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Coparenting Behavior Moderates Longitudinal Relations between Effortful Control and Preschool Children’s Externalizing Behavior

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Abstract

Background—Temperamental effortful control involves the voluntary control of attention and behavior. Deficits in effortful control put children at risk for developing externalizing behavior problems. Coparenting behavior, or the extent to which parents support or undermine each other’s parenting efforts, has also been identified as an important correlate of children’s socioemotional adjustment. The present study tested whether coparenting behavior moderated longitudinal relations between preschool children’s effortful control and their externalizing behavior.

Methods—Ninety-two families (mother, father, 4-year-old child) participated. Parents’ coparenting behavior was observed during family interaction, and children’s effortful control was rated by parents. At that time and one year later, mothers and teachers reported on children’s externalizing behavior.

Results—Supportive coparenting behavior moderated longitudinal relations between children’s effortful control and mothers’ and teachers’ reports of their externalizing behavior, even when taking into account initial levels of externalizing behavior.

Conclusions—Effective coparenting served as a buffer for children, such that when parents displayed high levels of supportive coparenting behavior, the link between low effortful control and increases in externalizing behavior was not observed.

Keywords

Coparenting behavior; effortful control; externalizing behavior

Models seeking to explain children’s socioemotional adjustment and maladjustment are increasingly taking into account both within-person vulnerabilities with a posited genetic basis, such as temperament (e.g., Deater-Deckard, Petrill, & Thompson, 2007), and factors

external to the individual, such as social environments, which may increase children's vulnerability or protect them from risk (e.g., Feinberg, Button, Neiderhiser, Reiss, & Hetherington, 2007). This framework reflects a developmental psychopathology perspective (Luthar, Cicchetti, & Becker, 2000), and is also in keeping with other conceptualizations of the etiology and maintenance of maladjustment that have placed increased emphasis on person-by-environment interactions (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Rothbart & Bates, 2006).

One within-person vulnerability that recent research has consistently identified as a risk for child maladjustment, particularly externalizing behavior, is low temperamental effortful control, or deficits in the ability to voluntarily control one's attention and behavior (Posner & Rothbart, 2000). At the same time, research on sources of vulnerability and protection for children within the family environment, guided by family systems theory (e.g., Minuchin, 1974), has expanded to implicate coparenting behavior as a unique source of risk or protection for children (McHale et al., 2002). Informed by both developmental psychopathology and family systems perspectives (Cicchetti & Davies, 2004), the present study examined whether coparenting behavior moderated the link between preschool-aged children's effortful control and their externalizing behavior.

Effortful Control and Externalizing Behavior

Posner and Rothbart (2000) defined effortful control as "the ability to inhibit a dominant response in order to perform a subdominant response" (p. 434). In a broader sense, effortful control is a component of temperament used for emotion-related regulation that aids in the expression and control of emotional reactions and behaviors (Eisenberg et al., 2005). As effortful control emerges over the first several years of life, children evidence remarkably stable individual differences in their capacities for effortful control (Kochanska & Knaack, 2003).

Consistent with the notion that effortful control has profound implications for social development (Kochanska, Murray, & Harlan, 2000), a number of studies have demonstrated links between children's effortful control and externalizing problems in community samples of normally developing children (e.g., Gartstein & Fagot, 2003; Spinrad et al., 2007; Valiente et al., 2003) as well as in samples of children with elevated levels of externalizing behavior (Olson, Sameroff, Kerr, Lopez, & Wellman, 2005). For example, Kochanska and Knaack (2003) found that lower levels of effortful control in the toddler and preschool years portended higher levels of externalizing behavior at age 6.

A child's capacity for effortful control is likely shaped not only by genetically based tendencies but also by the social environment (Eisenberg et al., 2005). In particular, mothers' parenting has been implicated in the development of effortful control (Kochanska & Knaack, 2003; Spinrad et al., 2007; Valiente et al., 2006). Others have suggested that effortful control may interact with environmental factors in relation to children's behavioral adjustment (Gartstein & Fagot, 2003; Rubin, Burgess, Dwyer, & Hastings, 2003), consistent with "goodness-of-fit" or interactive models of vulnerability and protective factors (e.g., Luthar et al., 2000; Rothbart & Bates, 2006; Thomas & Chess, 1977). However, little research has considered whether aspects of the family environment beyond mothers' parenting may play a role in the processes linking children's effortful control and their adjustment.

Coparenting Behavior as a Moderator

One aspect of the broader family system that has received increasing attention from developmental researchers is the coparenting relationship, or in the terminology of family

systems theory, the family's "executive subsystem" (Minuchin, 1974). Coparenting behavior can be defined as the extent to which parents support or undermine each other's parenting efforts (Belsky, Putnam, & Crnic, 1996). Recent research has revealed persistent connections between coparenting behavior and young children's adjustment in community samples (McHale et al., 2002). The most consistent evidence links higher levels of undermining coparenting behavior and deficits in supportive coparenting behavior with higher levels of child externalizing behavior (e.g., Belsky, Woodworth, & Crnic, 1996; McHale & Rasmussen, 1998; Schoppe, Mangelsdorf, & Frosch, 2001). Moreover, coparenting consistently explains additional variance in children's adjustment above and beyond both marital quality and dyadic parenting quality (Belsky, Putnam, et al., 1996; Karreman, van Tuijl, van Aken, & Dekovi, 2008; McHale & Rasmussen, 1998).

However, research on coparenting has primarily focused on testing its direct or additive effects on children, and to date has not typically considered its potential interactive role. One exception is the work of Leary and Katz (2004), who demonstrated that coparenting interacted with children's vagal suppression (an index of emotion regulation) in relation to children's behavior with peers. In contrast to the coparenting literature, research on dyadic parenting has provided convincing evidence that parenting may interact with temperament in relation to children's adjustment (Bates, Pettit, Dodge, & Ridge, 1998; Kochanska, Askan, & Joy, 2007). Thus, the primary goal of the current study was to advance the literature on coparenting by examining its interactive role with temperament in relation to children's externalizing behavior.

The Present Study

The purpose of this research was to examine whether coparenting behavior moderated relations between preschool-aged children's effortful control and their externalizing behavior. Parents reported on children's effortful control and completed an observational assessment of coparenting behavior when their child was 4 years old. At that time and one year later, mothers and children's preschool or kindergarten teachers reported on children's externalizing behavior. Consistent with past research (e.g., Kochanska & Knaack, 2003; Valiente et al., 2006), we hypothesized that children with lower initial levels of effortful control would exhibit higher levels of externalizing behavior both concurrently and one year later. Similarly, we expected that children from families with supportive coparents would demonstrate lower levels of externalizing behavior, whereas those from families characterized by undermining coparenting would demonstrate higher levels of externalizing behavior (McHale & Rasmussen, 1998; Schoppe et al., 2001). However, we further anticipated that coparenting behavior would moderate relations between children's effortful control and their externalizing behavior, consistent with interactive models of vulnerability and protective factors (e.g., Luthar et al., 2000; Rothbart & Bates, 2006; Thomas & Chess, 1977). Specifically, we expected that low effortful control would be a risk for increases in externalizing behavior only when parents showed high levels of undermining and low levels of supportive coparenting behavior, but not when parents displayed high levels of supportive and low levels of undermining coparenting behavior.

Method

Participants

Participating families (mother, father, 4-year-old child) were drawn from a short-term longitudinal study of family relationships and children's development. Participating parents were required to be married or cohabiting together with the focal child. Families were recruited through a network of local preschools and day care centers, as well as through advertisements and word-of-mouth. At Phase 1 of the study, 113 families participated.

Ninety-two families (81%) participated in the second phase. Attrition was primarily due to an inability to locate/contact families, geographic relocation of families, or families indicating a lack of available time to participate. The 92 families whose data are considered in this report were not significantly different from the larger sample on any child, parent, or family demographic characteristics. With respect to key study variables (see descriptions below), only one significant difference was found: children who participated in the follow-up had fewer externalizing behaviors as reported by their teachers on the Conners questionnaire, $t(93) = -2.03, p < .05$.

At Phase 1, participating children were approximately 4.11 years old ($SD = .49$ years; 48 boys, 44 girls). Seventy-eight percent of children who participated were European American, 7% African American, 1% Asian, 1% Hispanic, and 13% were of mixed ethnicity. Mothers' ages ranged from 26 to 56 years ($M = 36.15$ years; $SD = 5.32$). Fathers' ages ranged from 27 to 57 years ($M = 38.06$ years; $SD = 5.93$). Participants' annual family income ranged from less than \$10,000 to over \$100,000 ($Mdn = \$71,000$ to 80,000). Eighty-six percent of mothers and 81% of fathers had obtained at least a college degree (range: high school degree to Ph.D.). All couples were married or cohabiting for an average of 9.16 years ($SD = 4.47$ years).

Procedure

At Phase 1, parents and children visited the laboratory together for 1.5 hours. At the visit, mothers and fathers completed a temperament questionnaire about their child independently, and mothers reported about their children's behavior. Parents were also asked to name a preschool teacher or child care provider who knew their child well. Researchers mailed questionnaires regarding children's behavior to the named individual. Seventy-eight of these individuals returned completed questionnaires (85%). At the Phase 1 assessment, mothers, fathers, and children were also videotaped while completing two 10-minute tasks together. These tasks were designed to elicit coparenting behavior, as they required parents to work together with their child towards attainment of a particular goal (Schoppe et al., 2001; Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004). The first task required families to draw a picture of their family together, and the second task required them to build a house out of a toy building set.

At Phase 2, approximately one year later, mothers again reported on children's behavior, as did children's preschool or kindergarten teachers (seventy-nine or 86% of these individuals returned completed questionnaires). In accordance with procedures approved by the university's institutional review board, informed consent was obtained from parents at both phases of the study. For participation, families received a \$30 gift card to a local store at Phase 1 and \$50 cash at Phase 2. Children's teachers received \$5 for completing questionnaires about the child's behavior (gift card at Phase 1; cash at Phase 2).

Measures: Phase 1

Children's effortful control—Mothers and fathers each completed the 36-item Very Short Form of the Children's Behavior Questionnaire, designed to assess three broad temperament factors (Surgency, Negative Affect, and Effortful Control) in children aged 3–8 (Putnam & Rothbart, 2006). For the purposes of this study we focused on mothers' and fathers' reports on the 12-item Effortful Control scale ($\alpha = .72$ for mothers and $.75$ for fathers). Parents' reports were significantly correlated, $r = .46, p < .01$, and thus were averaged to create a single index of effortful control.

Observed coparenting behavior—The videotaped drawing and building episodes were coded for coparenting behavior by a team of trained raters using 5-point rating scales (1 =

very low; 5 = *very high*) developed by Cowan and Cowan (1996) and used in previous investigations (Schoppe et al., 2001; Schoppe-Sullivan et al., 2004). “Coparenting events,” according to Belsky, Putnam, et al. (1996), occur when one parent either supports and/or undermines the other parent’s parenting goals or intentions. Thus, coparenting reflects partners’ behaviors toward each other with reference to the child or parenting, but does not directly include individual parent behavior toward the child or partner-directed behaviors unrelated to the child or parenting. Coders made note of the nature of coparenting events observed during the interactions and then rated the overall quality of coparenting events on seven dimensions: *pleasure, warmth, cooperation, interactiveness, displeasure, anger, and competition*. For detailed descriptions of these scales see Schoppe et al. (2001) and Schoppe-Sullivan et al. (2004). Each family received two sets of ratings on the eight scales - one set each for the drawing and building episodes. These ratings were summed to assign each family one score on each dimension across the 20 minutes of observed interaction.

Each of the two raters was randomly assigned half of the drawing and half of the building episodes, and the same coder did not rate a family across both episodes. Exceptions included episodes that both team members coded to establish reliability (29%). Several measures of interrater reliability are reported. Weighted kappas averaged .67 (range: from .59 to .74), reflecting moderate to substantial agreement (Landis & Koch, 1977). Gamma coefficients, which are particularly appropriate for ordinal data (Hays, 1981; Liebetrau, 1983), ranged from .78 to .94 ($M = .88$), reflecting acceptable reliability.

The coding data were reduced using principal components analysis with varimax rotation. This analysis yielded two components. Component 1 (Eigenvalue = 2.97; 42.46% variance) was characterized by high loadings for pleasure (.846), warmth (.864), cooperation (.735), and interactiveness (.678), and was thus called Supportive Coparenting. Component 2 (Eigenvalue = 1.85; 26.46% variance) indicated high loadings for the other three scales - displeasure (.853), anger (.852), and competition (.770) - and was named Undermining Coparenting. These components are similar to those obtained in other studies that employed the same coding system (e.g., Schoppe-Sullivan et al., 2004). Factor scores for these two components based on the rotated solution were used for subsequent analyses.

Measures: Phase 1 and Phase 2

Mothers’ reports of children’s behavior—Mothers completed the reliable, valid, and widely-used Child Behavior Checklist for children ages 1.5–5 years (CBCL; Achenbach & Rescorla, 2000). For the purposes of the present study, analyses focused on the Externalizing (24 items) factor ($\alpha = .91$ at Phases 1 and 2).

Mothers also completed the Conners questionnaire (Conners, 1973), a 10-item measure of children’s externalizing behavior used in previous research on coparenting (Schoppe et al., 2001). Each item (e.g., “constantly fidgeting”) is rated on a 4-point scale (1 = *not at all*; 4 = *very much*). Cronbach’s alphas were .87 at Phase 1 and .86 at Phase 2.

Mothers’ reports on the CBCL Externalizing Scale were significantly and strongly correlated with their Conners reports ($r = .71, p < .01$ at Phase 1; $r = .79, p < .01$ at Phase 2). Thus, the CBCL and Conners scores were standardized and combined to form a composite measure of mother-reported externalizing behavior at each phase.

Teachers’ reports of children’s behavior—Each child’s teacher or child care provider completed the 30-item Social Competence and Behavior Evaluation Scale - Short Form (SCBE-30; LaFreniere & Dumas, 1996), a measure specifically designed to assess 3–6-year-old children’s behavior in the classroom context. Teachers rated the presence of particular behaviors in the child on a 6-point scale (1 = *never*; 6 = *always*). The SCBE-30 contains

three 10-item scales: social competence, anger/aggression, and anxiety/withdrawal. For the purposes of the present study, we focused on the scale assessing externalizing behavior (anger/aggression; $\alpha = .89$ at Phase 1 and $.88$ at Phase 2).

Children's teachers or child care providers also completed the Conners questionnaire (described above); $\alpha = .90$ at Phase 1 and $.87$ at Phase 2. Teachers' reports on the Conners and on the anger/aggression scale of the SCBE-30 were significantly and strongly correlated ($r = .82, p < .01$ at Phase 1; $r = .83, p < .01$ at Phase 2), and thus were standardized and combined to create a single index of teacher-reported externalizing behavior at each phase. Mothers' and teachers' reports of externalizing behavior, although moderately correlated (Table 2), were maintained separately for use in analyses given that children may behave differently in home and school contexts (Mangelsdorf, Schoppe, & Buur, 2000).

Results

Descriptive statistics for all variables are presented in Table 1. Data analysis was conducted in two steps. First, associations among child effortful control, supportive and undermining coparenting behavior, and mothers' and teachers' perceptions of children's externalizing behavior were examined. Second, a series of hierarchical regression equations was computed to examine the combined effects of child effortful control and coparenting behavior at Phase 1 on children's behavior at Phase 2. Separate equations were conducted predicting mothers' versus teachers' perceptions of children's externalizing behavior. In each equation, children's externalizing behavior at Phase 1 was entered on the first step, to conduct an especially strong test of the roles of effortful control, coparenting behavior, and their interactions as predictors of children's behavior. By controlling for externalizing behavior at Phase 1, we essentially tested whether the other variables predicted *change* in externalizing behavior over time. Next, effortful control and supportive and undermining coparenting behavior were entered together on the second step. On the third and final step, the Effortful Control \times Supportive Coparenting and Effortful Control \times Undermining Coparenting interaction terms were entered. Before the creation of the interaction terms, all independent variables were mean-centered. Significant interactions were graphed and probed according to procedures detailed in Preacher, Curran, and Bauer (2006).

Associations among Child Effortful Control, Coparenting Behavior, and Children's Behavior

First, correlations among child effortful control, supportive and undermining coparenting behavior, and mothers' and teachers' reports of children's externalizing behavior were computed (Table 2). As anticipated, children rated lower on effortful control at Phase 1 were rated significantly higher on externalizing by mothers and teachers both concurrently and one year later, with the exception of one nonsignificant correlation between child effortful control and mothers' CBCL reports at Phase 1. Contrary to expectations, there were no significant direct relations between coparenting behavior and children's externalizing behavior. All measures of externalizing behavior showed statistically significant, moderate to strong stability over time.

Regressions Predicting Children's Behavior from Effortful Control and Coparenting Behavior

Next we conducted regression analyses to test whether observed coparenting behavior moderated relations between child effortful control and children's externalizing behavior. When predicting mothers' reports of children's externalizing behavior, the Effortful Control \times Supportive Coparenting interaction was significant, as anticipated, in addition to the expected main effects of externalizing and effortful control at Phase 1 (Table 3). A graph of

this interaction effect is presented in Figure 1. A simple slopes analysis indicated that the slope of the line representing low levels of supportive coparenting was significantly different from zero, $t = -2.95, p < .01$, whereas the slope of the line representing high levels of supportive coparenting was not, $t = .25, p = .80$.

A similar, significant Effortful Control \times Supportive Coparenting interaction effect was found when predicting teachers' reports of children's externalizing behavior, again over and above the significant main effects of externalizing and effortful control at Phase 1 (Table 3). This interaction effect is depicted in Figure 2. The results of the simple slopes analyses again indicated that the negative relation between effortful control and externalizing behavior held for children in families low on supportive coparenting behavior, $t = -3.17, p < .01$, but not for those children in families headed by highly supportive coparents, $t = .17, p = .87$.

In sum, children with low levels of effortful control only experienced increases in externalizing behavior over time when their parents were low on supportive coparenting. In neither equation was undermining coparenting behavior a significant predictor of children's externalizing behavior either alone or in combination with effortful control.

Discussion

Findings from the present study are among the first to indicate that coparenting behavior may play an important interactive role in relation to children's socioemotional adjustment by moderating links between preschool aged children's temperamental effortful control and their externalizing behavior. By providing evidence for a temperament-by-coparenting interaction, these findings support and expand models emphasizing person-by-environment effects (Collins et al., 2000; Rothbart & Bates, 2006), for which prior support has typically come from studies of dyadic parenting (e.g., Bates et al., 1998; Kochanska et al., 2007).

In particular, our results indicate that supportive coparenting served as a buffer for children with low effortful control - in the context of highly supportive coparenting behavior such children were not at increased risk for externalizing behavior. In the terms used by Luthar et al. (2000), this type of interaction effect can be described as a "protective-stabilizing" effect. Notably, this moderating effect emerged as significant in the context of controlling for children's initial levels of externalizing behavior, thus providing evidence that supportive coparenting behavior may have prevented growth in externalizing behavior over one year's time.

However, what this study does not explicate are the mechanisms through which supportive coparenting behavior may act as a protective factor for children low in temperamental effortful control. A prime candidate may be dyadic parenting behavior. Unfortunately, the present study could not address the role of parenting because we did not collect measures of mothers' and fathers' individual parenting quality. It should be noted, however, that parenting likely doesn't fully mediate the effects of coparenting - a number of previous studies have demonstrated that coparenting explains variance in children's adjustment above and beyond effects of parenting (Belsky, Putnam, et al., 1996; Karreman et al., 2008). As such, it is possible that a different process was operating to produce our findings. For instance, supportive coparenting may promote a sense of family security in children that makes it easier for them to focus on effortful self-regulation of their emotions and behavior (Karreman et al.). Alternatively, given the large body of research linking marital dynamics to children's functioning (Cummings & Davies, 2002), it is also possible that marital relationship quality underlies the findings of the present study. However, just as coparenting predicts child adjustment over and above dyadic parenting, coparenting predicts child

adjustment when taking into account marital quality as well (McHale & Rasmussen, 1998). Clearly, understanding the processes through which coparenting is linked to children's adjustment is an important direction for future research.

Although our hypothesis regarding the moderating role of supportive coparenting was borne out, we did not obtain direct associations between coparenting and children's externalizing behavior, nor did we find that undermining coparenting interacted with effortful control in relation to externalizing behavior. Previous work linking observed coparenting and children's adjustment has tended to focus on younger children (e.g., Belsky, Woodworth, et al., 1996; McHale & Rasmussen, 1998) and has often utilized home observations of coparenting behavior (e.g., Belsky, Putnam, et al., 1996; Schoppe et al., 2001). It is possible that the relative importance of direct versus moderating effects of coparenting, and of undermining versus supportive coparenting behavior, may change with the child's developmental level or that the laboratory setting for the observations in the present study elicited less undermining behavior than if families had been observed at home.

The potential for supportive coparenting to serve as a protective factor is encouraging, in that coparenting behavior may be a malleable aspect of the family environment and thus amenable to intervention efforts (Feinberg et al., 2007). However, given that our sample consisted of relatively well-functioning parents and few children with clinical-level behavior problems, we caution against extrapolating from our findings to other populations prematurely. Before sound implications for intervention can be drawn from these findings, replication in more clinically-relevant samples is necessary. Moreover, clinical samples of children and families are unlikely to conform to the sociodemographic profile of the current study's sample. Although in theory coparenting is an inclusive construct not limited to two-parent, heterosexual, married families (McHale et al., 2002), the reality is that most coparenting research has focused on just such families, possibly limiting the generalizability of our results and those of others to families with other structures.

Future research would also do well to improve upon the measurement of effortful control employed in this study by including observational as well as parent-report data. Although parents have an unparalleled knowledge base with respect to their children's behavior (Mangelsdorf et al., 2000), and research indicates convergence between observations and parent reports of children's effortful control (Valiente et al., 2003), parents' ratings of temperament can be affected by a number of factors besides children's genetic tendencies (Seifer, 2002). Moreover, effortful control is not unitary, but consists of several components including attentional focusing and inhibitory control which are discernable through the use of more fine-grained assessments of effortful control (Posner & Rothbart, 2000). It may be that children with vulnerabilities in particular aspects of effortful control may be more or less susceptible to effects of the child rearing environment, including coparenting.

Although longitudinal, the present study only followed children and families over one year's time, and thus it is not clear whether coparenting behavior would continue to moderate relations between children's effortful control and behavior problems over a longer span of time. It would be interesting for future work to consider whether, as some work suggests (Eisenberg et al., 2005; Valiente et al., 2006), aspects of parenting or coparenting actually modify children's levels of effortful control over time.

Conclusion

Even in the context of these caveats, however, the present study has drawn attention to supportive coparenting behavior as a factor that may buffer the effects of a temperamental vulnerability on children's short-term risk for externalizing behavior. Should future research

confirm the protective role of supportive coparenting behavior across diverse samples, interventions focused on increasing the amount of support between parents may prove useful for preventing the development of externalizing behavior problems among children with difficulties in voluntarily controlling their attention and behavior. The development and testing of such interventions might not only help promote positive adaptation among a vulnerable group of children, but would also have the potential to further support the role of the family environment in theoretical models of children's socioemotional development.

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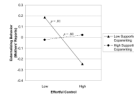


Figure 1.
Supportive coparenting moderates the relation between children's effortful control and change in mothers' reports of children's externalizing behavior from Phase 1 to Phase 2.

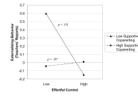


Figure 2.
Supportive coparenting moderates the relation between children's effortful control and change in teachers' reports of children's externalizing behavior from Phase 1 to Phase 2.

Table 1

Means and Standard Deviations of Study Variables

Phase 1	<i>M</i>	<i>SD</i>	<i>N</i>
Child Effortful Control	5.41	.58	92
Supportive Coparenting Behavior ^a	0.00	1.00	92
Pleasure	5.86	1.16	92
Warmth	5.09	.98	92
Cooperation	5.91	1.00	92
Interactiveness	5.30	.99	92
Undermining Coparenting Behavior ^a	0.00	1.00	92
Displeasure	4.20	1.19	92
Anger	3.01	.94	92
Competition	3.64	1.10	92
Mother's CBCL Externalizing	11.65	7.62	89
Mother's Conners	16.49	4.91	92
Teacher's SCBE Anger/Aggression	17.22	6.77	77
Teacher's Conners	14.46	4.90	78
Phase 2			
Mother's CBCL Externalizing	9.90	7.12	92
Mother's Conners	15.48	4.46	92
Teacher's SCBE Anger/Aggression	15.00	5.63	79
Teacher's Conners	14.04	4.69	79

^aFactor scores derived from Principal Components Analysis.

*N*s vary as a function of missing data as specified above.

Table 2
Intercorrelations for Child Effortful Control, Coparenting Behavior, and Child Externalizing Behavior

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Phase 1											
1. Child Effortful Control	1										
2. Supportive Coparenting Behavior	.12	1									
3. Undermining Coparenting Behavior	.15	.00	1								
4. Mother's CBCL Externalizing	-.20	-.11	.01	1							
5. Mother's Conners	-.21*	-.09	-.05	.79**	1						
6. Teacher's SCBE Anger/Aggression	-.42**	-.02	.15	.43**	.51**	1					
7. Teacher's Conners	-.38**	-.08	.12	.32**	.44**	.82**	1				
Phase 2											
8. Mother's CBCL Externalizing	-.27**	-.02	.04	.79**	.64**	.54**	.47**	1			
9. Mother's Conners	-.28**	-.07	-.08	.71**	.80**	.57**	.51**	.79**	1		
10. Teacher's SCBE Anger/Aggression	-.38**	-.07	.07	.17	.26*	.59**	.56**	.39**	.40**	1	
11. Teacher's Conners	-.41**	-.07	.05	.22*	.30**	.57**	.52**	.34**	.36**	.83**	1

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

Table 3

Regressions Testing Coparenting as a Moderator of the Associations Between Child Effortful Control and Child Externalizing Behavior

		β	R^2	ΔF
Step	Predictor			
Phase 2 Externalizing (Mother)				
1	Phase 1 Externalizing (Mother)	.82**	.67	180.67**
2	Child Effortful Control	-.13*		
	Supportive Coparenting	.05		
	Undermining Coparenting	.02	.02	1.67
3	Effortful Control \times Supportive Coparenting	.14*		
	Effortful Control \times Undermining Coparenting	.03	.02	2.31
			$R^2 = .70 F(6,85) = 33.34^{**}$	
Phase 2 Externalizing (Teacher)				
1	Phase 1 Externalizing (Teacher)	.61**	.37	40.41**
2	Child Effortful Control	-.21*		
	Supportive Coparenting	-.06		
	Undermining Coparenting	.10	.05	1.77
3	Effortful Control \times Supportive Coparenting	.23*		
	Effortful Control \times Undermining Coparenting	-.11	.06	3.59*
			$R^2 = .48 F(6,63) = 9.67^{**}$	

* $p < .05$

** $p < .01$.