Family Stress and Parental Responses to Children's Negative Emotions: Tests of the Spillover, Crossover, and Compensatory Hypotheses

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Abstract:

The relations between 4 sources of family stress (marital dissatisfaction, home chaos, parental depressive symptoms, and job role dissatisfaction) and the emotion socialization practice of mothers' and fathers' responses to children's negative emotions were examined. Participants included 101 couples with 7-year-old children. Dyadic analyses were conducted using the Actor–Partner Interdependence Model and relations were tested in terms of the spillover, crossover, and compensatory hypotheses. Results suggest that measures of family stress relate to supportive and nonsupportive parental responses, though many of these relations differ by parent gender. The results are discussed in terms of the 3 theoretical hypotheses, all of which are supported to some degree depending on the family stressor examined.

Article:

Coping with a negative emotion, such as sadness, anger, or fear, is a more developmentally difficult task for children than coping with a positive emotion (Ramsden & Hubbard, 2002). Until children have learned how to cope with and regulate their negative feelings, it is important for parents to assist children in handling these experiences. In their responses to their children's negative emotions, parents are providing valuable information to their children about appropriate emotional displays and successful coping strategies. Parent responses to children's negative emotions have been described as one of the most important methods of direct emotion socialization (Eisenberg, Cumberland, & Spinrad, 1998).

Parents vary in the ways they respond to negative emotions, and their responses can be described as either supportive or nonsupportive (Eisenberg et al., 1998; Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). Supportive responses by parents invite children to explore their feelings by encouraging the child to express emotions or helping the child understand and cope with an emotion-eliciting situation. Nonsupportive responses, such minimizing the child's emotional experience, punishing the child, or becoming distressed by the child's display, send messages to the child that the display of negative emotions is not appropriate or acceptable. Supportive parental responses to children's negative emotions have been found to be related to aspects of emotional and social competence including children's emotion understanding and friendship

quality (McElwain, Halberstadt, & Volling, 2007). By contrast, parental nonsupportive or suppressive responses have been linked to stored negative affect in the child and disorganized behaviors during emotion-evoking situations, presumably because of an inability or unwillingness to express negative feelings (Roberts & Strayer, 1987).

Although fathers' responses to children's emotions rarely have been examined, their potential importance recently has been recognized (McElwain et al., 2007; Stolz, Barber, & Olsen, 2005). Prior studies that have collected data on fathers' responses to children's negative emotions have found differences compared to mothers' responses, with fathers generally displaying less supportive and more non-supportive responses to children's negative emotions (Cassano, Perry-Parrish, & Zeman, 2007; Eisenberg, Fabes, & Murphy, 1996). However, many studies have conducted analyses separately for mothers and fathers (Cassano et al., 2007; Denham & Kochanoff, 2002; Eisenberg et al., 1996). In this study, we move beyond these limitations and analyze data from both parents using multilevel modeling techniques to account for the interdependence and mutual influence between partners.

Previous research examining parental responses to children's negative emotions has focused almost exclusively on associations between parental responses and child outcomes. Very little is known about the factors associated with parents' responses to their children. Valiente, Lemery-Chalfant, and Reiser (2007) found parents' responses to negative emotions to be related to the amount of stress or fatigue parents' experience. All families experience stress from time to time. In the current project, we identify a set of common sources of family stress, including marital dissatisfaction, home chaos, parental depressive symptoms, and job role dissatisfaction, and examine how these stressors are related to mothers' and fathers' responses to children's negative emotions.

FAMILY SYSTEMS THEORY AS A FRAMEWORK FOR UNDERSTANDING FAMILY STRESS AND PARENTING

Family systems theorists view the family as an organized collection of relationships and behaviors (White & Klein, 2002). Boundaries with varying degrees of permeability separate members into various subsystems, such as the marital or the parent–child subsystem. Each individual or subsystem in the family is influenced by the others (Steinglass, 1987). Several processes have been proposed to explain how family members influence one another (Erel & Burman, 1995), three of which are examined in the present study. The spillover hypothesis suggests that affect or behavior transfers directly from one setting or relationship to another within a family system. Transfer occurs in the same valence, such that negative affect in one subsystem is linked to negative affect in another, or stress at work carries over and increases stress at home. An alternate view is presented by the compensatory hypothesis, which proposes that transfer between subsystems in a family occurs in the opposite valence, such that a person will seek satisfaction in one relationship or setting to compensate for shortages in another domain. Thus, one might expect to see higher levels of positive parenting among couples with low marital satisfaction, or increased investment in family activities when work dissatisfaction is high. To date, there has been little evidence to support compensatory effects among family subsystems. A third hypothesized process is crossover. Rather than a transfer of affect within one person across subsystems, crossover refers to the transfer of affect or behavior between people.

An example of crossover is when the stress experienced by one partner at work is detrimental to the other partner's relationship with a child.

These three processes do not occur in isolation. For example, the contagion of stress between work and family roles can be in the form of stress spillover, stress crossover, or both (Bolger, DeLongis, Kessler, & Wethington, 1989). It is possible that stress compensation may also co-occur with stress crossover. In the current study, we examine each of these possibilities.

THE ROLL OF PARENT GENDER IN EMOTION SOCIALIZATION

Why should we expect differences between mothers' and fathers' responses to child distress? Some authors have argued that fathering is qualitatively different than mothering and that fathers provide unique contributions to their children's development (Parke, 2002; Stolz et al., 2005). Some evidence for such qualitative differences comes from attachment research, in which investigators have suggested that fathers provide emotional support to their children through encouraging independence and exploration, whereas mothers provide emotional support by responding sensitively to child distress (Grossmann et al., 2002). Such differences in the contexts and meaning of support for mothers and fathers may persist throughout childhood. In relation to the current project, we expect mothers to provide more supportive responses to their children's negative emotions than fathers.

Parent gender differences also have been found specifically in research on parent responses to children's negative emotions. Using the Coping with Children's Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990) to measure parental responses, Cassano et al. (2007) found fathers to provide less emotional support through their responses to children's negative emotions than mothers. These mean differences are expected to be replicated in the current study; however, our primary focus is differences in the relation between family stressors and parental responses.

SOURCES OF FAMILY STRESS

Four sources of stress are examined in the present study: stress arising from the marital relationship, work, lack of organization at home, and psychological distress. Each of these sources of stress and how they may affect parenting are described briefly.

Marital Dissatisfaction

Marital dissatisfaction can be a source of stress for parents, affecting daily interactions and relationships. Presumably, parents who are dissatisfied with their marital relationship are more likely to display negative affect and less able to be emotionally available to their children. Previous research has suggested that families that have more negative marital relationships also have more negative parent–child relationships (Erel & Burman, 1995) and that marital conflict is linked with most dimensions of parenting, especially harsh discipline and lack of acceptance (Krishnakumar & Buehler, 2000). In addition, there is evidence of gender differences in the relation between marital quality and parent–child interactions with fathers being more likely than mothers to show spillover of negative affect from marital distress to their interactions with children (Kerig, Cowan, & Cowan, 1993; Parke, 2002). Based on these findings, we expect spillover to occur between marital dissatisfaction and parenting practices, and for marital

dissatisfaction to have a stronger relation with fathers' parenting behaviors than with mothers' parenting.

Home Chaos

Perceptions of a disorganized, chaotic home environment can also add stress for parents. These perceptions may vary between partners within the same home due to individual differences in the degree of tolerance for disorganization and a lack of routine. In addition, perceptions of home chaos may be dependent on other cognitive acuities about relationships in the home or on individual characteristics such as depression. Researchers have demonstrated that home chaos is distinct from other social and psychological variables, such as socioeconomic status and anxiety and is associated with less effective parental discipline (Dumas et al., 2005). Valiente et al. (2007) tested the relation between perceptions of home chaos and parental responses to children's negative emotions, finding that high levels of chaos predicted low levels of supportive responses. Most research examining the link between home chaos and parenting have included only mothers; it is unclear whether fathers' perceptions of home chaos are linked to their parenting practices. It may be that fathers feel less responsible than mothers for the home environment and see themselves as somewhat removed from any disorganization. We therefore anticipate spillover between perception of home chaos and parenting practices, and for the relation between perceptions of home chaos and parent response to children's negative emotions to be stronger for mothers than fathers.

Depressive Symptoms

When parents experience fatigue, a loss of interest, and an overall negative mood, they are likely to be less responsive toward children. In a review of the association between maternal depression and parenting, Lovejoy, Graczyk, O'Hare, and Neuman (2000) found depressive symptoms to relate to numerous parenting behaviors, although the strongest associations were evident for such negative interactions as irritability and hostility toward the child, which are likely to be linked to nonsupportive parental responses to children's negative emotions. Although little research has focused on fathers' depressive symptoms, Jacob and Johnson (1997) found that paternal depression was positively associated with more impaired father–child communication, characterized by less positivity and congeniality. The authors even found that communication between the child and the nondepressed parent was less positive in homes in which the other parent was depressed. Although Jacob and Johnson found evidence that depressed mothers may be more negative with their children, other researchers have found similar patterns for men and women in terms of the course and severity of depression (Simpson, Nee, & Endicott, 1997). Therefore, we do not make specific predictions regarding parent gender differences and instead approach this question as exploratory. We anticipate spillover between depressive symptoms and parenting practices and crossover between depressive symptoms and parenting practices of the other parent.

Job Role Dissatisfaction

Another source of stress or tension for parents examined in the present study is the level of dissatisfaction each parent perceives in his or her job role. Much of the research on stress spillover has focused on how the work role is linked to interactions at home (Greenberger, O'Neil, & Nagel, 1994). Researchers have not found differences between men and women in regards to the salience their career has in their lives (Sekaran, 1982); thus we expect that

spillover from job role dissatisfaction to parenting practices will be similar for mothers and fathers. There is also evidence for crossover of work stress to family life with high occupational stress in husbands being linked to psychological stress in wives (Jones & Fletcher, 1993; Rook, Dooley, & Catalano, 1991). We anticipate, therefore that there will be crossover between fathers' job stress and mothers' response to child negative emotions but not from mothers' job stress to fathers' parenting.

RESEARCH QUESTIONS AND HYPOTHESES

The first goal of the present study is to describe differences in parent responses to children's negative emotions by parent gender. Based on prior research, it is predicted that mothers will report more supportive responses and less nonsupportive responses than fathers.

The second aim is to examine how family stress relates to supportive and nonsupportive parent responses to children's negative emotions, taking into consideration the dyadic nature of reports from mothers and fathers within the same families. We anticipate that there will be spillover between each parent's marital dissatisfaction, perception of home chaos, depressive symptoms, and job role dissatisfaction and that parent's own responses to children's negative emotions; that is, we anticipate that higher levels of perceived family stress will be linked to lower levels of supportive responses and higher levels of nonsupportive responses. We also expect to find support for the crossover hypothesis in the case of job role dissatisfaction and depressive symptoms; that is, we expect to see reports of family stress from one partner to be associated with the responses to children's negative emotions of the other partner. We do not expect to find support for the compensatory hypothesis.

The third goal of the present study is to examine the extent to which parent gender moderates the relations between family stress and parent responses to children's negative emotions. Specific hypotheses for parent gender effects are: (a) spillover from marital dissatisfaction will be more evident for fathers than mothers, and spillover from home chaos will be more evident for mothers than fathers; and (b) job role dissatisfaction crossover will occur only between fathers' job role dissatisfaction and mothers' responses. We explore the question of interactions between depressive symptoms and other stressors but make no specific hypotheses because of an overall lack of prior literature on this topic.

METHOD

Participants

The participants in this study were a subsample of two cohorts of children who are part of an ongoing longitudinal study. Children and families were recruited through child daycare centers, the County Health Department, and the local Women, Infants, and Children (WIC) program. The 130 participants in one cohort were recruited during 2000–2001 when the children were 2 years of age, and the 140 participants in the other cohort were recruited in 1998 when children were 6 months of age. There were no significant demographic differences between cohorts with regard to gender, $\chi^2(2, N = 447) = .63$, $p = .73$; race, $\chi^2(2, N = 447) = 1.13$, $p = .57$; or socioeconomic status (SES) at age 2, $F(2, N = 444) = .53$, $p = .59$.

Of the 270 original participants, 234 families (86.7%) participated at 7 years of age, when the data for the present study were collected. There were no significant differences between families

who participated and those lost to attrition in terms of gender, $\chi^2(1, N = 447) = 2.12$, $p = .15$; or race, $\chi^2(3, N = 447) = .60$, $p = .90$. Families with lower 2-year SES, $t(432) = 2.61$, $p > .01$; were less likely to be participants in the 7-year assessment.

Only two-parent families in which both parents reported on their responses to child negative emotions were included in the present analyses ($n = 101$ couples). The included couples did not differ from excluded couples ($n = 75$) on any demographic variables. Compared to single mothers in the original sample ($n = 58$), children of the included couples were more likely boys, $\chi^2(1, N = 159) = 3.92$, $p < .05$; and White, $\chi^2(3, N = 159) = 27.1$, $p < .01$; mothers had higher levels of education, $\chi^2(4, N = 151) = 22.35$, $p < .01$; and families' total income was higher, $\chi^2(16, N = 148) = 113.72$, $p < .01$. In the final sample, 48% of the children were girls; 19% were ethnic minority (13% African American, 4% mixed race, 2% other). The median education level for mothers and for fathers was a college degree, and the median family income was between $80,000 and $95,000 annually.

In this sample 30% of mothers and 3% of fathers were not employed outside of the home at the time of data collection. In the analyses of job role dissatisfaction, a subsample of employed couples ($n = 68$) was used, whereas the entire sample ($N = 101$) was used in the analyses including the other three family stressors as predictors.

Procedure

When the children were 7 years of age, they came to the study site for two visits, during which children participated in various tasks and mothers completed questionnaires and were observed in interaction with the children. At the completion of the second visit, mothers with partners living in the home were given a packet of questionnaires for the partner to complete. Of the 176 two-parent families, 101 father packets were returned for a response rate of 57.4%. Questionnaire data from both mothers and fathers are used in this report.

Measures

Demographics. Mothers completed questionnaires to provide demographic information, including child's gender and race, parental marital status, and income and education for each parent.

Marital dissatisfaction. The Revised Dyadic Adjustment Scale (RDAS; Busby, Crane, Larson, & Christensen, 1995) is a 14-item self-report measure of marital and relationship quality. Both mothers and fathers rated the extent that they agree or disagree with their partner on specific issues and how often they engage in various behaviors on a 6-point Likert scale ranging from 0 (*never*) to 5 (*all the time*). An item example is "Do you and your mate engage in outside interests together?" All items were reverse scored and summed to form a total marital dissatisfaction score for use in analyses, with higher scores indicating higher marital dissatisfaction. Internal reliability (Cronbach's alpha) in the current sample was .76 for mothers and .81 for fathers.

Home chaos. The Confusion, Hubbub, and Order Scale (CHAOS; Matheny, Wachs, Ludwig, & Phillips, 1995) is a self-report measure of perception of environmental confusion in the home. Mothers and fathers responded to 15 true or false statements about their home environments (e.g., "There is often a fuss going on at our home"). A single score representing more chaos and

disorganization in the home was obtained by summing the responses after reversing appropriate items. Cronbach's alpha in the current sample was .81 for mothers and .84 for fathers.

Depressive symptoms. The Symptom Checklist–90–Revised (SCL–90–R; Derogatis, 1994) is a self-report measure that assesses adult psychopathology, with 13 items assessing depressive symptoms. Mothers and fathers rated how much distress each item caused them over the past 7 days using a 5-point scale ranging from 1 (*not at all*)to 5 (*extremely*). Scale items were averaged to yield a measure of depressive symptoms, with higher scores indicating more depressive symptoms. In the current sample, as expected, only four mothers and three fathers had depressive symptom scores at or above a cutoff for clinical referral (*t* scores > 63 for mothers and fathers). Cronbach's alpha in the current sample was .89 for mothers and .86 for fathers.

Job role dissatisfaction. The Job Role Quality Scale (JRQ; Barnett & Marshall, 1991) is a self-report measure of perceived rewards and concerns of the job role. There are 32 items presented as possible rewards or concerns each scored on a 4-point scale ranging from 1 (*not at all*) to 4 (*extremely*). For the present study, the total Job Rewards score was subtracted from the total Job Concerns score to obtain an index of overall job dissatisfaction, with higher scores indicating greater dissatisfaction. Cronbach's alpha in the current sample was .80 for mothers and .84 for fathers.

Responses to child's negative emotions. The CCNES (Fabes et al., 1990) is a self-report measure in which mothers and fathers respond to 12 hypothetical situations in which their child expresses distress (e.g., "If my child loses some prized possession and reacts with tears, I would …"). Parents indicate the likelihood of each of six possible responses to the situation ranging from 1 (*very unlikely*) to 7 (*very likely*). The measure yields 6 subscales: problem-focused reactions, ("help my child think of places he/she hasn't looked yet"), emotion-focused reactions ("distract my child by talking about happy things"), expressive encouragement ("tell him/her it's OK to cry when you feel unhappy"), distress reactions ("get upset with him/her for being so careless and then crying about it"), minimization reactions ("tell my child that he/she is over-reacting"), and punitive reactions ("tell him/her that's what happens when you're not careful"). Based on previous research, two aggregates, supportive (problem-focused, emotion-focused, expressive encouragement) and nonsupportive (distress, minimizing, punitive) responses, were calculated as averages of the subscales (Fabes et al., 2002). Cronbach's alphas in the current sample for the supportive and nonsupportive aggregates were .89 and .86, respectively for mothers and .94 and .82 for fathers.

Covariates. To determine whether demographic variables needed to be included as covariates in the analyses, we examined the relation between demographic and study variables. Among all the demographic variables considered, only family income was related to a predictor (fathers' job role dissatisfaction, $r(95) = -.34$, $p < .01$; as well as an outcome variable, mothers' supportive responses to their children's negative emotions, $r(99) = .20$, $p < .05$. Therefore, total family income was included as a covariate in the analyses predicting supportive responses. In addition to the demographic covariate, child gender was included in all models based on previous research suggesting that parents respond to boys' and girls' negative emotions differently (Cassano et al., 2007). However, examining interactions effects with child gender were beyond the scope of the current paper.

Analyses

Preliminary analyses were conducted to examine the frequencies, distributions, and correlations for all variables. Parent gender differences were examined using paired samples *t* tests. The relations between family stress and parents' responses to children's negative emotions were examined using a multilevel modeling approach, termed the Actor–Partner Interdependence Model (APIM; Kashy & Kenny, 2000) that accounts for the interdependence in dyadic data. To examine moderation by parent gender, we entered interaction terms in the model and followed up significant results with analyses of simple slopes as recommended by Aiken and West (1991).

RESULTS

Preliminary Analyses

The proportion of missing values was small, with 11 cases missing some portion of the data and less than 1% of the data missing overall; thus, single imputation was appropriate (Acock, 2005). Missing data were imputed in SPSS 15.0 for windows using an expectation-maximization (EM) algorithm to replace missing values.

Means and standard deviations for the study variables are shown in Table 1. Paired samples *t* tests comparing mother and father reports on each family stress predictor variable were nonsignificant. Most of the predictor variables were correlated with each other and with at least one of the criterion variables, as can be seen in Table 2.

Table 1: Descriptive Data

	Mother			Father			
Variable	*M*	*SD*	Range	*M*	*SD*	Range	*t*
Marital dissatisfaction	51.25	7.90	10 to 66	51.84	9.39	9 to 66	-0.74
Job role dissatisfaction	-8.02	2.91	-13 to 0	-7.30	3.40	-12 to 6	-1.50
Home chaos	13.99	7.76	5 to 38	12.66	7.29	4 to 41	1.55
Depressive symptoms	0.33	0.42	0 to 2.77	0.35	0.38	0 to 2.23	-0.54
Supportive responses	5.71	0.62	4.03 to 6.82	5.29	0.84	3.09 to 7.00	4.48**
Nonsupportive responsive	2.25	0.57	1.09 to 4.03	2.60	0.57	1.18 to 4.58	-4.92**

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

Table 2: Correlations Among Study Variables

Variable	2	3	4	5	6	7	8	9	10	11	12
1. Marital dissatisfaction, mother	.59**	.42**	.38**	.55**	.31**	.17	.11	-.12	-.26**	.23**	.16
2. Marital dissatisfaction, father		.27**	.40**	.32**	.40**	.05	.21*	-.11	-.37**	.13	.20*
3. Home chaos, mother			.38**	.35**	.24*	.12	.16	-.28**	-.11	.46**	.16
4. Home chaos, father				.26**	.32**	-.06	.28**	.00	-.15	.18	.12
5. Depressive symptoms, mother					.19	.27	.17	-.13	-.03	.27	.05
6. Depressive symptoms, father						-.01	.31	.06	-.10	.01	.15
7. Job role dissatisfaction, mother							.16	-.08	-.00	.06	-.04
8. Job role dissatisfaction, father								-.27	-.12	.09	.00
9. Supportive responses, mother									-16	-.07	-.05
10. Supportive responses, father										-.07	-.31**
11. Nonsupportive responses, mother											.23*
12. Nonsupportive responses, father											

Note. Intercorrelations with job role dissatisfaction are based on reduced sample size of 68; all other intercorrelations based on total sample size of 101.

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

Differences by Parent Gender

To test the first research question regarding parent gender differences in parental responses to children's negative emotions, a paired samples *t* test was conducted for supportive and nonsupportive responses. We had predicted that mothers would report more supportive responses

and less nonsupportive responses than fathers. The hypotheses were supported. For supportive responses, there was a significant effect for parent gender, $t(100) = 4.48$, $p < .01$; with mothers reporting significantly more supportive responses to their children's negative emotions than fathers. For non-supportive responses, there was a significant effect for parent gender, $t(100) = -4.92$, $p < .01$; with fathers reporting significantly more nonsupportive responses than mothers.

Relation Between Stress and Parent Responses

The major goals of the study focus on the relations between family stressors and parental responses to children's negative emotions and potential gender differences in these relations. To test for potential spillover, crossover, and compensatory effects, we examined how the reports of one partner related both to his or her own supportive and nonsupportive responses and to the responses of his or her spouse. Using the APIM (Kashy & Kenny, 2000), these relations are referred to as actor and partner effects. Actor effects are indicative of spillover effects, for example, the situation in which father marital dissatisfaction is related to his own nonsupportive responses to children's negative emotions. Partner effects are indicative of crossover effects, for example, the situation in which father marital dissatisfaction is related to maternal nonsupportive responses to negative emotions. Compensatory effects can be identified within either actor or partner effects dependent on the direction of the relation. If more stress is related to more supportive or less nonsupportive responses on the part of either parent, we can interpret these findings as compensatory.

There are three types of independent variables that may be included in the APIM model: within-dyad, between-dyad, and mixed variables (Campbell & Kashy, 2002). A within-dyad variable is one in which scores for each member of the dyad are different but the average is the same for all dyads; an example is parent gender. A between-dyad variable is one in which scores are the same for each member of the dyad but differs from one dyad to another, such as child gender. Finally, a mixed variable is one that varies within and between dyads; in the present study, the four family stress variables are mixed variables. The APIM model can provide direct estimates only for mixed variables, although interaction effects between within- or between-dyad and mixed variables can also be tested. In the present study, we followed the procedure described by Campbell and Kashy for the use of PROC MIXED in SAS to test the APIM model. All estimates given in the APIM model are unstandardized regression coefficients. Variables were centered prior to analyses. Effect sizes according to Cohen's *d* statistic are reported after each significant effect.

Four models were run to examine the relation between family stressors and parental responses to children's negative emotions. Separate models were run for supportive responses and nonsupportive responses. One set of models included the three stressors that were available for the whole sample: marital dissatisfaction, home chaos, and depressive symptoms. A second set was run for the reduced sample of employed parents on whom data on job role dissatisfaction was available; these models controlled for the three other family stressors. All models included interaction effects with parent gender. Family income was included as a covariate in the analyses predicting supportive responses. Results are shown in Tables 3 and 4.

Table 3: Parental Supportive and Nonsupportive Responses Total Sample Regressions

	Supportive		Nonsupportive	
Variable	*b*	*t*	*b*	*t*
Parent gender	-1.41	-2.85**	0.61	1.65
Child gender	-0.07	-1.27	0.07	1.61
Income	0.04	2.11*		
Marital dissatisfaction actor	-0.02	-2.01	0.00	0.75
Marital dissatisfaction partner	-0.01	-1.80†	0.00	0.40
Home chaos actor	-0.01	-1.38	0.01	2.58*
Home chaos partner	0.01	0.96	0.00	0.65
Depressive symptoms actor	0.05	0.37	0.14	1.29
Depressive symptoms partner	0.30	2.12*	-0.14	-1.28
Marital Dissatisfaction X Gender Actor	-0.02	-2.03*	0.00	0.50
Marital Dissatisfaction X Gender Partner	0.00	0.47	-0.00	-0.30
Home Chaos X Gender Actor	0.01	1.87†	-0.02	-2.67**
Home Chaos X Gender Partner	0.01	1.05	-0.00	-0.61
Depressive Symptoms X Gender Actor	0.10	0.72	-0.04	-0.37
Depressive Symptoms X Gender Partner	-0.04	-0.25	-0.05	-0.48
-2 Log likelihood	499.50		400.40	

Note. Only the interactions model is shown.
$^{\dagger}p < .10$; *$p < .05$; **$p < .01$

Table 4: Employed Parental Supportive and Nonsupportive Responsive Reduced Sample Regressions

	Supportive		Nonsupportive	
Variable	*b*	*t*	*b*	*t*
Parent gender	-0.29	-4.68**	0.19	4.06**
Child gender	-0.06	-0.81	0.06	1.22
Income	0.02	0.59		
Marital dissatisfaction actor	-0.03	-2.83**	0.01	1.07
Marital dissatisfaction partner	-0.01	-0.61	-0.00	-0.33
Home chaos actor	-0.00	-0.21	0.01	2.02*
Home chaos partner	-0.00	-0.35	0.00	0.42
Depressive symptoms actor	0.04	0.16	0.25	1.45
Depressive symptoms partner	0.51	2.17	0.04	0.20
Job role dissatisfaction actor	-0.01	-0.27	-0.00	-0.27
Job role dissatisfaction partner	-0.05	-2.14*	0.00	0.19
Job Role Dissatisfaction X Gender Actor	-0.00	-0.09	-0.03	-1.63
Job Role Dissatisfaction X Gender Partner	-0.00	-0.20	-0.01	-0.51
-2 Log likelihood	351.20		275.40	

Note. Only the interactions model is shown.
*$p < .05$; **$p < .01$

Spillover from stress to parent supportive and nonsupportive responses. For both mothers and fathers, spillover was evident for marital dissatisfaction and home chaos, as indicated by the significant negative actor effects between marital dissatisfaction and supportive responses ($b = -.02$, $p < .05$, $d = .34$) and between home chaos and nonsupportive responses ($b = .01$, $p < .05$, $d = .46$). Higher marital dissatisfaction was linked to lower support for children's negative emotions, and a higher perception of home chaos was linked to more nonsupportive responses. No spillover effects were found for depressive symptoms or job role dissatisfaction.

Crossover from stress to spousal supportive and nonsupportive responses. Each parent's job role dissatisfaction was related to the other parent's supportive responses, as shown by the significant negative partner effect between job role dissatisfaction and supportive responses ($b = -.05$, $p < .05$, $d = .45$). When employed mothers and fathers had higher job role dissatisfaction, their spouse was less supportive of children's negative emotions. In addition, a partner effect between marital dissatisfaction and supportive responses was significant at the trend level ($b =$

−.01, $p < .08$, $d = .29$) indicating that higher marital dissatisfaction was linked to lower supportive responses from one's partner.

Compensatory relations between stress and supportive and nonsupportive responses. Contrary to our expectations, the compensatory hypothesis was supported in the case of parental depressive symptoms, as indicated by a positive partner effect between depressive symptoms and supportive responses ($b = .30$, $p < .05$, $d = .36$), a finding supporting both the compensatory and crossover hypotheses. When either mothers or fathers reported depressive symptoms, their spouses reported more supportive responses to children's negative emotions.

Moderation by parent gender. We hypothesized that fathers would experience more spillover from marital dissatisfaction than mothers and mothers more spillover from home chaos than fathers, and our results supported these predictions. Parent gender was found to be a significant moderator of the marital dissatisfaction actor effect and a marginally significant moderator of the home chaos actor effect on supportive responses. Regression analyses testing the simple slopes indicated that actor marital dissatisfaction was significantly related to supportive responses only for fathers ($b = -.03$, $p < .01$, $d = .78$) and the home chaos actor effect was significant only for mothers ($b = -.02$, $p < .05$, $d = .43$). A Home Chaos Actor × Gender interaction was also significant for nonsupportive responses to children's negative emotions; analysis of the simple slopes again indicated that actor home chaos was significant only for mothers ($b = .03$, $p < .01$, $d = .78$). Our expectation that job role dissatisfaction would show crossover effects only for fathers was not supported; parent gender did not moderate either actor or partner effects on supportive or nonsupportive responses.

DISCUSSION

In this project, we tested the extent to which family stress spills over into parenting behaviors, crosses over to a spouse's parenting, and is compensated for by more positive parenting behaviors of an individual or spouse. We found support for all three of these possibilities. These findings suggest that family stress is associated with how parents socialize their children's emotions. The more family stress parents experience, the less supportive and more nonsupportive are their techniques to teach children about emotions. More interesting, spillover effects occurred for both supportive and nonsupportive parent responses to children's negative emotions, whereas crossover and compensatory effects were seen only with supportive responses. It is our speculation that spillover, which results from stress in other contexts of one's own life, is more personal and therefore, has the possibility to be more negative than stress stemming from one's partner. We also found evidence for parent gender differences, not only in how parents respond to their children's negative emotions but also in how various family stressors are associated with parenting behaviors. Findings such as these emphasize the importance of including both mothers and fathers in parenting research, as well as examining multiple subsystems within a family, to fully understand specific emotion socialization behaviors by parents.

As anticipated, mean levels of supportive and nonsupportive responses differed by parent gender. The parent gender differences found in this study are consistent with previous research that has suggested mothers and fathers show emotional support for their children in different ways, with mothers showing their support during times of child distress (Grossmann et al., 2002). The primary focus of the present study, however, was not to examine mean differences between

mothers and fathers but instead to examine differences in the associations between stress and parenting to understand how family stress affects socialization practices.

Spillover to parents' own responses to negative emotions was found for fathers' marital dissatisfaction and mothers' perceptions of home chaos. The gender-specific findings are consistent with our hypotheses. Previous research on parent–infant interactions has suggested that the fathering role may be less well-defined and may be determined more by the state of the marital relationship than the role of mothers (Belsky, Gilstrap, & Rovine, 1984; Belsky & Volling, 1986; see Parke, 2002). Although this was not directly tested in the current study, significant associations between marital dissatisfaction and parenting for fathers leads us to speculate that fathers' patience and attention may continue to be more dependent on the marital relationship than mothers' even in middle childhood. For mothers, perceptions of home chaos were related to both supportive and nonsupportive responses. It appears that mothers who perceive the home environment as disorganized have reduced patience and attention in interactions with their children, and also show greater negativity; these responses may be due to social pressure on mothers to be responsible for maintaining an organized home.

Crossover was evident for job role dissatisfaction and was suggested by a trend-level effect for marital dissatisfaction. Though we anticipated that crossover would occur between fathers' job role dissatisfaction and mothers' responses to children, our results indicated that this effect occurred for both parents' supportive responses. Job role dissatisfaction was not associated with one's own parental responses. Parents may make more of an effort to keep their own work stress separate from their home life but are less able to provide patient, supportive responses to their children when partners are dissatisfied in their jobs, possibly requiring increased attention and support themselves. Marital dissatisfaction was associated with parents' own responses and their partners', emphasizing the importance of marital quality for parenting.

Depressive symptoms operated in a different and unexpected fashion, providing support for the compensatory hypothesis in addition to showing crossover effects. When mothers and fathers experienced more depressive symptoms, their partners provided more supportive responses to children. It may be that parents without depressive symptoms are able to be especially alert to the potential negative effects of partners' symptoms, thus triggering increased attention and sensitivity to the child. Despite research suggesting that parent–child negativity is stronger in homes with depressed mothers than depressed fathers (Jacob & Johnson, 1997), we did not find parent gender differences in socialization responses to children's negative emotions. This may be due to different socialization objectives or to the fact that almost all parents in the current study did not display clinical levels of depression. More research is needed to examine how depressive symptoms are linked to one's own versus one's partner's emotion socialization practices as well as to examine which socialization practices elicit parent gender differences.

The current study has several limitations. A goal of this project was to examine the four constructs as a set of family stressors, analyzing each association with parental responses when the other family stressors were also considered. However, because not all parents were employed, job role dissatisfaction could not be analyzed for the full sample. Although findings were similar in both samples, we cannot be sure whether the inclusion of job role dissatisfaction might have changed whole-sample results. A second limitation is the lack of information

included about the child. Although child gender was included in the models, interactions between family stressors and child gender, as well as between parent and child gender, were not tested in the current study. Also, transactional approaches to research on parenting that emphasize the bidirectional influences of parent and child on each other (Sameroff, 1993) were not examined. Because family processes are known to differ by cultural and ethnic background, a third limitation of the present study is the lack of an adequate sample of minority families that would allow us to examine potential ethnic differences. In addition, we do not have information on how parents coped with the family stressors they experienced. Some parents may be able to handle their stress in a more constructive way than others, especially when interactions with their children are involved; thus, more intricate variation in spillover and crossover processes may exist. And finally, the use of parental report for family stressors as well as responses to children's negative emotions may reflect a response bias from participants. Use of observational methods would help to correct this problem and provide a more thorough examination of these family processes.

There are many avenues for future research that would extend the information gained from the current project. It would be useful to examine other forms of emotion socialization dyadically to understand joint socialization practices of mothers and fathers and to examine predictors of these parenting practices. Study of the relation between stress and emotion socialization in diverse groups of families, including single-parent families and families varying in cultural background, would expand our knowledge of family functioning. Furthermore, the risk literature has suggested that stress may operate in a more cumulative fashion; this perspective could be used to better understand the role of family stress on emotion socialization.

Parents play a major role in teaching children about the expression, regulation, and experience of emotion (Eisenberg et al., 1998). By identifying the family contexts that may interfere with positive emotion socialization practices, practitioners can better identify families that may be at risk and encourage parents to pay more attention to the emotional messages their children are receiving or to use positive emotion socialization strategies, such as directly explaining emotions to their children. By taking these steps, we may be better able to help parents understand and minimize the impact of family stress on children's development.

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