threshold: The developing adolescent (pp. 255-276). Cambridge, MA: Harvard University Press.
- Susman, E. J., Trickett, P., Iannotti, R., Hollenbeck, B. E., & Zahn-Waxler, C. (1985). Child-rearing patterns in depressed, abusive, and normal mothers. *American Journal of Orthopsychiatry*, 55, 237-251.
- Teti, D. M., & Gelfand, D. M. (1991). Behavioral competence among

- mothers of infants in the first year: The mediational role of maternal self-efficacy. Child Development, 62, 918-929.
- Vondra, J., & Belsky, J. (1993). Developmental origins of parenting: Personality and relationship factors. In T. Luster & L. Okagaki (Eds.), Parenting: An ecological perspective. Hillsdale, NJ: Erlbaum.
- Webster-Stratton, C., & Hammond, M. (1988). Maternal depression and its relationship to life stress, perceptions of child behavior problems, parenting behaviors, and child conduct problems. *Journal of Abnor*mal Child Psychology, 16, 299-315.
- Weissman, M. M., & Paykel, E. S. (1974). The depressed woman: A study of social relationships. Chicago: University of Chicago Press.
- Wells-Parker, E., Miller, D. I., & Topping, J. S. (1990). Development of control-of-outcome scales and self-efficacy scales for women in four life roles. *Journal of Personality Assessment*, 54, 564-575.
- Zahn-Waxler, C., Iannotti, R. J., Cummings, E. M., & Denham, S. (1990). Antecedents of problem behaviors in children of depressed mothers. *Development and Psychopathology*, 2, 271–291.

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