The Thesis Committee for Sarah Elizabeth Murphy
Certifies that this is the approved version of the following thesis:

Predicting Children's Externalizing Symptoms from Dyadic and Triadic Measures of Family Systems

APPROVED BY

SUPERVISING COMMITTEE:

Nancy Hazen-Swann, Supervisor

Deborah Jacobvitz

Anita Vangelisti

Predicting Children's Externalizing Symptoms from Dyadic and Triadic Measures of Family Systems

by

Sarah Elizabeth Murphy, B.A.

Thesis

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

August 2015

Dedication

To my family.

Acknowledgements

I would like to extend gratitude to my advisor, Nancy Hazen, as she was extremely supportive throughout this endeavor. In addition, I want to thank Deborah Jacobvitz and Anita Vangelisti for their guidance. Lastly, I want to acknowledge the continued support of my family.

Abstract

Predicting Children's Externalizing Symptoms from Dyadic and Triadic Measures of Family Systems

Sarah Elizabeth Murphy, M.A.

The University of Texas at Austin, 2015

Supervisor: Nancy Hazen-Swann

According to Family Systems Theory, the whole family system is greater than the sum of its parts. The purpose of this study is to investigate this claim by examining marital, parent-child, and triadic (mother-father-child) interactions as simultaneous predictors of children's externalizing symptoms. Longitudinal data from 108 families were used to investigate three hypotheses: 1) parents' negative responses to their toddlers' negative emotions will predict their children's later externalizing symptoms, 2) marital negativity will relate to both mothers and fathers displaying more negative patterns of emotional socialization, and 3) competitive coparenting – assessed in triadic family interactions during toddlerhood (age 24 months) – will predict children's later externalizing symptoms at age 7, after accounting for the effects of significant dyadic family interactions (specifically, mothers' and fathers' emotional socialization assessed at 24 months). Results demonstrated spillover from marital negativity to mothers' negative emotion socialization. Competitive coparenting predicted children's later emotion socialization

after controlling for infant temperament, family income, child gender, and dyadic predictors of children's externalizing symptoms; mothers' negative emotional socialization also remained a significant predictor. This study emphasizes the importance of examining the family holistically and has important implications for designing more effective whole-family interventions to reduce the development of children's externalizing symptoms.

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Introduction

According to Family Systems Theory (FST), a family is an interconnected system, with each subsystem affecting every other subsystem (Minuchin, 1985). Family systems theorists posit that whole family interactions account for variance in children's developmental outcomes beyond that accounted for by a combination of all the dyadic relationships within the family (McHale, 1995). That is, when predicting the effects of parenting on child outcomes, triadic family interactions should provide unique information, beyond that of the combined effects of mother-child, father-child, and marital interactions. For example, according to FST, the dyadic parent-child interactions may be altered when the spouse is present (second-order effects; Cox & Paley, 2003; Minuchin, 1985). Such second-order effects may be particularly pronounced when couples experience marital discord. In such situations, a form of *triangulation* may occur in which one or both parents may insert their child into their marital conflicts (Bowen, 1985), leading to competitive coparenting. If triadic family interactions provide unique information beyond that of dyadic interactions, this has important implications not only for testing a key assumption of FST, but also for creating more effective early interventions to reduce children's problematic outcomes, including externalizing symptoms. No studies to date have utilized *both* dyadic and triadic measures to assess the effects of maladaptive family interactions *simultaneously*.

Externalizing symptoms have been associated with *dyadic* assessments of marital (Cummings and Davies, 2002), mother-child, and father-child interactions (Morris et al., 2007; Rothbaum & Weisz, 1994), and more recently with *triadic* measures of family

interactions (Jacobvitz, Hazen, Curran, & Hitchens, 2004), particularly competitive coparenting (Shoppe, Mangelsdorf, & Frosh, 2001). Thus, the primary goal of the present study is to examine whether triadic competitive coparenting predicts children's later externalizing symptoms even after accounting for the combined effects of dyadic marital, mother-child, and father-child interactions that have also been found to predict children's externalizing symptoms.

Triadic Competitive Coparenting

Even though dyadic marital and parent-child interactions have been shown to forecast children's externalizing symptoms, FST argues that triadic family interactions in which both parents are engaged in coparenting their child should predict unique information about child outcomes, beyond that predicted by dyadic marital, mother-child, and father-child interactions. The sum of dyadic interactions is not equivalent to triadic interaction, as emergent properties become salient when the whole family system is assessed simultaneously (Cox & Paley, 2003; Minuchin, 1985). Dyadic family subsystems are understood by family systems theorists to be the "thermostat" of the family climate, in that family members can establish separate relationships with other family members that serve as risk or protective factors (Cox & Paley, 2003). Even so, whole-family interactions should be superior to dyadic family observations in predicting child and family outcomes because they integrate qualities of all sub-systems. As previously noted, parents' dyadic behavior (mother-child, father-child, mother-father) might differ in the context of the triad (mother-father-child) since second order effects may emerge (Minuchin, 1988). Coparenting, a triadic measure that refers to how parents

work with or against each other when caring for their child (McHale, 1995), has been found to be particularly important in predicting child outcomes. Coparenting is viewed as the intersection between the marital and parent-child dyads (Cowan & Cowan, 2002; Fivaz-Depeursinge & Corboz-Warney, 1999). Although associated with the quality of the marital relationship (e.g., McHale, 1995), it is also separate from the marital relationship in that some distressed couples are able to parent amicably (Talbot, 2001). Because coparenting refers to the parents' joint efforts at parenting, it is related to both mother-child and father-child interaction quality (e.g., Feinberg & Kan, 2008), but goes beyond dyadic interactions since it also includes information about whether parents cooperate or compete in their joint parenting efforts.

Competitive coparenting has been identified as a particularly dysfunctional style of coparenting, characterized by one parent undermining the other in order to take control of parenting or to win favor with the child over the other parent (McHale, 1995). In this pattern, parents send the child disparate messages or include the child in their conflicts, effectively putting the child in the middle. For example, competitive coparenting may involve parent-child alliances in which a parent might inappropriately rely on their child for consolation, try to be the "favorite" parent, or even try to turn the child against the other parent (McHale, 1995).

Competitive coparenting has been firmly established as a predictor of the development of preschool (McHale & Rasmussen, 1998) and school-aged (McConnell & Kerig, 2003; Schoppe et al., 2001) children's externalizing symptoms. Observing coparenting at these ages is important, as it is at an age in which parents begin to

socialize their children and set limits for their children (Christopher, Umemura, Mann, Jacobvitz, & Hazen, 2015). In addition, externalizing symptoms attributed to maladaptive coparenting behavior becomes obvious (Umemura, Christopher, Mann, Jacobvitz, & Hazen, 2015). Observed patterns of competitive coparenting in triadic family interactions were found to predict children's higher teacher- and parent- reported outbursts or other hostile behaviors (Schoppe et al., 2001), as well as greater teacher-reported preschool aggression even after controlling for couples' self-reported marital quality and individual well being (McHale & Rasmussen, 1998).

Dyadic Marital Negativity

Marital conflict has also been found to affect children's externalizing behavior indirectly, due to "spillover" from stress due to marital discord into parents' interactions with their children (Grych & Fincham, 1990). For example, Gerard, Krishnakumar, & Buehler (2006) found that harsh and conflictual parenting mediated the relationship between marital conflict and school-aged children's externalizing symptoms. Additionally, Nelson and colleagues (2009) found evidence for marital dissatisfaction predicting parental emotion socialization with their children. Specifically, if couples experienced family stress, they were more likely to have negative responses to their child's upset behavior.

Dyadic Parent-Child Emotional Socialization

Literature on dyadic parent-child emotional socialization has focused on specific ways in which parents respond to their children's negative emotions and their consequences for children's developmental outcomes, including externalizing behaviors

(Eisenberg, Cumberland, & Spinrad, 1998). Parents' supportive responses to their children's distress may be either emotion-focused (e.g., comforting their child) or problem-focused (e.g., helping their child navigate or resolve the issue at hand). When mothers respond supportively to their children's negative emotions, their children have been found to have better coping and emotion regulation skills (Eisenberg, Fabes, & Murphy, 1996), fewer externalizing behaviors, less angry verbalizations, and more signs of regulating their own emotions (Eisenberg & Fabes, 1994). Fathers' emotion-focused responses (e.g., encouragement) have also been related to their children's later coping abilities (Eisenberg et al., 1996).

In contrast, when parents respond negatively to children's upset behavior, children may experience heightened levels of frustration, increasing their emotional dysregulation (Eisenberg et al., 1998). Negative responses include those in which parents are harsh or punitive, display distressed reactions of their own (i.e., anger, fear, sadness or emotional stress), or minimize the child's feelings (downplaying the child's emotion, e.g., "Oh that didn't hurt, be a big boy"). Such responses do not provide children with emotional or instrumental strategies for regulating their negative emotions and do not acknowledge their distress, which may increase their frustration, fear, or anger, thus perpetuating externalizing symptoms (Cowan & Cowan, 2002).

These ideas are supported by a considerable body of research focused on parents' self-reported and observed responses to preschool and school-aged children's negative emotions (Eisenberg et al., 1998). For example, mothers' reports of harsh responses were associated with poorer emotion regulation in their children, whereas fathers' reports of

harsh reactions were related to their children's externalizing symptoms, particularly for sons (Chang et al., 2003). Fathers' observed harsh and distressed responses to their children's negativity have also been related to teacher reports of their children's decreased social competence and social skills and their increased physical aggression with peers (Carson & Parke, 1996). Mothers' self-reported minimizing responses have been associated with their children's poorer emotion regulation, higher levels of negative affectivity, and lower social competency (Romano, Tremblay, & Vitaro, 2001; Romano, Tremblay, & Vitaro, 2001; Eisenberg & Fabes, 1994), as well as their higher frequencies of displayed anger (Rubin et al., 1998).

Overview of the Current Study

The primary aim of the present study is to address the following overarching question: Are triadic coparenting interactions the strongest predictors of children's later externalizing symptoms, predicting even after accounting for separate dyadic correlates of children's externalizing symptoms? Additionally, we sought to replicate and extend previous research findings indicating that marital negative affect and parent's negative patterns of emotional socialization would be associated with children's later externalizing symptoms. To address these questions, the present study examined dyadic marital negativity, dyadic maladaptive maternal and paternal emotional socialization, and triadic competitive coparenting using observational measures obtained when children were 24 months as in relation to children's teacher-reported externalizing symptoms at 7-years-old.

A goal of the present study is to extend the literature on emotional socialization and its relation to the development of children's externalizing behavior by examining parents' observed emotional socialization of their toddlers. Before examining dyadic family relationships in conjunction with our triadic measure of coparenting, we wanted to examine the inner functioning of dyadic family relationships, as suggested by family systems theorists to be the "thermostat" of the family climate (Cox & Paley, 2003). Past research on emotional socialization has focused almost exclusively on how parents respond to the negative emotions of preschoolers and school-aged children. In addition, most past studies have used self-report rather than observational measures of how parents respond to children's negative emotions, have been cross-sectional rather than longitudinal, and have not included fathers' reactions to children's negative emotions. Specifically, this study is the first to examine how both fathers and mothers respond to toddlers' negative emotions using observational measures, and how these responses relate to their child's externalizing symptoms when they are school-aged. Based on previous research conducted with older children, we hypothesized that parents' negative responses to their toddlers' negative emotions should predict their children's later externalizing symptoms (*Hypothesis 1*). Moreover, this study is the first to examine how mothers' and fathers' observed responses to their toddlers' negative emotions relate to their martial negativity. We expected that marital negativity should relate to both mothers and fathers displaying more negative patterns of emotional socialization, since marital distress is likely to spill over to parenting (*Hypothesis 2*).

We then examined the unique variance contributed by competitive coparenting and each of the dyadic marital and parental family interactions in relation to children's externalizing symptoms. We hypothesized that our triadic measure, competitive coparenting, would predict children's externalizing problems even after accounting for the effects of dyadic family sub-system predictors of children's externalizing symptoms (*Hypothesis 3*).

In all our analyses, we controlled for possible covariates, including family income, infant temperament, and child gender. Lower family income has shown to increase marital distress and conflict, as this could increase stress for the family or be a point of conflict for the couple. (e.g., Amato et al., 2004). Children's temperament has been shown to influence parents' responses to their children's emotional displays (e.g., Eisenberg et al., 1999). Finally, externalizing symptoms have been found to be more prevalent in boys (e.g., Chang et al., 2003).

Method

Participants

Data for the present study were drawn from a longitudinal study with an original sample of 125 families that focused on family interactions across the transition to parenthood in relation to child's later developmental outcomes. Measures were first collected when mothers were in the third trimester of their pregnancy with their first child (Wave 1), as well as when their children were 8 months old (Wave 2), 24 months old (Wave 3) and 7 years old (Wave 4). Families were recruited from a large southwestern city through birthing classes at local hospitals, public radio announcements, and flyers posted in maternity stores. To participate, couples were required to be first-time parents, married, living together, and able to fluently speak English. After completing each phase of data collection, families received compensation in the form of savings bonds, newsletters, gifts for their child, and a copy of videotaped interactions. The purpose of the study and procedures of the research project were secured in accordance with the provisions of our university's Committee on Human Subjects.

The present study used data from Waves 3 and 4. The original sample at Wave 1 had 125 couples. At Wave 3, 108 couples remained, followed by 85 couples at Wave 4. Couples that left the study moved away, were too busy to participate, or could not be located. At Wave 3, only 96 triadic interactions could be coded because twelve couples had divorced. Teachers could only report on the behaviors of the children if they had known them for at least three months, which reduced the number of children that had complete data to 71, 56% of which were sons. Parents ranged in age from 18 to 43 years,

with a mean age of 29 years. All of the couples with complete data were married, and most were middle class (55% with a household income of more than $45,000 per year and only 4% with less than $15,000 per year), and Caucasian (84%). The remainder of the sample was Hispanic (11%), African American (2.4%), Native American (1.6%), and Middle Eastern (1%). Couples who reported their income at Wave 1 to be between $0 and $30,000 were less likely to remain in the study by Wave 4, compared to couples with reported incomes of $45,000 to $60,000, $\chi^2(4) = 12.22$, $p < .05$. Couples who left the study did not differ significantly on any other demographic variables from those who remained in the study.

Procedure

When children were 24 months old, mother-child and father-child interactions were observed at a university laboratory to assess each parents' dyadic emotional socialization. Two weeks later, during a home visit, mothers and fathers were observed in a marital interaction task, then both parents were observed in a triadic family interaction task to assess coparenting.

Measures

Parents' responses to children's emotional distress during dyadic interactions. Each child was independently observed in mother-child and father-child interactions. Both interactions involved 20-25 minutes of free play in a playroom containing developmentally challenging toys. Parents were instructed to play with their child as they regularly would, followed by 5-minutes of cleanup. This interaction was designed to induce negative emotions in the children, such as: any negative emotions

derived from playing with developmentally challenging toys, reluctance to engage in the interaction, and "clean-up," frustration. There was not an instance where a child did not show any negative emotions. Afterwards, the parent and completed two problem-solving tasks in a different room. The tasks were designed to be difficult for the child in order to elicit parental assistance. Mothers and fathers completed several different tasks, which included putting together nested cups, removing a snack from a clear tube by using connected Bristle Blocks, using a brick to lift a lever inside of a box in order to retrieve another snack, and completing a sorting puzzle. Interactions were randomly counterbalanced such that half of the families had fathers play first, whereas the other half had mothers start first.

Parents' socialization of children's negative emotions was assessed by the Parents' Responses to Children's Emotions Rating Scales (PRCERS), an observational rating system developed by the third author that is based on scales from the Parental Coping with Children's Negative Emotions Questionnaire (CCNES; Fabes, Eisenberg, & Bernzweig, 1990). Each of the 7-point Likert rating scales assessed the degree to which parents responded to their child's negative emotions in a way that was distressed, harsh, minimizing, or supportive.

The *distressed responses* scale reflects the extent to which the parent displayed emotional distress (anxiety, frustration, and/or anger) in response to their child's negative emotions. A score of 1 indicates the absence of parental distress, whereas a score of 7 reveals frequent displays of parental frustration, stress, or anger displayed in voice tone (e.g., speaking more rapidly, raising one's voice, using an agitated voice tone) or body

language (e.g., wringing one's hands, burying one's face in one's hands, trembling, handling the child abruptly).

The *harsh responses* scale rates the degree to which the parent punished or responded harshly to their child for displaying negative emotions. A score of 1 indicates this type of response was not observed, and a high score would indicate either a high frequency of this behavior, or very marked instances of harsh responding. Examples include spanking the child for crying, withholding toys until the child's negative emotions ceased, putting a child in timeout without explaining why, yelling at the child, or threatening to punish the child.

The *minimizing responses* scale rated the extent to which the parent dismissed or devalued the children's expressed negative emotions. A low score would indicate an absence of minimizing responses, whereas a high score of 7 would indicate a parent frequently responds in such a manner. Examples include sarcasm (e.g., saying, "Oh, it's the end of the world!"), ignoring the child's upset behavior, or telling the child that he or she is overreacting (e.g., "Oh, that doesn't hurt, don't be a baby!").

The *supportive responses* scale rated the degree to which the parent acknowledged their child's upset feelings, comforted their child, showed empathy to their child, or helped their child solve the problem that was upsetting him or her. Such reactions to their child could be verbal (e.g., "I understand you are upset right now") or nonverbal (e.g., holding and rocking their child) manner. A score of 1 indicates very unsupportive responses, whereas a 7 would indicate that virtually all responses were supportive.

Observational coders took notes on all of the parents' responses to children's negative emotions and then rated each style of responding based on the parent-child interaction as a whole. It is important to note that a given response can be simultaneously high on two or three of the scales. For example, yelling in a threatening way at the child, "We are going to stop playing right now it you don't stop whining!" would be rated highly on both the distressed and punitive scales.

Three coders, blind to all other data, were trained to use the PRCERS. The author of the scale coded all observed interactions, with two other coders who observed approximately 70 parents each. If scores were discrepant by more than one point, the third coder rated the interaction as well. Intraclass correlations between all coders were averaged (distressed responses r =.32, punitive responses r =.79, minimizing responses r =.83). Because the reliability for distressed responses was too low, this measure was re-coded, such that one coder rated all of the mother-child and father-child interactions for distress and 34% were double-coded. The interclass correlation for distressed responses was then .77. Final scores for each rating scale were averaged across coders.

To obtain a composite measure of each parents' total negative emotional socialization, average scores for each of the four rating scales were standardized and summed. Unstandardized scores yield the same pattern of results. Supportive responses from parents were reverse-coded. Cronbach's alphas for both the mothers' and fathers' composite negative emotional socialization were high (mothers = .85, fathers = .79).

Marital negative affectivity during dyadic interaction. Marital interactions were recorded without the child or researcher present through a 20-minute videotaped

private home observation during Wave 3. Couples were asked to discuss each other's parenting style and the division of childcare and labor, in addition to areas for improvement regarding these topics. These topics were chosen because they were likely to result in disagreement, enabling us to observe the couple's ability to resolve conflict.

Marital negative affectivity was coded on 9-point scales developed by the second author (Author Citation). The observed couple interactions were rated on several scales, but the present study utilized only the rating for the couples' negative affectivity, which was coded through observed interactions, including spoken word and body language. High ratings were given when there was a high level of general tension in the interaction, indicated by stiff or guarded positions, jokes being made at the partner's expense, or high frequencies of sarcasm, anger, or sadness, Low scores were given when the couple shows little or no tension and is able to resolve conflict in a relaxed manner, without undue anger, sadness, or hostility. Two coders who were blind to all other data individually coded each marital interaction for couple negative affectivity. The intraclass correlation coefficient for marital negative affect at 24 months was .94. Averaged scores were used in the analyses.

Competitive coparenting behaviors during triadic interaction. Competitive coparenting was assessed using 30 minute in-home observations of mother-father-child triadic interactions when the children were 24 months old (Wave 3). Parents were instructed to prepare a snack and change their child's clothes while engaging in a parenting card-sort activity. This task was designed to arouse dialogue and negotiation about childrearing, as well as to examine coparenting interactions that required parents to

complete an adult task when concurrently caring for their child. Parents were told they could complete the tasks in any order, as long as they were completed within a 20-minute timeframe. The time constraints of the activity put the parents under mild pressure, as they were to complete several tasks within a short amount of time, which was designed to simulate how parents jointly navigate daily challenges at home. If parents completed the task early, they were asked to engage their child in a challenging peg-sorting task that required parent involvement for the child to successfully complete the task.

Videotaped observations of the triadic interactions were coded for coparenting behaviors using an adaptation of the Coparenting and Family Rating scales (CFRS; McHale et al., 2000). The present study utilized only the 5-point competitive coparenting scale. Competitive coparenting was rated based on the degree to which parents tried to undermine or contradict each other, to jockey for attention or favoritism from the child, or to put the child in the middle of their disagreements during triadic interaction. A high score of 5 reflects a couple that displayed excessive levels of these behaviors with no indication of self-awareness, whereas a low score of 1 was given if there was an absence of competition or undermining. In addition, if one parent made all of the parenting decisions, making coparenting non-existent, a score of 1 was given.

Two coders were trained separately and were blind to all other data. The intraclass correlation between the two coders was $r = .81$. Scores averaged between two coders were used for analyses. If scores differed more than one point between the coders, the triadic interaction was conference coded.

Child externalizing symptoms. Teachers were asked to report children's externalizing symptoms when they were 7 years old (Wave 4) by completing the Teacher Report Form of the Child Behavior Checklist (TRF-CBCL; Achenbach, 1991). Teachers have been found to be more objective raters of externalizing symptoms than parents (e.g., Lyons-Ruth, Easterbrooks, & Cibelli, 1997). The form consisted of 116 items for which teachers were asked to respond to each item using the following 3-point scale: 0 = *not true*; 1 = *somewhat true*; or 2 = *very true.* Only the externalizing subscale was examined in the current study. Examples of externalizing symptoms include whether or not the child breaks rules or displays aggressive behavior. High inter-interviewer and test re-test reliabilities (with intra-class correlations in the 90s) have been well established for this instrument (Achenbach, 1991).

Control Variables

We controlled for family income, infant temperament, and child gender because they may covary with the quality of marital, parent-child interaction, and whole family interaction. It is important to note that our goal was not to examine these possible covariates as predictors of externalizing behavior, nor to examine interactions between these variables and our key predictor variables. Rather, our goal was to examine dyadic and triadic family variables as predictors of children's later externalizing symptoms to ascertain whether the triadic variable of coparenting predicts externalizing symptoms beyond dyadic measures.

Family income. When children were 24 months old, their parents were presented with a range of incomes (1 to 5; over $45,000) from which they had to select the range that corresponded to their family income, including all sources of income.

Infant temperament. When the child was 3-6 weeks old, mother reports of infant temperament were obtained using the Infant Behavior Questionnaire (IBQ; Rothbart, 1981). This measure assesses 6 domains of temperament (infants' activity level, smiling and laughter, fear, distress to limitations, soothability, and duration of orienting) using 84 7-point items. For the present study, we created a composite scale for infant reactivity by subtracting the standardized positive reactivity score from the standardized negative reactivity score, following Rothbart (1986). The alpha for internal consistency was .77.

Results

We first examined how fathers' and mothers' responses to their toddlers' negative emotions relate to marital negative affectivity. Next, we then explored the primary aim to the study, which was to test whether triadic competitive coparenting would predict children's externalizing problems even after accounting for the effects of known dyadic predictors of children's externalizing symptoms.

Descriptive Statistics

Table 1 displays the means and standard deviations for all of the study variables as well as the first-order correlations between all study variables.

Relation of Parents' Emotional Socialization to Marital Negativity

Two hierarchical regressions, in which mothers' and fathers' negative emotional socialization were the dependent variables, were used to examine *Hypothesis 2:* Marital negativity will predict parents' negative emotional socialization. For both mothers and fathers, Step 1 included the same control variables used in the previous regression, and Step 2 entered couple negative affect. As shown in Table 2, Hypothesis 2 was partially supported. Marital negative affect predicted mothers' emotion socialization, but the effect for fathers was nonsignificant.

Triadic vs. Dyadic Predictors of Children's Externalizing Symptoms

We used a hierarchical OLS regression was conducted to test *Hypothesis 3:* Competitive coparenting will predict children's externalizing problems even after accounting for the effects of known dyadic predictors of children's externalizing symptoms (Table 3). This regression also tested *Hypothesis 2*: Parents' negative

emotional socialization will predict children's externalizing symptoms. In our first step, we included the control variables: infant temperament, family income at 24 months, and child gender. In Step 2, we entered marital negative affect, which was not a significant predictor of externalizing symptoms. For Step 3, we entered our composite measures of fathers' and mothers' negative emotional socialization with their child (e.g., distressed, harsh/punitive, minimizing, and sensitive responses). *Hypothesis 1* was partially supported: Mothers' negative emotional socialization, but not fathers', emerged as a significant predictor of children's externalizing symptoms. Finally, in Step 4, our whole-family variable of competitive coparenting was entered into the regression. Mothers' negative emotional socialization remained as a significant predictor of children's externalizing symptoms. Most importantly, as predicted, *Hypothesis 3* was confirmed: competitive coparenting predicted children's externalizing symptoms, even after controlling for possible covariates and for the dyadic predictors of children's externalizing symptoms. In fact, competitive coparenting emerged as the strongest predictor of children's externalizing symptoms.

Discussion

The present study is the first to empirically test a key assumption of FST: The dynamics of the whole family subsystem cannot be reduced to the sum of its component subsystems; thus, triadic family interactions should provide unique information what dyadic relationships can explain (Minuchin, 1985). The novel strength of FST is that it proposes that family relationships are a "complex, integrated whole," in which individuals are interdependent and have ongoing multi-directional influences on each other (Minuchin, 1988). Our triadic measure of competitive coparenting remained as a significant predictor of children's later externalizing symptoms, even after accounting for the dyadic marital and parent-child predictors. Therefore, this research supports FST's perspective in that individual developmental trajectories might be best understood in by not only considering individual parenting, particularly for mothers, but in addition consider the context of the entire family system (Minuchin, 1988).

FST posits that a triadic interaction will reveal differences in parenting behaviors that might not otherwise be accounted through additive dyadic measures of family sub-systems (Minuchin, 1985). The triadic measure of competitive coparenting captures aspects of conflict in the marital relationship, as well as aspects of harsh, distressed, or minimizing parental communication styles. These relations are all in line with family systems theorists posing that dyadic family relationships can serve as practive or risk factors within a given family environment (Cox & Paley, 2003). But, in addition to exposing the child to marital conflict and to negative dyadic communication patterns, competitive coparenting places the child in the middle of the marital conflict, sending the

child mixed messages, and forces the child to choose between parents (McHale, 1995). Triangulating the child in this way, especially when combined with the stress of observing marital conflict and receiving negative responses from parents, may be particularly distressing and dysregulating to young children.

This study also extended research on the antecedents and consequences of parental emotional socialization to toddlers. As hypothesized, and in congruence with the extant literature on emotional socialization in preschoolers and school-aged children, we found that mothers' negative responses to their toddler's negative emotions predicted their children's later externalizing symptoms (e.g., Carson & Parke, 1996; Eisenberg et al., 1996; Eisenberg & Fabes, 1994). Also as predicted, marital negativity was related to mothers' negative emotional socialization. Thus, martial negativity may affect children's externalizing symptoms indirectly by creating the spillover effect in which marital distress leaks into parenting behaviors, increasing both mothers' distressed responses to the toddler.

However, these hypotheses were not confirmed for fathers. Marital negativity was not related to fathers' negative emotional socialization, and fathers' negative emotional socialization did not predict children's later externalizing behaviors. Although fathers have greatly increased their involvement in infant and toddler caregiving in the past 30 years, recent research indicates that mothers still spend far more time caring for infants and toddlers than do fathers (Kotila, Schoppe-Sullivan, & Kamp Dush, 2013). Thus, it is possible that fathers' emotional socialization during toddlerhood may be much less predictive of their children's later externalizing problems compared to their emotional

socialization later in childhood, when they become more involved in child rearing. Few studies have examined fathers' responses to children's negative emotions, and most that have used self-report measures of fathers' responses (e.g., Eisenberg et al., 1999). As noted above, studies of parents' emotional socialization of toddlers are particularly lacking, and we know of no studies that have examined the consequences of fathers' negative responses to toddlers' distress. Clearly, more research on fathers' emotional responses to infants and toddlers is needed to clarify this finding.

Contrary to our expectation and to previous studies, marital negativity at 24 months was not related to children's later externalizing symptoms. In addition, marital negativity was not related to competitive coparenting, in contrast to past studies that have found significant relationships between dyadic martial conflict and competitive coparenting (McHale, 1995; Schoppe-Sullivan et al., 2004). The measure of marital negativity used in this study was broader than measures of marital conflict used in other studies, because it encompassed tension in the marriage that could be due to either the angry or hostile expression of unresolved conflict or to emotional withdrawal. It may be that toddlers find it more upsetting when their parents display open, hostile conflict with each other rather than withdrawing. As noted above, open conflict in which parents put their child in the middle and force him or her to choose sides may be particularly upsetting.

It is interesting to note that marital negative affect was significantly related to both infant temperament and family income, such that greater negative affectivity in marital interaction was associated with lower family income and with having an infant

with a more difficult, reactive temperament. This finding corresponds with other studies that have found that lower family income increases marital distress and conflict, because financial problems add to the couple's stress and family finances may often be a source of conflict (e.g., Amato et al., 2004). Additionally, this may indicate spillover in the other direction, in which tension in parent-child interaction due to having a child with a reactive temperament spills over into the marital interaction. Thus, the direction of influence from marital to parent-child interactions cannot be determined and is likely bidirectional.

Limitations and Future Directions

Small sample size and lack of repeated measures are clear limitations of the present study. Nevertheless, the discrepancies we found between our anticipated findings and results still supported our primary hypothesis derived from FST that holistic family assessments provide information beyond that provided by combined assessments of family subsystems. In fact, finding significance results despite our small sample size highlights the robustness of this hypothesis.

Findings from this research have important implications future studies that examine externalizing symptoms in children. Such studies should continue to explore competitive coparenting and other types of maladaptive parenting in which parents involve their child in their conflicts. Not only do these instances send the child emotionally-based mixed messages, but parents become negative role models. In such circumstances, parents may be missing an opportunity to be positive examples and help guide children's negative behavior in a constructive way. Our findings also have

important implications for designing more effective family interventions to decrease children's externalizing symptoms. In addition to helping children learn better emotion regulation or behavioral inhibition skills and helping parents develop more positive ways of responding to their children's distress, helping parents learn ways of avoiding competitive coparenting may be a particularly effective mode of intervention.

Future research should continue to establish the validity of FST's claims that examining the whole family system improves prediction and understanding of children's individual developmental outcomes. For example, examining larger family systems, including siblings, may lead to identifying additional predictors of children's externalizing symptoms by accounting for changes in dyadic parenting or triadic coparenting due to the addition of another child to the family unit and sibling interaction patterns. In addition, it would be interesting to explore same-sex couples and cultural influences on the family system regarding whole-family interaction patterns and their effects on children's outcomes.

Finally, our findings have important implications for designing more effective family interventions to decrease children's externalizing symptoms. Most family interventions are aimed primarily at helping children learn emotion regulation or behavioral inhibition skills (e.g., Zeman, Cassano, Perry-Parish, & Stegall, 2006), or at helping parents develop more positive and less punitive, harsh, and minimizing ways of interacting with children (e.g., Sanders & Mazzucchelli, 2013). Our findings indicate that helping parents learn ways of avoiding competitive coparenting that puts their children in the middle of their conflicts may be a particularly effective mode of intervention.

Table 1

Intercorrelations of study variables

Variable	1	2	3	4	5	6	7	*Mean*	*SD*
Children's externalizing symptoms	-0.04	-0.12	-0.22†	-0.10†	0.19	0.12	0.41**	51.31	8.67
1. Family income	--	0.03	0.03	-0.24*	0.09	-0.20†	-0.05	3.81	1.10
2. Infant temperament		--	0.04	0.46**	-0.01	0.01	-0.02	0.49	1.68
3. Child gender			--	0.08†	-0.14	-0.20*	-0.01	0.41	0.49
4. Martial negative affect				--	0.10	0.25*	0.14	1.71	0.79
5. Fathers' emotion socialization					--	0.46**	0.14	0.07	3.30
6. Mothers' emotion socialization						--	0.28**	0.01	3.33
7. Competitive coparenting							--	1.79	0.91

Notes: †p <.10, *p <.05, **p <.001, boys coded as 0 and girls coded as 1

Table 2

Hierarchical regression of study variables predicting negative parental socialization

	Fathers				Mothers			
	Step 1		Step 2		Step 1		Step 2	
Variable	*B*(*SE*)	β	*B*(*SE*)	β	*B*(*SE*)	β	*B*(*SE*)	β
Family income	0.43(0.32)	0.16	0.53(0.33)	0.19	-0.37(0.28)	-0.15	-0.21(0.27)	-0.09
Infant temperament	0.10(0.20)	0.06	-0.02(0.21)	-0.01	0.20(0.17)	0.14	-0.02(0.18)	-0.02
Child gender	-0.62(0.69)	-0.10	-0.67(0.69)	-0.11	-0.61(0.61)	-0.12	-0.69(0.58)	-0.13
Marital negative affect			0.37(0.26)	0.18			0.67(0.22)	0.38**
F	0.96		1.22		1.42		3.54	
R^2	0.04		0.07		0.06		0.17	
R^2 Δ	-0.00		0.01		0.02		0.12	

Note: ** $p < .001$

Table 3

Hierarchical regression of study variables predicting externalizing symptoms in children

	Step 1		Step 2		Step 3		Step 4	
Variable	*B*(*SE*)	β	*B*(*SE*)	β	*B*(*SE*)	β	*B*(*SE*)	β
Family income	-0.26(1.15)	-0.03	-0.25(1.17)	-0.03	-0.23(1.17)	-0.03	-0.28(1.10)	-0.04
Infant temperament	-1.05(0.72)	-0.22	-1.10(0.83)	-0.23	-0.56(0.95)	-0.12	0.34(0.96)	0.07
Child gender	-2.54(2.41)	-0.16	-2.53(2.45)	-0.16	-3.54(2.53)	-0.22	-3.64(2.38)	-0.23
Marital negative affect			0.12(0.99)	0.02	0.50(1.03)	0.09	-0.18(1.01)	-0.04
Fathers' negative emotion socialization					-0.01(0.49)	-0.01	0.33(0.48)	0.11
Mothers' negative emotion socialization					-0.12(0.85)	-0.29*	-1.74(0.83)	-0.41*
Competitive coparenting							3.99(1.64)	0.39**
F	1.03		0.76		0.87		1.69	
R^2	0.07		0.07		0.12		0.25	
$R^2\Delta$	0.00		-0.02		-0.02		0.10	

Note. *p <.05, **p <.001, boys coded as 0 and girls as 1

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