Coparenting, Temperament, and Emotional Understanding: Mediating and Moderating Models

Leading to the Development of Children's Behavior Problems

By

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Abstract

The current study examined the relationship between coparenting, temperament, emotional understanding and the development of externalizing and internalizing problems. Data from 240 families were used to determine if coparenting moderated and mediated the relationship between temperament and the development of behavior problems, as well as if emotional understanding mediated the relationship between coparenting and the development of behavior problems. Analyses found that lower levels of coparenting conflict and triangulation moderated the development of problem behaviors in children with difficult temperaments more so than higher levels of coparenting conflict and triangulation. Furthermore, coparenting conflict partially mediated the relationship between temperament and the development of internalizing and externalizing problems. Emotional understanding, on the other hand, was not significantly correlated with coparenting or the development of behavior problems after controlling for the child's age. Findings highlight how child characteristics can interact with family dynamics to increase or decrease the likelihood of the development of behavior problems.

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It is widely accepted that a child's immediate family has a profound relationship with his/her development. Parents play a key role in providing the "nurture side" of a child's development. There are many ways, however, that parents provide this influence. Some are more direct, such as parenting styles or the parent-child relationship, and some are indirect, such as the marital relationship. In fact, many studies have examined the associations between mother-child or father-child relationships and the child's development. Similarly, there has been much research on the ways that a positive or negative marital relationship can affect developmental outcomes. Only recently have researchers studied coparenting and its role in children's development.

Coparenting

Gable, Crnic and Belsky (1994) define coparenting as "the extent to which spouses function as partners or adversaries in the parenting role" (p. 380). This is seen as parents supporting or undermining their partner's parenting decisions or styles, and the way in which parents interact with one another while with their child. Coparenting is seen as a unique aspect of the family, with the potential to affect the family members in a manner distinct from the marital relationship or a parent-child dyad (McHale, 1997). Coparenting looks at the degree to which parents' interactions are supportive or are hostile and competitive, as well as differences in the amount of each parent's involvement (Schoppe, Mangelsdorf & Frosch, 2001). "Mutual support and commitment to parenting the child" in a way that includes both partners' individual parenting preferences leads to a successful coparenting alliance (McHale, 1995, p. 985).

Children are sensitive to conflicting behavior and emotions from adults and can sense unsupportive coparenting dynamics (McHale, 1995). The quality of the coparenting alliance can

impact children's development (Gable, Crnic, & Belsky, 1994), even though it is not necessarily directed at the child. Research has demonstrated the negative impact that marital conflict can have on a child's developmental outcomes (Gable, Crnic and Belsky, 1994; Schoppe-Sullivan, Schermerhorn & Cummings, 2007), and also the interaction between parents as they coparent their child (McHale & Rasmussen, 1998). For example, Karrenman, van Tuijl, van Aken and Dekovic (2008) found that preschoolers had lower levels of effortful control in families with more hostile and competitive coparenting. Additionally, they found that "coparenting contributed over and above maternal and paternal parenting" (p. 35). McHale and Rasmussen (1998) also found that hostile-competitive coparenting behavior among parents with infants predicted teachers' ratings of child aggression three years later. Furthermore, Belsky, Woodworth and Crnic (1996) found that parents exhibiting unsupportive coparenting had more difficulty disciplining and controlling their toddlers, and had toddlers who showed higher levels of externalizing behavior problems. Therefore, the main goal of this thesis was to examine the role of coparenting in the development of children's internalizing and externalizing behavior problems.

Influences on Coparenting and the Resulting Effects

Because coparenting involves both the direct and indirect ways parents interact with their child, there are many possible factors that could influence the interactions and resulting coparenting quality. For example, marital satisfaction often declines and conflict increases when couples experience the transition to parenthood, and this change could potentially lead couples to engage in more unsupportive coparenting (Belsky & Hsieh, 1998). Belsky and Hsieh (1998) discuss the possibility that it is unsupportive coparenting that causes marital distress, which, in

turn, leads to more unsupportive coparenting. It is sometimes difficult to distinguish which is the main causal factor that leads to the type of coparenting exhibited by a couple.

Some studies have looked at the influence various parent characteristics could have on the quality of coparenting and its effects. Belsky, Crnic, and Gable (1995) found that more unsupportive coparenting occurred among couples who differed in certain personality and relatedness measures. More unsupportive-emotional coparenting was seen in couples with a greater difference in extroversion and interpersonal affect measures. Another study by Schoppe, Mangelsdorf and Frosch (2001) demonstrated how supportive coparenting could be seen as a buffer in a child's development of externalizing behavior problems in families with low levels of positive affect or high levels of negative affect.

Other studies have looked at child characteristics in relation to coparenting behavior. For example, researchers have found mixed results when looking at the effect of child gender on coparenting. Stright and Bales (2003) found no effects of child gender on coparenting behavior, but McHale (1995) found more hostile-competitive coparenting among maritally distressed couples with boys, and larger discrepancies in parental involvement among maritally distressed couples with girls. This means that if boys and girls influence coparenting behavior differently, they also experience the effects of coparenting differently.

Temperament and Coparenting

Like gender, temperament is another child characteristic that greatly influences child development. Bates (1989) defines temperament as "biologically rooted individual differences in behavior tendencies that are present early in life and are relatively stable across various kinds of situations and over the course of time...manifest largely in the context of social interaction" (p. 4). Thus, temperament helps to guide how children react in a given situation. These different

reactions have been shown to lead to different emotional, behavioral and scholastic outcomes (Rutter, 1982). Researchers have classified these various reaction patterns and behavioral tendencies into different temperamental categories, but with varying names. However, overall, children with irregular behavior, a general negative mood, and difficulty adapting are at a greater risk of developing problem behaviors (Rutter, 1982). Researchers have often categorized children with this combination of behavior patterns as having a "difficult" temperament (Bates, 1989).

Rutter (1982) discusses how the temperament of children can influence how others respond to them, and more specifically, Rothbart (1989) argues that temperament greatly influences the dyadic relationship between parent and child. Putnam, Sanson and Rothbart (2002) cite several studies where parents and/or parenting have affected the behavioral outcomes of children with a given temperament. For example, they cite Cameron (1978), who found that children classified as "difficult" at twelve months experienced more behavioral problems two years later if they experienced poorer parenting. Additionally, they cite Crockenberg (1987), who found that irritable infants experienced more behavior problems as toddlers if they had punitive mothers than if they had less angry mothers. Putnam et al. (2002) also argue that more adaptable and easy-to-soothe infants will elicit warmer parenting than those classified as "difficult." Furthermore, they cite Calkins and Johnson (1998), who observed more aggression as a result of child frustration, and an even stronger correlation between child frustration and aggression when the child had a greater amount of maternal interference. Finally, Wolkind and De Salis (1982) demonstrate how a child's temperament can impact the parent, which in turn, impacts the child. In their study, they found that children classified as "negative mood/irregular" had mothers who were more physically exhausted, which they suggest can greatly influence parenting.

Though much research has shown a connection between child temperament and individual parenting and the parent-child dyad, previous research on the relationship between temperament and coparenting has yielded mixed results. Schoppe-Sullivan, Mangelsdorf, Brown and Sokolowski, (2007) found no significant relationship between coparenting behavior and a child's temperament. However, the preliminary report for their study "found that parents of more temperamentally extreme infants displayed both less supportive and less undermining coparenting behavior" (p. 83). Similarly, Berkman, Alberts, Carleton and McHale (2002) found more coparental cooperation among parents with temperamentally difficult children. Still, others have found no significant associations between a child's difficult temperament and the presence of more supportive coparenting (Stright & Bales, 2003).

As a result of the current inconclusive findings of the connection between temperament and coparenting, but the many findings connecting temperament and individual parenting, the first aim of this study was to examine relations between coparenting, the child's difficult temperament and behavioral problems. The role of coparenting will be examined in two ways. First, I will examine whether coparenting moderates the relation between a child's difficult temperament and the development of behavior problems. I predict that supportive coparenting will buffer the effect of a child's difficult temperament on behavior problems and unsupportive coparenting will exacerbate the effect. Second, I will examine whether coparenting mediates the difficult temperament and behavior problem relationship such that the direct association between a difficult temperament and a child's behavior problems is due to the indirect mediating path with unsupportive coparenting. I discuss the basis for each of these models below.

Coparenting as a Moderator of Difficult Temperament on the Development of Behavior Problems

The second aim of this study was to assess whether coparenting events moderate the relationship between temperament and the development of problem behaviors. Previously, other research has found moderators between difficult temperament and the development of problem behaviors. For example, Berdan, Keane, and Calkins (2008) found that girls with the temperamental aspect of surgency/extraversion experienced externalizing problems only when they had an inaccurately perceived high acceptance with peers. However, girls with the same temperamental aspect experienced far fewer externalizing problems when they had an accurately perceived high acceptance with peers. In this finding, accuracy of perception of high peer acceptance acts as a moderator between temperament and behavioral outcomes.

Schoppe-Sullivan et al. (2007) suggest that the quality of coparenting can determine the "goodness-of-fit" for a child's temperament, such that positive coparenting supports the child's temperament, but negative coparenting conflicts with it. In their study, high marital quality buffered the potential effects of a difficult temperament by helping the child and family reach a 'goodness of fit,' with supportive coparenting. Marital quality moderated the effect between temperament and the achievement of supportive coparenting, or what they suggest as a 'goodness- of-fit.' Furthermore, Maziade et al. (1990) found that family functioning moderated the relationship between temperamentally difficult children and the development of problem behaviors. Difficult children in high functioning homes experienced far fewer behavioral problems than temperamentally difficult children in dysfunctional homes. Thus, it is possible that coparenting, an aspect of family functioning and a possible reflection of 'goodness to fit'

(Shoppe-Sullivan et al., 2007), moderates the relationship between a child's difficult temperament and the development of problem behaviors.

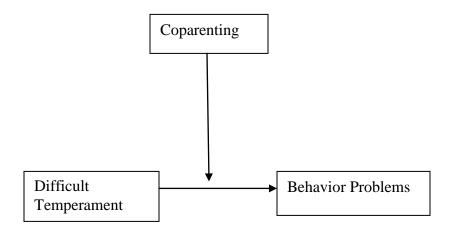


Figure 1: Coparenting moderating the effect of difficult temperament on the development of behavior problems.

Figure 1 presents a model in which coparenting acts as a moderator of the relationship between a child's difficult temperament and behavior problems. With this model, the link between children's behavior problems and their difficult temperaments will differ based on the coparenting relationship. Therefore, I predict that, as Schoppe-Sullivan et al. (2007) found with marital quality and Maziade et al. (1990) found with family functioning, supportive coparenting will act as a buffer for the development of problem behaviors in temperamentally difficult children while unsupportive coparenting will intensify its effects.

A Meditational Model of Temperament and Coparenting

The third aim of this study was to determine if, in addition to moderating, it is possible that coparenting could mediate the relationship between a child's difficult temperament and behavior problems. As was previously mentioned, Rutter (1982) argues that a child's characteristics can greatly impact how others respond to them. In a study by Stevenson-Hinde

and Simpson (1982), researchers found that children classified as difficult had mothers who were more anxious, as well as inwardly and outwardly irritable, and that the difficult children also had more negative feelings about themselves and their mothers. It is possible that the irritable and anxious mothers promoted the negative feelings in their children, but were only made anxious and irritable as a result of their children's difficult temperaments. In this study, feelings expressed by the mother act as a mediator between a difficult child and the development of negative feelings.

The Stevenson-Hinde and Simpson (2002) study concerns maternal feelings as a mediator, but Rothbart (1989) argues that temperament strongly influences the parenting relationship between the parent and child starting at birth, and that parenting then shapes the behavioral responses by the child. Although this study focuses on parent-child dyads, it is possible that temperament influences coparenting behavior in the same way.

Previous research has produced mixed results in terms of whether the child's temperament affects coparenting (Lindsey, Caldera & Colwell, 2005; Shoppe-Sullivan et al., 2007). Schoppe-Sullivan et al., (2007) cite McHale et al. (2004) as finding no relationship between difficult temperament in infants and coparenting behavior. Stright and Bales (2003) also found no significant relationship between temperament and coparenting in their study on preschoolers. Lindsey et al. (2005), on the other hand, found a child's difficult temperament to have an impact on fathers in the coparenting alliance. In this case, the father's reaction to the difficult child could potentially lead to unsupportive coparenting, which, in turn, produces the problem behaviors exhibited by the child. In this scenario, coparenting can be viewed as a mediator between temperament and the development of externalizing and internalizing symptoms.

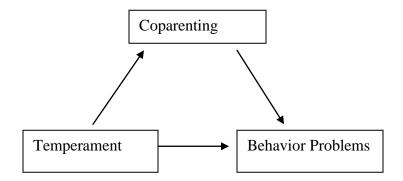


Figure 2: Coparenting as the mediating factor between temperament and behavior problems.

Figure 2 shows a meditational model where coparenting acts as the mediator between children's temperaments and their behavior problems. With this model, I predict that aspects of a child's temperament will lead to developmental outcomes because of temperament's effect on coparenting. The supportive or unsupportive coparenting that results because of the child's temperament will then determine if a child develops internalizing or externalizing problems. *Emotional Understanding and Children's Behavior Problems*

In addition to temperament, another varying aspect of a child that has implications for development is the extent to which they understand emotions. Brown and Dunn (1996) affirm "substantial variability has been observed across children in the onset and extent to which they correctly infer the relations between situations and four basic emotions" (p. 790). They mention various factors relating to this variability, including family relationships, family emotion talk, social class and language ability.

Emotional understanding is very important for children's social lives and developing relationships with others. It has also been linked to the quality and quantity of pretend play, peer interactions, social skills, moral sensibility, later peer popularity and a more sophisticated understanding of feelings (Cutting & Dunn, 2002; Dunn, 2000). However, an understanding of

emotions can also have potentially negative effects on a young, developing child. Cutting and Dunn (2002) found that children with an early understanding of emotions and of the mind led to an increased sensitivity to criticism in kindergarten. Furthermore, those with an advanced understanding of emotions were better able to interpret their own emotional response and rated their own abilities as much lower after receiving criticism than those with a less developed understanding of emotions.

Another important finding in the research on young children's emotional understanding, is that children's understanding of specific emotions is somewhat based on the relationship that the child has with a specific person. For example, Dunn and Hughes (1998) found that naming reasons why their mother became sad was difficult, but naming reasons why she became angry was much easier for four-year-olds. In contrast, naming reasons friends felt sadness was much easier than giving reasons for their anger. Furthermore, these findings indicate that a child's understanding of emotions often results from direct observations and experiences with others. Dunn and Hughes noticed that children often cited parental conflict as a source of negative emotions, especially for the mother, and that "at the age of four years, children already have such a clear picture of some aspects of their parents' emotional lives" (p.188).

Davies and Cummings (1998) developed an "emotional security hypothesis" to explain the effect that negative marital relations have on a child's developmental outcomes. This hypothesis states that "destructive marital relations compromise children's adjustment by threatening their sense of emotional security" (p. 124), and assumes that protecting and upholding a sense of emotional security is a motivating goal that directs children's behaviors and reactions. In the presence of stressful parental emotions, emotional insecurity may cause children to react by over-involving themselves in interparental conflict or by completely

withdrawing to avoid exposure to the threat. Emotional insecurity also fosters the development of insecure internal representations of family relations, which include fears of further conflict, violence and the possibility of divorce.

Emotional Understanding as a Mediator

The fourth aim of this study, then, was to determine if a child's emotional understanding mediated the relationship between coparenting and the development of problem behaviors. Children's interpretations and actions are important features of Davies and Cummings' emotional security hypothesis. Whether children have the ability to interpret the emotions expressed by their parents, and whether they are able to respond to them in an appropriate way, greatly impacts whether or not they will develop internalizing or externalizing behavior problems. Thus, emotional understanding may act as a mediator between the marital behavior and the development of behavior problems. Children's interpretations of the affect and behavior of their parents differ based on their ability to understand parental emotions.

Although Davies and Cummings looked at marital relations in developing their emotional security hypothesis, it is possible that emotional understanding could act as a mediator between coparenting behavior and the development of problem behaviors. Belsky, Putnam and Crnic (1996) found that high levels of unsupportive coparenting led to lower levels of inhibition in children, and suggested that the reason for this outcome was the child's interpretation and reaction to the coparenting events. Therefore, depending on how children interpret and react to coparenting events could greatly influence the effects coparenting has on the child. If children have a greater understanding of emotional expressions and influences, they may be more aware of how their parents interact in relation to them. This could then potentially worsen the effects that unsupportive coparenting has on a child's development, or perhaps buffer the effect if the

knowledge helps him/her cope with the event. On the other hand, a lack of emotional understanding could protect children if they are less aware of negative coparenting events, or it could worsen the effects if children feel more insecure because of the expression of negative emotions in the family with no clear ability to understand and interpret the situation. Figure 3 illustrates this meditational model where emotional understanding acts as the mediator between coparenting and children's behavior problems.

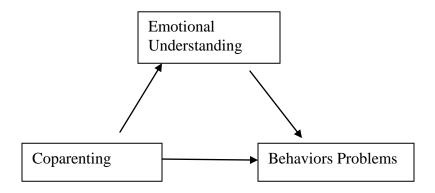


Figure 3: Emotional understanding as the mediating factor between coparenting and behavior problems.

Even though we know that emotional understanding is related to children's age (Denham, 1986), it could act as a mediator even when controlling for age. Brown and Dunn (1996) found that individual differences in emotional understanding remained fairly stable in children from age three to six. They suggested possible early experiences, such as "the child's participation in discourse about feelings and causality, observations of positive interaction between the child and the sibling, family socio-economic status and the child's language ability" (p.790) could explain discrepancies in children's understanding of emotions. Thus, if children have difficulty understanding the coparenting events they observe, and do not improve their interpretations relative to their age, they may experience more negative developmental outcomes because of their limited grasp of understanding parental emotion and behavior. On the other hand, it is also

possible that a more advanced understanding of emotions could lead to more recognition of the negative coparenting events and result in the development of behavior problems. Therefore, based on Belsky, Putnam, et al.'s (1996) study and Davies and Cummings' emotional security hypothesis, I predict that emotional understanding will mediate the relationship between coparenting and the development of behavior problems, such that a more advanced understanding of emotions will lead to a larger amount of behavior problems when children experience unsupportive coparenting.

In sum, with this study I would like to further investigate the effects that coparenting has on children's development of externalizing and internalizing problems. There are four main questions I am addressing. (1) What is the relationship between coparenting, a child's difficult temperament and behavior problems? I predict that there is a positive association between a child's difficult temperament and the development of externalizing and internalizing behavior problems, such that a child rated higher on difficult temperament measures will also exhibit more internalizing and externalizing problems. I also predict that a child rated higher on measures of difficult temperament will have parents who exhibit more negative coparenting, and that negative coparenting will be positively correlated with behavior problems. (2) Does coparenting moderate the effect that a child's difficult temperament has on the development of externalizing and internalizing problems? I predict that coparenting events will moderate the effect that a difficult temperament has on the development of problem behaviors, such that supportive coparenting will buffer the effects of a difficult temperament while unsupportive coparenting will worsen the development of behavior problems. (3) Does coparenting mediate the relationship between temperament and the development of externalizing and internalizing problems? I expect that coparenting will mediate the effect that a difficult temperament has on

the development of problem behaviors, such that a difficult temperament will lead to unsupportive coparenting, which, in turn, will lead to the development of behavior problems.

(4) Does emotional understanding mediate the effect that coparenting has on the development of externalizing and internalizing problems? I predict that emotional understanding will mediate the effect that coparenting has the development of externalizing and internalizing problems, such that the child's emotional interpretations of, and reactions, to coparenting events will be what leads to the development of, or lack thereof, behavior problems.

Method

Participants

Participants for this study included 240 co-habitating or married couples where the mother was pregnant with their second child (The Family Transitions Study). These families were recruited through postings at local hospitals and OBGYN clinics, and by advertisements in newspapers and magazines. Families were eligible for the study if: (1) the couple was living together or married; (2) the couple had one child with no known developmental delays; (3) the mother was pregnant with her second child, without any pregnancy complications; (4) the father was the biological father of the unborn child; (5) the mother had no health problems or concerns, and (6) English was the primary language spoken in the home.

The couples were married or together an average or 5.7 years (SD = 2.7 years), with an average age of 33 years for fathers (SD = 4.8 years) and 32 years for mothers (SD = 4.2 years). The average age of the older sibling was 30 months (SD = 10.2 months), with 54.2 % girls and 45.8 % boys. About 10% of the families had a household income of \$35,000 or less, about 30% of families fell between \$35,000 and \$70,000, 27% of families had incomes between \$70,000 and \$100,000, and 33% had incomes over \$100,000. The majority of the mothers identified as

European White (86.7%), while 5.4% identified as African American or Black, 3.8% as Hispanic, 1.7% as Asian American, and 5.8% as other. Similarly, 87.9% of the fathers identified as European White, 5% as African American or Black, 2.9% as Asian American, 2.9% as Hispanic, 0.4% as American Indian or Alaska Native and 3.3% as other. Eighty three percent of the mothers had at least a Bachelor's degree, 34.6% of the mothers completed a Master's degree, 11.2% had a degree greater than a Master's, 10.8% of the mothers had some college experience, 2.5% possessed an Associate's Degree, 2.1% had a high school degree, and 0.8% had a vocational or technical degree. Seventy nine percent of the fathers had at least a Bachelor's degree, 29.2% had a Master's degree, 12.5% had greater than a Master's degree, 10.8% of fathers had completed some college, 3.8% had Associate's degrees, 3.3% had a vocational or technical degree, 2.5% had a high school degree, and 0.4% of fathers had less than a high school degree.

Procedure

The Family Transitions Study involves a total of eight home visits and two laboratory visits starting when the mother is in her third trimester of pregnancy and continuing through the first year of the younger sibling's life. The home visits take place at the prenatal, one-month, four-months, eight-months and twelve-month time points, while the laboratory visits take place when the younger sibling is twelve- and thirteen-months. The data used in this particular study come from the two prenatal home visits.

On the first prenatal home visit, the family is video-taped playing together, the child is given a theory of mind assessment, and the parents are interviewed about their family life, including employment information, daycare, daily hassles, and their child's eating and sleeping habits. On the second home visit, the parents complete a card sorting task to assess attachment,

while the child is given an emotional understanding assessment. Additionally, between the first and second home visits, parents complete questionnaires regarding their child's behavior and temperament, as well as questionnaires about their marriage, parenting beliefs and coparenting practices. The current investigation focuses on the parent self-report questionnaires and the emotional understanding assessment.

Measures

Coparenting. The Coparenting Questionnaire (Margolin, Gordis & Jonn, 2001), completed by both husbands and wives about their spouse, was used to assess three aspects of coparenting: conflict, cooperation, and triangulation. All items were answered on a 5-point scale ranging from 1(never) to 5(always). The *conflict* subscale (five items) indicated the amount of disagreements surrounding parenting and how much one parent undermines the other's parenting, $\alpha = .73$ and .74 for husbands and wives, respectively. A sample item from this subscale was "My spouse and I have different rules regarding food, bedtime or discipline for our child." The *cooperation* subscale (five items) measured the extent to which husbands and wives share the responsibilities of parenting, and the extent to which they value, respect and support each others' parenting, $\alpha = .66$ and .78 for husbands and wives respectively. A sample item from this subscale was "My spouse asks my opinion on issues related to parenting our child." The triangulation (four items) subscale indicated the degree to which a parent forms a coalition with their child that undermines and/or excludes the other parent, $\alpha = .63$ and .41 for husbands and wives respectively. A sample item from this subscale was "My spouse uses our child to get back at me." Scores were averaged across items for each scale.

Temperament. The Child Behavior Questionnaire (Rothbart, Ahadi, Hershey & Fisher, 2001) was completed by both parents and used to assess five aspects of temperament:

Anger/frustration, falling reactivity and soothability, activity level, attentional focusing, and shyness. This investigation focused on the anger/frustration and soothability subscales. All items were answered on a 7-point scale ranging from 1(extremely untrue) to 7(extremely true). The anger/frustration subscale (thirteen items) measured the amount of negative emotions the child experiences when ongoing tasks are interrupted or goals are blocked, $\alpha = .73$ and .77 for fathers' and mothers' answers, respectively. Sample items included "Has temper tantrums when s/he doesn't get what s/he wants" and "Gets angry when told s/he has to go to bed." The falling reactivity and soothability subscale (13 items) indicated the speed of recovery from a high point of distress, excitement or general arousal, $\alpha = .76$ and .77 for fathers' and mothers' answers respectively. Sample items included, "Is easy to soothe when s/he is upset," and "Has a hard time settling down for a nap." Mothers' and fathers' scores were averaged to create more robust composites of each child's temperament.

Emotional understanding. This measure was obtained by calculating the sum across items designed to look at the increasing level of a child's emotional understanding. The tasks included nine levels of emotional understanding. The first task, Affective Labeling, tested children's abilities to correctly label emotions on felt faces (methodology taken from Denham, 1986). The first part asked the child to produce the word describing the emotion on the felt face that the experimenter pointed to (i.e. "How does she feel when she wears this face?"), and the second part of the task required the child point to the felt face expressing the emotion described by the experimenter (i.e. "Show me the face where she feels happy"). The emotions on the felt faces were happy, sad, mad/angry, and scared. Children received two points for the correct response, one point for the correct positive or negative valence, and zero points for an incorrect response.

The second task, methodology also taken from Denham (1986), was the Stereotypical Reaction Puppet Task. In this task, the experimenter acted out four vignettes with puppets without faces, giving the child facial and emotional cues. The emotions expressed in the vignettes in this task were similar to what most children would feel in the same situation (i.e. Scared when alone in the dark). The child was then asked to find the face that the puppet was feeling and put it on the puppet's face. The four vignettes described four different emotions: happy, sad, mad/angry, and scared. Scoring for the task was the same as the affective labeling task.

The third task, methodology taken from Wellman and Woolley (1990), was the Desire-Based Emotion Task. In this task, stories were read of characters who want to find something, and the stories end with the character either finding the wanted item, not finding it, or finding something else in its place. The child was then asked if the character feels happy or sad, and the child received one point for a correct response and zero points for an incorrect response.

The fourth task, methodology taken from Denham (1986), was the Non-Stereotypical Reaction Puppet Task. This task was similar to the second task, but the puppets in the vignettes had emotional responses that were the opposite of how the child would react, according to the child's mother. For example, before the assessment, the mother was asked if her child would feel happy or scared if a large dog was running toward him/her. If the mother answered that her child would be scared, the puppet in the vignette was happy when the big dog was running toward him/her. As with the second task, the puppets did not have faces, so after listening to the experimenter act out the vignette with obvious facial and emotional cues, the child was asked to find the face that showed how the puppet was feeling and put it on the puppet's face. The scoring was the same for this task as it was for the Stereotypical Reaction Task, where the child

received two points for a correct response, one point for the correct valence, and zero points for an incorrect response or no response.

The fifth, sixth and seventh tasks were part of the Belief-Based Emotion Task, methodology taken from Vinden (1999). These tasks required that the child understand a character's beliefs and how those beliefs would influence the character's actions and feelings. The fifth and sixth tasks tested the child's knowledge of false-beliefs, using a story where the experimenter showed the child two boxes: one was a crayon box with crayons in it, and the other was a plain, empty box. The experimenter then told the child that he/she was going to play a trick, and switched the crayons from the crayon box to the plain box. For the fifth task, the False-Belief Explanation task, the character, Fred, wanted to color in his coloring book, but Fred did not see the experimenter switch the crayons to the plain box, so he looked in the empty crayon box. The child was then asked how Fred would feel before looking for his crayons and asked to explain why Fred looked for the crayons in the crayon box. The child received one point for the correct emotion and one point if the explanation referred to thoughts. The experimenter then asked the child how Fred would feel after he looked for the crayons and if the crayons were really in the crayon box or not. The child was given one point for the correct emotion and one point for the correct "no" response.

The sixth task, the False-Prediction Task, continued the story, but with the character, Pam, instead of Fred. The child was told that Pam, like Fred, did not see the trick by the experimenter, and that Pam wanted to color in her coloring book as well. This task required the child to make predictions about Pam's actions and emotions based on her false-belief. The child was asked where Pam would look for the crayons, how she would feel before and after looking

for the crayons, and if Pam would find the crayons. The child was given one point for a correct response and zero points for an incorrect response.

Unlike tasks five and six, the seventh task, the True-Belief Prediction Task, used a story where the character's beliefs were true instead of false. The experimenter showed the child a band-aid box, with band-aids in it, and a plain, empty box. This time the experimenter left the band-aids in the band-aid box instead of playing a "trick," as with the crayons in tasks five and six. The experimenter presented the character, Linda, who had a cut and wanted a band-aid. As with the sixth task, the child was asked where Linda would look for the band-aids, how she would feel before and after looking for the band-aids, and if she would find the band-aids. The child received one point for a correct response and zero points for an incorrect response.

The eighth task, methodology taken from Jones, Abbey and Cumberland (1998), was the Emotion Display Rules Task. This task tested the child's ability to understand that people can have an internal feeling that does not match their external expression of emotion. The experimenter told the child three stories, each of which described a character (gender-matched with the child), who felt one emotion on the inside, but expressed a different emotion on his/her face. For example, in one of the stories, Jimmy received a present from his grandmother that he did not like. The child was then asked how Jimmy would feel on the inside and how he would look on his face. The child was given facial expression and internal feeling response cards to answer these questions. Each facial response card illustrated one of four emotions: happy, sad, angry or just okay. Each internal emotion card had a character without a face, but with one of the four facial expressions drawn on its chest. After using the cards to identify the character's internal feeling and external expression, the child was asked to explain why the character felt one emotion (identified by the child) on the inside, and why the character expressed the emotion, as

labeled by the child, on the outside. The child received one point for correctly labeling each emotion, and one point for an appropriate explanation.

The ninth, and final, task was the Mixed Emotion Task, methodology based on Gordis (1989). This task included three stories, which tested the child's ability to understand and explain how a person might feel two emotions at the exact same time. For example, in one of the stories, Jane was going to the zoo with her parents, but her father became ill right before the outing. Her mother was still going to take her to the zoo, but the story explained that Jane felt both happy and sad about her outing to the zoo without her father. The experimenter asked the child if he/she could explain why Jane felt both happy and sad. The child received one point for answering, "Yes," and zero points for answering, "No." The child's explanation was then coded to determine the child's level of understanding of the ability to feel more than one emotion at the same time. However, in this study, the explanations were not used, so only the points awarded for the yes/no responses were included in the child's score for the assessment. For purposes of analysis, each of the nine tasks completed correctly was counted as one point, so a total of 9 possible points were awarded.

Externalizing and internalizing behavior problems. The Child Behavior Checklist (Achenbach & Rescorla, 2000) was completed by both parents and used to assess the extent to which their child experienced externalizing or internalizing problems. The questionnaire had ninety-nine items answered on a 3-point scale: 0 (not true), 1(somewhat or sometimes true) and 2(very true or often true). The externalizing problem dimension included 24 questions about aggressive behaviors and attention problems $\alpha = .88$ and .89, for mothers' and fathers' responses, respectively. Sample items included, "Hits others," "Disobedient," and "Can't concentrate, can't pay attention for long." The internalizing problem dimension included 36 questions about the

child's emotional reactivity, tendency to withdraw and anxious/depressed symptoms, $\alpha = .78$ and .77, for mothers' and fathers' answers, respectively. Sample items included, "Disturbed by change in behavior," "Clings to adults or too dependent," and "Avoids looking others in the eye." Because correlations between mother and father responses were significant high (r = .35*** for externalizing problems, and r = .26*** for internalizing problems), their responses were averaged to determine the child's score on each of these dimensions. Table 1 presents descriptive statistics for all variables used in analyses.

Results

Preliminary Analyses

Correlations were conducted between the child's age, coparenting measures (cooperation, triangulation, conflict), difficult temperament measures (anger/frustration and soothability), and behavior problem measures (internalizing and externalizing problems). Correlations between all variables are presented in Table 2.

The Association between Coparenting, Difficult Temperament and Behavior Problems

The first aim of the study was to determine the relationship between coparenting, a child's difficult temperament and the development of behavior problems. Correlations revealed that coparenting cooperation was negatively associated with coparenting triangulation, coparenting conflict, internalizing problems and externalizing problems, and positively associated with soothability. Coparenting triangulation was positively associated with child age, coparenting conflict, and internalizing problems, and negatively associated with soothability. Coparenting conflict was positively associated with internalizing problems, externalizing problems, and anger/frustration, and negatively associated with soothability. Anger/frustration was positively associated with child age, internalizing problems, externalizing problems and

emotional understanding scores, and negatively associated with soothability. Soothability was negatively associated with child age, internalizing problems, externalizing problems, and emotional understanding scores. Emotional understanding was also positively correlated with child age and internalizing problems. Internalizing problems were positively associated with child age, and externalizing behavior problems.

Coparenting as a Moderator of Temperament and Behavior Problems

The second aim of this study was to see if positive coparenting events moderated the potential negative effects of a difficult temperament, or if negative coparenting events worsened the effects of a difficult temperament when predicting children's problem behaviors. To examine moderation, a median split was conducted on each of the coparenting measures (cooperation, triangulation, and conflict) to establish a high and low group. Correlations were run within the high and low groups for each temperament and behavior problem measure to determine if the association existed for one coparenting group, but not the other. Correlations were then tested using Fisher's r to z transformation to determine if the correlations were significantly different from one another. There was a significant difference for four of the models (presented in Table 3). Somewhat surprisingly, anger/frustration was more highly correlated with externalizing problems when there was less coparenting conflict and triangulation. Likewise, soothability was more negatively correlated with both externalizing and internalizing problems in families with lower scores of parental triangulation.

Coparenting as a Mediator of Temperament and Behavior Problems

The third aim of this study was to see if coparenting acted as a mediator between a temperamentally difficult child and the development of behavior problems. Correlations were run between the two temperamental measures (anger/frustration and soothability), the three

coparenting measures (cooperation, triangulation and conflict), and the two possible outcome behaviors (externalizing and internalizing problems) while controlling for the child's age. Based on the correlations, five models qualified for mediation testing (see Baron & Kenney, 1986). To qualify for mediation, (1) the temperamental measure (predictor variable) had to significantly correlate with the coparenting measure (mediating variable) and (2) with the behavior problem measure (outcome variable), and (3) the coparenting measure (mediating variable) had to significantly correlate with the behavior problem measure (outcome variable). The five models tested were as follows: (1) Coparenting conflict mediating the relationship between anger/frustration and internalizing problems; (2) Coparenting conflict mediating the relationship between soothability and internalizing problems; (4) Coparenting conflict mediating the relationship between soothability and internalizing problems; and (5) Coparenting conflict mediating the relationship between soothability and externalizing problems.

To determine if mediation occurred in these models, regression analyses were performed to see if the fourth and final requirement of mediation was fulfilled: when the association between the temperamental measure and the coparenting measure, as well as the association between the coparenting measure and behavior problem measure are controlled, a significant correlation between the temperamental measure and the behavior problem measure should not exist, or at a minimum be reduced in magnitude.

For the first model tested, as presented in Figure 4, the correlation between frustration/anger and the development of internalizing behaviors did decrease from .42 to .37 after controlling for coparental conflict. The correlation of .37 was still significant, meaning that this decrease did not constitute complete mediation. However, it is possible that the decrease

could provide evidence for partial mediation. To see whether this change was significant, a Sobel test was performed. The *t*-statistic from the Sobel test was 2.37 with a *p*-value of 0.02. Therefore, the change in correlation was significant and partial mediation was confirmed.

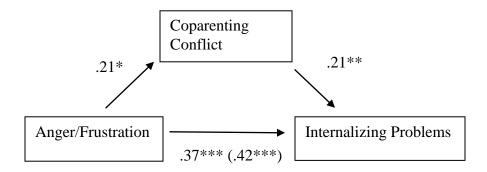


Figure 4: Mediation of anger/frustration and internalizing problems.

The second model, similar to the first but with externalizing behavior as the outcome variable, also saw a decrease in magnitude (.58 to .54) of the association between anger/frustration and externalizing problems after controlling for coparental conflict (see Figure 5). This correlation was still significant, but because of the decrease in the magnitude of the association, it is again possible to have encountered partial mediation. To verify this, a Sobel test was performed, yielding a *t*-statistic of 2.27 with *p*-value of 0.02. Again, coparenting conflict partially mediated the relationship between anger/frustration and externalizing problems.

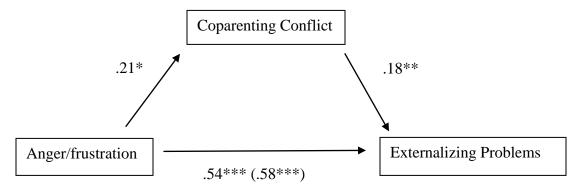


Figure 5: Mediation of anger/frustration and externalizing problems.

The third model tested the mediation of coparenting cooperation on the relationship of soothabilty and internalizing problems. With this model, there was no evidence of mediation.

The association between the mediating variable of coparenting cooperation and the outcome variable of internalizing problems did not remain significant after regression analyses.

The fourth model, as depicted in Figure 6, suggested coparenting conflict as a mediator of the relationship between soothability and internalizing behavior problems. The magnitude of the correlation between soothability and internalizing problems reduced from .34 to .27, however, the correlation was still significant. Because of the decrease in magnitude, a Sobel test was conducted to check for partial mediation. The *t*-statistic was -2.68 with a *p*-value of 0.01, suggesting that coparenting conflict does partially mediate the relationship between soothability and internalizing problems.

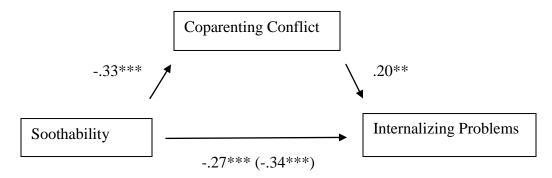


Figure 6: Mediation of soothability and internalizing problems.

The fifth model tested for mediation was similar to the fourth, but externalizing problems was the outcome variable instead of internalizing problems (see Figure 7). The magnitude of the relationship between soothability and externalizing problems decreased from -.44 to -.38 once coparenting conflict was entered, but, once again, the association remained significant. A Sobel test provided evidence for partial mediation with a *t*-statistic of -2.36 and *p*-value of 0.02.

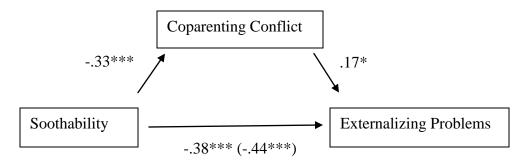


Figure 7: Mediation of soothability and externalizing problems.

Emotional Understanding as a mediator

The fourth aim of this study was to see if emotional understanding acts as a mediator between coparenting and the development of behavior problems. After controlling for age, emotional understanding did not correlate significantly with any coparenting measures or behavior problem measures. Therefore, requirements for mediation were not met, and there was no evidence that emotional understanding acted as a mediator between temperamental measures and behavioral outcomes.

Discussion

The first aim of the study was to examine relations between coparenting, a child's difficult temperament, and behavior problems. The second aim was to determine if coparenting moderates the relationship of a child's difficult temperament and the development of behavior problems. The third aim of the study was to see if coparenting mediated the association between a child's difficult temperament and the development of behavior problems. The fourth aim was to examine emotional understanding as a potential mediator between coparenting and the development of behavior problems.

Associations between Coparenting, Temperament and Behavior Problems

As expected, there was a positive correlation between the anger/frustration component of temperament and internalizing and externalizing problems, and a negative correlation between

soothability and internalizing and externalizing problems. This is consistent with findings by Rutter (1982). Similarly, consistent with previous research, (Belsky, Putnam, et al., 1996; Belsky, Woodworth, et al., 1996; Gable et al., 1994; Karrenman et al., 2008; McHale & Rasmussen, 1998), coparenting measures were significantly correlated with behavior problems.

Previous research has found mixed results in terms of the relationship between a child's temperament and coparenting. Findings in this study indicate a relationship between a difficult temperament and coparenting. Contrary to Berkman et al. (2002), who found more coparental cooperation among parents of difficult children, this study found that anger/frustration was significantly positively associated with coparenting conflict, while soothability was positively associated with coparental cooperation and negatively associated with coparental triangulation and conflict. Therefore, results in this study seem to indicate that more difficult children elicit negative coparenting, as opposed to the supportive coparenting seen by Berkman et al.

Coparenting as a Moderator of Temperament and Behavior Problems

This study found that certain aspects of coparenting did, in fact, moderate the relationship between temperament and the development of behavior problems, but results were somewhat contrary to my predictions. Based on the findings of Schoppe-Sullivan et al. (2007) and Maziade et al. (1990), I hypothesized that supportive coparenting (high in cooperation and low in triangulation and conflict) would act as a buffer in the development of behavior problems in temperamentally difficult children, while unsupportive coparenting (low in cooperation and high in triangulation and conflict) would worsen the effects of a difficult temperament on the development of behavior problems. However, analyses showed that a child's anger/frustration was more strongly correlated with the development of externalizing problems in families with low coparental triangulation and conflict. Likewise, a child's soothability was more negatively

correlated with the development of externalizing and internalizing problems in families low in coparental triangulation. Therefore, supportive coparenting did not appear to act as a buffer for children with difficult temperaments, and unsupportive coparenting did not necessarily exacerbate the positive association between a difficult temperament and the development of behavior problems.

Instead, I found that when coparenting is negative, the effect of a child's temperament on the development of internalizing or externalizing problems is dampened, but a child's difficult temperament plays a larger role in a child's behavioral outcomes in families with more positive coparenting. Although contrary to original predictions, these findings seem reasonable. The coparenting dynamic becomes a more potent factor in determining behavior problems when it is higher in conflict and triangulation, making the child's temperament a less important factor. Studies have shown the direct correlation between unsupportive coparenting and the development of behavior problems (Belsky, Putnam, et al., 1996; Belsky, Woodworth, et al, 1996; Gable et al., 1994; Karreman et al., 2008; McHale & Rasmussen, 1998), so it is possible that this relationship outweighs the relationship between difficult temperament and behavior problems when coparenting conflict is high.

Furthermore, it is possible that in situations of high stress, such as a family dynamic high in coparental conflict and triangulation, the significance of the child's temperament is replaced by, what Thomas and Chess (1989) label as, "defense mechanisms." They define defense mechanisms as "behavioral strategies which attempt to cope with stress or conflict which the individual cannot or will not master directly" (p. 253), and suggest that children may resort to these if their temperament does not allow them to meet environmental demands. Therefore, if the high levels of coparental conflict and triangulation are stressful to the child, and the child's

temperament make it difficult for him/her to cope, he/she may resort to the use of defense mechanisms. It is important to note that Thomas and Chess argue that this is not always an unhealthy response, nor does it always lead to the development of behavior problems. However, they assert that a chronic use of these mechanisms can lead to less desirable developmental outcomes. Although their study did not provide sufficient data to determine which types of temperament may lead to the use of each type of defense mechanism, it is plausible that children in the current study employed some of these defense mechanisms during times of high stress caused by negative coparenting, which resulted in the decrease in significance of their individual temperaments in the development of behavior problems.

Coparenting as a Mediator of Temperament and Behavior Problems

The third aim of this study was to determine if coparenting mediated the relationship between a child's difficult temperament and the development of internalizing and externalizing problems. Based on research findings that a child's temperament can affect the way others respond to them (Rutter, 1982), and evidence demonstrating the influence of child temperament on both parenting (Rothbart, 1989) and coparenting (Lindsay et al., 2005), I predicted that coparenting would mediate the relationship between a child's difficult temperament and behavior problems, such that the child's difficult temperament would lead to the unsupportive coparenting that caused the behavior problems. Analyses revealed that no aspect of coparenting fully mediated the relationship between temperament and behavior problems, but coparental conflict did partially mediate the relationship between both anger/frustration and soothability, and the development of externalizing and internalizing problems. Therefore, while a difficult temperament does somewhat impact the coparenting relationship, which, in turn, affects the development of behavior problems, these findings indicate that a difficult temperament continues

to play a role in a child's development of behavior problems independently from the coparenting relationship.

These findings are consistent with findings by Maziade (1989) on the relationship between dysfunctional parental behavior control and temperamentally difficult children in the development of behavior problems. Maziade found that in preschool-aged children, a difficult temperament and dysfunctional parental behavior control contributed both together and separately to the development of behavior problems. Therefore, it is conceivable that a child's difficult temperament makes contributions to the development of behavior problems both in conjunction with, and separately from, negative coparenting.

The findings in the current study also indicate that there may be more factors influencing the coparental response to the child than simply temperament. Rutter (1989) cites several studies with findings that certain child characteristics elicit different responses from parents. For example, he cites Cross, Nienhuys and Kirkman (1985) as finding that parents talked to their children differently based on language ability. He also cites findings by Goodman, Richardson, Dornbusch, and Hastorf (1963) and Lerner (1982) demonstrating that a person's physical appearance can affect others' reactions to him/her, and findings by Goldberg and Di Vitto (1983) indicating that mothers differed on their responses to preterm and full-term infants. Therefore, it is probable that temperament was not the sole contributor to the child's role in influencing the coparental relationship. Rather, it is likely that other child characteristics added to this effect, accounting for some of the resulting behavior problems.

Additionally, it is likely that coparenting is not the only mediator between a difficult temperament and the development of behavior problems, further explaining why only partial mediation was found. Several studies have illustrated the profound influence of temperament on

the dyadic relationship between a parent and child (Putnam et al., 2002; Rothbart, 1989), and how that influence can then impact how he/she parents the child (Wolkind & De Salis, 1982). The parenting of each individual parent can then affect the child's development. Therefore, it is possible that mothers' and fathers' individual parenting also mediates the relationship between temperament and behavior problems in addition to the coparenting relationship.

Emotional Understanding as a Mediator of Coparenting and Behavior Problems

The fourth goal of this study was to investigate the possibility that a child's emotional understanding could mediate the relationship between coparenting and the development of behavior problems. Based on findings by Davies and Cummings (1998) and Belsky, Putnam, et al. (1996), I predicted that emotional understanding would mediate the relationship between unsupportive coparenting and behavior problems, such that a more advanced understanding of emotions would allow the child to better interpret and internalize coparental conflict and triangulation, leading to the development of behavior problems. Contrary to my prediction, however, analyses did not support this suggestion of emotional understanding as a mediator.

One possibility for this finding is the young age of the children in this study. The average age of the children in the study was about thirty months, and there was a very strong correlation between age and emotional understanding scores (.79**). In fact, as previously mentioned, there were no significant correlations between emotional understanding and any of the other variables used in this study after controlling for the child's age. Therefore, it is difficult to separate the impact that emotional understanding has on the relationship between coparenting and behavior problems from that of the child's age.

It could also be the case that at such a young age, emotional understanding plays a less critical role in children's development. Davies and Cummings (1998) developed their emotional

security hypothesis in a study with children ages six through nine. Six- to nine-year-olds, not only possess greater cognitive skills, but have much greater verbal abilities than two- and three-year-olds, which aide in their emotional development. Therefore, because they have limited emotional understanding at such a young age, it may simply play a smaller role in their development than the school-aged children studied by Davies and Cummings.

Furthermore, toddlers have a much more limited ability to understand both the meanings and implications of emotions, and to demonstrate their knowledge of emotions in assessments, especially if they require verbal abilities. The assessment used in this study to determine a child's emotional understanding required that the child be able to talk, listen to stories, reason, and answer non-multiple choice questions. It is difficult to assess a child's level of emotional understanding if the child is having difficulties expressing words, in general. The young children may know and understand more than they are able to express. Consequently, their level of emotional understanding could be impacting their development, but assessments score the child very low because of a lack of verbal ability.

Finally, there were a total of forty six questions on the emotional understanding assessment used in this study, grouped together to form nine tasks. Each task was given a single score, leaving nine possible points available to each child. This method of scoring may have impacted the results. Had the scoring given each child a point for every question answered correctly, instead of just for the entirety of a task completed correctly, there would be a larger range of emotional understanding scores. This larger variability may have impacted correlations with the other variables examined in this study.

Limitations and Further Research

While this study had some very interesting findings, there are a few limitations to bear in mind. First of all, as mentioned above in considering emotional understanding scores, the age of the children in this study was very young. While the children's ages ranged from 10 to 67 months, 75% of the children were under the age of three, and 30% of the children were under the age of two. These children have limited cognitive abilities to interpret and process coparenting events, and will likely be affected differently at older ages as their cognitive abilities develop. Their limited verbal abilities, which certainly impact emotional understanding scores, as noted above, likely affect their understanding and reacting to coparenting events as well. Children also express aspects of temperament differently at different ages (Hagekull, 1989), which could affect the correlation of temperament with behavior problems, and the relationship between temperament, coparenting and behavior problems. This is not to say that young children are not affected by coparenting, as this study certainly found significant associations between temperament, coparenting and behavior problems. However, further research should consider a group of slightly older children, to determine if these children express temperamental differences, interpret and react to coparenting events, and use emotional understanding differently than the younger children in this study.

Second, the majority of the families enrolled in the study were Caucasian (86%), of the upper-middle class (50% of families \geq \$80,000/year), and had parents who had completed some level of post-secondary education (\geq 80%). Furthermore, all families resided in the south eastern part of Michigan. Therefore, further research in this area should include a more diverse sample of families, with a greater range in geographic region, race and socio-economic status.

Finally, it is also important to consider the methods used to obtain coparenting scores of cooperation, triangulation and conflict. Coparenting was assessed using a short questionnaire filled out by each parent about his/her spouse. Although, the measures were reliable, they still depended on the responses of each parent, which could be subjective. Observing and coding coparenting events may provide a more objective way to determine the coparental relationship. Future research should consider using a combination of these methods of measuring coparenting to obtain a more accurate account of coparental interactions.

Regardless of these limitations, this study had several important contributions. First of all, this study demonstrated the importance of looking at the family as a whole unit, and not simply considering child characteristics or parent-child dyads when looking at a child's development of behavior problems. Coparenting involves the triadic relationship between both parents and child as parents interact with each other to parent their child and interact directly with their child. This study added to the body of research illustrating how this relationship can uniquely impact a child's development of behavior problems (Belsky, Putnam, et al., 1996; Belsky, Woodworth, et al., 1996; Gable, Crnic & Belsky, 1994; Karrenman et al., 2008; McHale, 1995; McHale & Rasmussen, 1998). Furthermore, analyses demonstrated that coparenting can affect temperamentally difficult children's development of behavior problems by both moderating and partially mediating the relationship between their temperament and the development of internalizing and externalizing problems.

Secondly, with respect to emotional understanding, the study illustrated the strong relationship between a child's age and the child's level of emotional understanding. Because of this strong correlation, it seems that in the toddler years, emotional understanding does not play a key role in children's interpretations of coparenting events, nor does it affect how they respond

to coparenting. As discussed, a possible reason for this correlation was the link between emotional understanding and verbal ability, so it is conceivable that as children develop verbally, emotional understanding may become a more significant variable.

Finally, this study depicted the importance of considering children individually. Child temperament, and their expression of temperament, can impact both the coparenting relationship and the development of internalizing and externalizing problems. Even though certain coparenting aspects mediated the relationship between a difficult temperament and the development of behavior problems, it was not complete mediation, meaning that individual child dispositions still played a key role in their development of behavior problems. Furthermore, children's temperaments impact how their parents parent them, again stressing how individual child characteristics impact not only their own development, but their relationships with others. Considering a child as an individual, who makes unique impacts on his/her own development, is important for parents to help foster optimal development and avoid the development of behavior problems.

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Table 1

Descriptive Statistics of All Study Variables

Variables	Mean	SD	N
1. Child Age (Months)	29.87	10.15	240
2. Coparenting Cooperation	4.24	.48	230
3. Coparenting Triangulation	1.17	.28	230
4. Coparenting Conflict	1.80	.47	230
5. Internalizing Problems	6.53	3.70	228
6. Externalizing Problems	10.78	5.52	228
7. Anger/Frustration	4.22	.64	230
8. Soothibility	4.98	.60	230
9. Emotional Understanding Score	2.94	2.98	226

Table 2

Correlations among Child Age, Coparenting, Temperament and Emotional Understanding

Variables	1	2	3	4	5	6	7	8	9
1. Child Age	-								
2. Coparenting Cooperation	08	-							
3. Coparenting Triangulation	.18**	42***	-						
4. Coparenting Conflict	.13	51***	.47***	-					
5. Internalizing Problems	.28***	17*	.14*	.31***	-				
6. Externalizing Problems	.01	41*	.03	.29***	.53***	-			
7. Anger/Frustration	.17*	11	.06	.23**	.45***	.56***	-		
8. Soothability	27***	.22**	18***	36***	39***	41***	50***	-	
9. Emotional Understanding	.79***	10	.10	.13	.29***	.04	.18**	06***	-

Note: **p*<.05, ***p*<.01, ****p*<.001.

Table 3
Correlations Testing for Coparenting as Moderator of Temperament and Behavior Problems

	Cooperation					Triangu	angulation_			<u>Conflict</u>		
	r				r			r				
Correlations	High	Low	SE	z	High	Low	SE	z	High	Low	SE	z
Anger and Internalizing	.45***	.43***	.135	23	.45***	.46***	.134	.13	.40***	.45***	.134	.48
Anger and Externalizing	.60***	.51***	.135	96	.44***	.65***	.134	2.19*	.40***	.65***	.134	2.62*
Soothability and Internalizing	36***	37***	.135	09	21*	51***	.134	-2.67*	29**	39***	.134	84
Soothability and Externalizing	38***	41***	.135	25	27**	51***	.135	-2.09*	36***	37***	.134	13

Note: **p*<.05, ***p*<.01, *p*<.001.