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BRIEF REPORT

Longitudinal and Reciprocal Associations Between Coparenting Conflict and Father Engagement

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The major goal of the present study was to examine the reciprocal and longitudinal associations between coparenting conflict and father engagement with children during the early childhood years. Using data from the Early Childhood Longitudinal Survey—Birth Cohort (N = 3600), the findings supported the hypothesis that father engagement at 9 months has a significant effect on coparenting conflict at 24 and 48 months, but there was limited support for the hypothesis that early coparenting conflict has an effect on later engagement. The direct and indirect findings also suggest that fathers' engagement with young children has different longitudinal effects on coparenting conflict depending on the type of activity in which fathers are engaged. Whereas fathers' physical care at 9 months was associated with increased levels of later coparenting conflict, fathers' cognitive stimulation at 9 months was associated with lower levels of later coparenting conflict. Implications for programs for fathers and families are discussed.

Keywords: coparenting conflict, early childhood, family systems, father engagement, father involvement

Coparenting, defined as the ways that parents work together in their roles as parents (Feinberg, 2003), is a central family process that is linked to parent–child relationships and child functioning. Researchers have suggested that the quality of the coparenting relationship is especially important for fathers because the father–child relationship tends to be more sensitive to social and family environmental influences than is the mother–child relationship (Doherty, Kouneski, & Erickson, 1998; Elliston, McHale, Talbot, Parmley, & Kuersten-Hogan, 2008). Researchers have also suggested that the associations between coparenting and father engagement are reciprocal (i.e., bidirectional effects) (Carlson, McLanahan, & Brooks-Gunn, 2008; Jia & Schoppe-Sullivan, 2011). However, the research has reported mixed findings regarding the reciprocal associations between these variables. Several studies have shown that paternal engagement only has a longitudinal effect on the coparenting relationship (Jia & Schoppe-Sullivan, 2011), whereas other studies have shown that coparenting only has a longitudinal effect on paternal engagement (Fagan & Palkovitz, 2011). The question of whether coparenting and father engagement are reciprocally related is an important issue to address because of its implications for policy and programs. Depending on research findings, programs may choose to design early interventions targeting either the coparenting relationship or paternal engagement.

In the present study, we conducted a cross-lagged longitudinal analysis to examine the reciprocal associations between coparenting conflict and father engagement. We focused on mothers and fathers who resided together because previous studies showing reciprocal relationships between coparenting and father engagement have been conducted with nonresidential fathers (Carlson et al., 2008). We used the Early Childhood Longitudinal Study—Birth Cohort (ECLS–B) data to examine different aspects of paternal engagement (e.g., cognitive stimulation, physical care) in relation to coparenting conflict. We controlled for child gender and partner relationship happiness, and we examined whether the associations between coparenting conflict and paternal engagement were moderated by these variables.

Theoretical Foundations

The present study was guided by the family systems theory that families consist of interdependent components (Cox, Paley, & Harter, 2001). Specifically, the family is comprised of subsystems that exert influence on one another. This understanding necessitates considerations of the mother–father, mother–child, father–child, and mother–father–child subsystems as they exert direct and indirect influence on one another. In families headed by two parents, the mother–father subsystem is often regarded as having the greatest influence on children. Interdependence among subsystems suggests that the mother–father and parent–child subsystems have reciprocal influences upon each other.

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The mother–father subsystem is comprised of partner interactions that are unrelated to the parenting role (e.g., marital quality) and interactions that are related to parenting (coparenting) (Brown, Schoppe-Sullivan, Mangelsdorf, & Neff, 2010). Coparenting interactions involve triadic exchanges in that they are always focused on raising children (McHale & Irace, 2011). Researchers have suggested that coparenting has a stronger influence on parent–child relationships (Elliston et al., 2008) because it is more proximally related to parenting than is partner relationship quality (Feinberg, 2002). However, researchers also note significant overlap between coparenting and relationship quality (Feinberg, 2002; McHale, Fivaz-Depeursinge, Dickstein, Robertson, & Daley, 2008). The present study therefore focused on the associations between coparenting conflict and father engagement with children, and it controlled for the effects of partner relationship quality on father engagement.

Recent studies have reported that coparenting conflict (e.g., arguing about child rearing) is an important factor in child and family adjustment (Cabrera, Scott, Fagan, Steward-Streng, & Chen, in press; Dorsey, Forehand, & Brody, 2007). Coparental conflict may undermine parents' ability to both model and assist children in regulating their emotions (Feinberg, 2003), which might be the reason it has been found to be a stronger predictor than coparenting support of parent and child adjustment (Jones et al., 2005). Theorists have suggested that coparenting conflict leads to lower levels of positive parenting behavior (i.e., direction of effects is from coparenting conflict to fathers' engagement) by lowering parental efficacy, which may result in parents feeling helpless and anxious during interactions with the child (Feinberg & Sakuma, 2011). Evidence for coparenting effects on fathers comes partly from observational studies showing that when mothers engaged in low levels of coparenting mutuality with their partners, fathers were subsequently less likely to display positive affect, gaze at their infant, and touch the child than fathers whose partners showed coparenting mutuality (Elliston et al., 2008). Researchers have also suggested that father engagement with children may have longitudinal influences on coparenting conflict (Pleck, 2010). Jia and Schoppe-Sullivan (2011) suggested that developmental changes during the toddler and preschool years encourage fathers to become more involved with their children. Fathers who are more engaged with their children may fulfill mothers' expectations for father involvement, which may also lead to lower levels of coparenting conflict (Jia & Schoppe-Sullivan, 2011). Thus, we hypothesized reciprocal longitudinal associations between coparenting conflict and father engagement.

Theoretical conceptualizations focus on three types of father engagement with young children: physical care, play, and cognitive stimulation (Pleck, 2010). Researchers found that the direction of longitudinal associations between coparenting and father engagement may depend on the specific fathering behavior (Jia & Schoppe-Sullivan, 2011). That is, fathers who engaged in more physical care experienced decreased coparenting support and increased undermining over time, whereas fathers who engaged in more play experienced increased coparenting support and decreased undermining. These findings point to the need to examine different aspects of father engagement with children, including play and physical care. There is also increasing evidence that the father role during early childhood includes engagement in cognitively stimulating activities (e.g., reading to children), especially as children approach the transition to school (Lamb, 1997). Thus, we also include fathers' cognitive stimulation of children in our study.

Current Study

The present study used a cross-lagged, longitudinal research design because it allows for analysis of reciprocal associations (Ferrer-Caja & McArdle, 2003) between coparenting conflict and fathers' engagement with the child over time (at ages 9, 24, and 48 months). We expected that higher levels of father engagement at one point in time would be associated with significantly lower coparenting conflict at later times, and we expected that higher coparenting conflict would be associated with lower subsequent father engagement.

Partner relationship quality is an important contextual factor that may explain why coparenting conflict influences the parent–child relationship (Cox, Paley, & Harter, 2001; Mangelsdorf, Laxman, & Jessee, 2011). According to this perspective, many couples argue about children, but their arguing is detrimental to the parent–child relationship when they are unhappily married. We therefore tested the moderating effect of partner happiness in the present study. There is also reason to expect that child gender may moderate the associations between coparenting conflict and father engagement (Lindsey, Caldera, & Colwell, 2005). Evidence has revealed different patterns of coparenting among parents reporting high marital distress on the basis of child gender (McHale, 1995).

We controlled for other possible confounding variables in this study, including maternal engagement with the child. Child age was controlled because of differences in the timing of data collection within each round of the ECLS–B. Child racial and ethnic background was controlled to account for their associations with coparenting and parenting (Dorsey et al., 2007). Household socioeconomic status was controlled because associations have been found between coparenting conflict and socioeconomic status (Petterson & Albers, 2001). We also included a measure of marital status because compared to unmarried fathers, married fathers have been found to be more positively involved with children (Hofferth & Anderson, 2003). Employment hours were controlled because studies have shown that patterns of paid work outside of the home significantly influence fathers' engagement with children (Pleck, 2010).

Method

The ECLS–B is a nationally representative probability sample of 10,700 children designed to represent the nearly four million children born in the United States in 2001. The complex sampling design is described in detail by the National Center for Education Statistics (2005). The present study used the parent interview (conducted with the primary caregiver [mostly biological mothers]) and resident father questionnaire. The parent interview was conducted in the child's home at each data point. Resident fathers completed a self-administered questionnaire.

The analytic sample was restricted to children who lived with both the biological mother and father at 9 (T1), 24 (T2), and 48 (T3) months. Of the 10,700 participants at 9 months, we omitted 2400 cases in which children did not live with the biological

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parents at 9 months, 1150 cases in which children did not live with both parents at 24 months, and 1200 cases in which children did not live with both parents at 48 months. We then omitted a small number of cases (<50) because the biological mother did not complete the primary respondent interview at 9 months. Next, we omitted 2200 cases in which the resident father did not complete an interview (i.e., these cases were missing weights). The final analytic sample size was 3600 cases.

The majority of participating mothers in the analytic sample were non-Hispanic White, followed by Hispanic, African American, and Others (see Table 1). Child sex was almost equally split between male and female. Most parents were married (90.3%), and both mothers and fathers had median education levels of some college at T1. The average number of children in the home was 2.56 at T3. Fathers worked an average of 46 hours per week during each interview.

Measures

Coparenting conflict. *Coparenting conflict* was measured at T1, T2, and T3 using one mother and one father item asking how frequently respondents reported arguing with their spouse or partner about their child(ren). Scores ranged from 1 = *never* to 4 = *often*, with higher scores indicating more frequent coparenting conflict. The means were slightly over 2.0 (average *SD* = .83) for both mothers and fathers at T1, T2, and T3, suggesting that parents engaged in coparenting conflict some of the time. Although using a single item may not be ideal for measuring a construct such as coparenting conflict, the ECLS–B did not collect more data on conflict. A trade-off of using nationally representative data sets is that validated measures are often replaced with single-item measures in order to obtain a large representative sample (i.e., increase scope of the study).

Father engagement. The ECLS–B included 13 items measuring fathers' perception of their *engagement in physical care activities, cognitive stimulation*, and *play* at T1. All questions were scaled from 1 = *more than once a day* to 6 = *not at all*. Physical care items included *change diapers*, *prepare food*, *feed bottle*, *wash*, *dress*, *hold*, and *put to sleep* (α = .88). Cognitive stimulation items included *read books*, *tell stories*, and *sing songs* (α = .66). Play items included *play peek-a-boo*, *tickle*, and *go outside to play* (α = .50). These items were recoded so that high scores meant higher levels of engagement. Fourteen items measuring fathers' engagement were included at T2. The physical care items included *prepare food*, *brush teeth*, *put to sleep*, *wash*, *assist with eating*, *change diaper/help toilet*, and *dress* (α = .82). The play items at T2 included *play games indoors*, *chase*, *carry on shoulder*, and *go outside to play* (α = .72). The cognitive stimulation items at T1 were repeated at T2 (α = .66). Ten items were included at T3. The physical care items included *prepare food*, *put to sleep*, *wash*, *dress*, and *brush teeth* (α = .83). The play items included *play with toys* and *go outside to play* (α = .55). The cognitive stimulation items at T3 (α = .66) were the same as those at T1 and T2. Despite the low reliability for the play and cognitive stimulation measures, we examined measurement models for all of the father engagement constructs because previous studies have shown the items in these measures to be meaningful (National Center for Education Statistics, 2005). The models did not have good fit when the latent play variable was included (comparative fit indexes [CFI] were < .90 and root-mean-square error of approximations [RMSEA] were greater than .06). The measurement models had adequate fit only when physical care and cognitive stimulation latent variables (but not play) were included (T1: CFI = .92, RMSEA = .05; T2: CFI = .96, RMSEA = .05; T3: CFI = .97, RMSEA = .05). We therefore omitted the play variables from subsequent analyses.

Table 1
*Descriptive Statistics for the Study Variables (*N = *2700)*

Variable	*M* or median	*SD*	*n*	%
Child is a boy			1300	49
African American			200	7.2
Hispanic			450	17.3
Other			650	23.9
Non-Hispanic White			1400	51.6
Mother's education level, T1, median	Some college	.05		
Father's education level, T1, median	Some college	.05		
Parents married, T1			2450	90.3
Parents married, T2			2450	90.8
Parents married, T3			2500	91.2
Father's perception of coparenting conflict, T1	2.04	.85		
Father's perception of coparenting conflict, T2	2.16	.84		
Father's perception of coparenting conflict, T3	2.21	.81		
Father's perception of marital happiness, T1	2.75	.47		
Father's perception of marital happiness, T2	2.71	.48		
Father's perception of marital happiness, T3	2.68	.52		
Father's number of hours worked, T1	45.92	9.78		
Father's number of hours worked, T2	45.50	10.72		
Father's number of hours worked, T3	45.63	13.30		
SES (quintile), T1, median	4.00	1.35		
SES (quintile), T2, median	4.00	1.34		
SES (quintile), T3, median	4.00	1.36		
Number of minors in household, T3	2.56	1.12		

Note. Means and standard deviations are weighted. SES = socioeconomic status.

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Moderators. *Partner relationship happiness* was measured at T1, T2, and T3 using one father item asking, "Would you say your marriage/relationship is *very happy*, *fairly happy*, or *not too happy*?" Scores ranged from 1 to 3. Scores were reverse coded so that higher scores indicated higher levels of happiness. The means were high: about 2.7 for fathers during each time period.

The T1 data included a variable indicating whether the target child was a boy or girl. *Child gender* was coded so that 1 = *boy* and 0 = *girl*.

Controls. Socioeconomic status (SES) was computed at the household level using data from the parent (mother) and father questionnaires at T1, T2, and T3. This constructed variable was based on the mother's and father's education, occupation, and household income. A description of the SES measure can be found at National Center for Education Statistics (2005). The following child race/ethnicity categories were constructed: Hispanic, African American, non-Hispanic White (reference group), and Other (e.g., Asian, Pacific Islander, American Indian). Marital status was measured by one item that asked mothers to report on their current marital status. Mothers who indicated that they were divorced, separated, or never married but who were also living with the target child's biological father were coded as cohabiting. Fathers were also asked how many hours they worked for pay in the last week (work hours). Fathers who indicated that they were not employed were coded as working 0 hours. Finally, we controlled for mothers' cognitive stimulation (mothers' play and physical care were not measured in the ECLS–B) at T1, T2, and T3. The items and response format used to measure mothers' cognitive stimulation were the same as those used to assess fathers' cognitive stimulation (see description above; αs = .63, .62, .63, respectively).

Analyses

Analyses were conducted using Mplus (see Table 2 and Figure 1). Full information maximum likelihood (FIML) estimation was used to handle all missing data. Goodness of fit of the model to the data is suggested when the chi-square is nonsignificant, the CFI is greater than .90 (Hu & Bentler, 1999), and the RMSEA is less than .06 (Browne & Cudeck, 1993). Researchers have suggested that

Table 2
Path Analysis and Fit Statistics for Longitudinal Associations Among Coparenting Conflict, Father Engagement, and Controls (N = *3600*)

Variable	Father model				Mother model			
	b	*SE*	β	*p*	*b*	*SE*	β	*p*
Direct effects								
Coparenting conflict T1 →								
Coparenting conflict T2	.36	.02	.37	.001	.37	.02	.37	.001
Father cognitive stimulation T3	−.02	.02	−.03		−.03	.02	−.05	.05
Father physical care T3	.04	.02	.04	.05	−.04	.02	−.03	
Father cognitive stimulation T1 →								
Coparenting conflict T2	−.13	.03	−.10	.001	−.10	.04	−.08	.001
Coparenting conflict T3	−.04	.03	−.04	.05	−.08	.03	−.07	.01
Father physical care T3	.10	.03	.17	.01	.10	.03	.07	.01
Father cognitive stimulation T3	.53	.04	.54	.001	.53	.04	.54	.001
Father physical care T1 →								
Coparenting conflict T2	.60	.17	.08	.001	.11	.18	.01	
Coparenting conflict T3	.01	.15	.00		.43	.16	.06	.01
Father physical care T3	4.11	.51	.49	.001	4.05	.50	.49	.001
Father cognitive stimulation T3	.20	.09	.04	.05	.35	.16	.06	.05
Coparenting conflict T2 →								
Coparenting conflict T3	.28	.02	.29	.001	.24	.02	.25	.001
Father cognitive stimulation T3	−.01	.02	−.01		.00	.01	.00	
Father physical care T3	−.03	.02	−.03		.00	.02	.00	
Indirect effects								
Father physical care T1 → father physical care T3	−.02	.01	−.00		.00	.00	.00	
Father physical care T1 → father cognitive stimulation T3	−.00	.01	−.00		.00	.00	.00	
Father physical care T1 → coparenting conflict T3	.17	.05	.02	.001	.03	.04	.00	
Father cognitive stimulation T1 → father physical care T3	.00	.00	.00		.00	.00	.00	
Father cognitive stimulation T1 → father cognitive stimulation T3	.00	.00	.00		.00	.00	.00	
Father cognitive stimulation T1 → coparenting conflict T3	−.04	.01	−.03	.001	−.02	.01	−.02	.01
Coparenting conflict T1 → father physical care T3	−.01	.01	−.01		.00	.01	.00	
Coparenting conflict T1 → father cognitive stimulation T3	.00	.00	.00		.00	.01	.00	
Coparenting conflict T1 → coparenting conflict T3	.10	.01	.11	.001	.09	.01	.09	.001
χ^2	2516			.001	2541			.001
df	325				325			
CFI	.92				.92			
RMSEA	.043				.043			
RMSEA with 90% confidence intervals	.042–.045				.042–.045			

Note. Father model includes father reports of coparenting conflict. Mother model includes mother report of coparenting conflict. Control variables include child age, child gender, partner relationship happiness (T1, T2, T3), marital status (T1), socioeconomic status (SES; T1), race/ethnicity, mother's cognitive stimulation (T1, T2, T3), and father's work hours (T1, T2, T3). Population weights are included in the analysis. CFI = comparative fit index; RMSEA = root-mean-square error of approximations.

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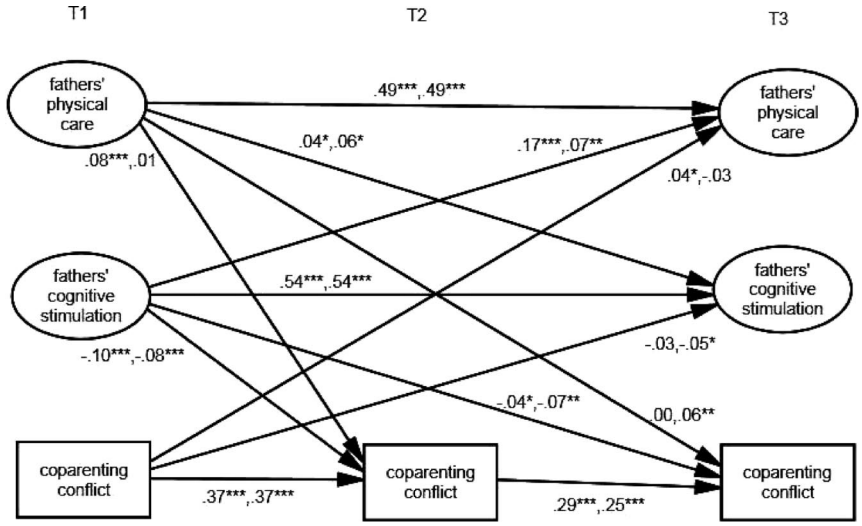

Figure 1. Path analysis of fathers' and mothers' perceptions of coparenting conflict and father engagement. Variables at T1 are intercorrelated, as are variables at T2 and T3. Control variables include child age, child gender, partner relationship happiness (T1, T2, T3), mother's cognitive stimulation (T1, T2, T3), marital status (T1), socioeconomic status (T1), race/ethnicity, and father's work hours (T1, T2, T3). Parameter estimates are standardized coefficients. First estimates are for fathers; second estimates are for mothers. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

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because the chi-square is so conservative (prone to Type II error), a negative model chi-square finding can be discounted if other model fit measures such as CFI and RMSEA support the model and if the sample size is reasonable (Garson, 1998). The data were weighted with the appropriate weight for resident parents in which fathers' data are also included, and bootstrap resampling procedures were used to estimate standard errors.

Results

Preliminary Analysis

Among the 3600 cases in the analytic sample, missing data ranged from no cases (SES, race/ethnicity, marital status, child gender) to about 2% of cases for the father engagement variables, 2% of cases for fathers' perception of coparenting conflict, and 9.5% of cases for fathers' work hours. To assess whether data were missing at random, we conducted *t* tests and chi-square tests to determine the extent to which SES, race/ethnicity, marital status, and child gender were associated with missing father engagement items and coparenting conflict. There were significant associations between SES and missingness on fathers' cognitive stimulation at T1, $t(3,598) = -4.04$, $p < .001$, and on fathers' cognitive stimulation at T3, $t(3,598) = -7.06$, $p < .001$. Lower-SES families were more likely to be missing fathers' cognitive stimulation data. There were significant associations between marital status and missing coparenting conflict data at T1 and T3, $\chi^2(1) = 4.08, 4.87$, $ps < .05$, respectively, but not at T2. There were no significant associations among race/ethnicity or child gender and missingness on coparenting conflict and father engagement. The relatively small correlations suggest that the data were not "completely missing at random," but they were more likely to be "missing at random" (MAR). FIML has been viewed as an acceptable technique to handle data that are MAR (Raykov, 2011), especially with small amounts of missing data.

Pearson correlation coefficients revealed high correlations ($rs > .70$) among the cognitive stimulation variables at all three waves. The same was true for SES and marital status at all three waves, suggesting potential problems with collinearity (correlation matrix available from authors). We included SES and marital status at T1 in subsequent SEM analyses only because of these findings.

Test of the Cross-Lagged Model

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First, we tested the hypothesized model that included latent father engagement variables (physical care, cognitive stimulation) at T1, T2, and T3; father perception of coparenting conflict at T1, T2, and T3; and controls. This model did not have a good fit to the data: $\chi^2(321) = 16{,}643$, $p < .001$; CFI = .79; RMSEA = .07. Next, we examined a model that included the father engagement latent variables at T2 and T3 and father perception of coparenting conflict at T2 and T3 (plus controls). This model also did not reveal good fit: $\chi^2(193) = 3923$, $p < .001$; CFI = .87; RMSEA = .06. The poor fit of these models may have been due to the fact that the path coefficients among the cognitive stimulation latent variables at T1, T2, and T3 were very large ($\beta s > .70$). Grewal, Cote, and Baumgartner (2004) suggested that multicollinearity can lead to poor model fit in SEM.

We then examined a model that included latent father engagement variables at T1 and T3; father perception of coparenting conflict at T1, T2, and T3; and controls. The data revealed an adequate model fit: $\chi^2(325) = 2516$, $p < .001$; CFI = .92; RMSEA = .043. There was no evidence of multicollinearity between the cognitive stimulation variables (T1 and T3). Moreover, the test for normality and outliers revealed than there were no skewness values greater than 2.0 or less than −2.0, suggesting that

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the data did not substantially deviate from symmetry around the mean. Two variables had kurtosis values above the 2.0 acceptable cutoff: fathers' work hours at T1 and T3. We therefore calculated the sine of this variable, which brought the kurtosis value to well below 2.0. We also tested a model that excluded control variables. This model did not have good fit to the data, $\chi^2(187) = 4753$, $p < .001$; CFI = .89; RMSEA = .064. These findings suggest that our model is strengthened when controls are included.

Because of possible shared method variance when fathers self-report on both coparenting conflict and engagement with the child, we tested a model that replaced the father perception of coparenting conflict with mother perception of coparenting conflict. All other variables in this model were the same. This model revealed adequate fit to the data: $\chi^2(325) = 2541$, $p < .001$; CFI = .92; RMSEA = .043.

AQ: 2 Table 2 and Figure 1 show the path analysis results and only significant parameters for the models with father and mother perception of coparenting conflict. There were significant negative associations between cognitive stimulation T1 and coparenting conflict T2 in the father and mother models (βs = −.10 and −.08, ps < .001, respectively), and between cognitive stimulation T1 and coparenting conflict T3 in the father and mother models (β = −.04, $p < .05$; β = −.07, $p < .01$). There was a significant positive longitudinal association between physical care T1 and coparenting conflict T2 in the father model (β = .08, $p < .001$), and between physical care T1 and coparenting conflict T3 in the mother model (β = .06, $p < .01$). Moreover, cognitive stimulation T1 had a negative indirect effect on coparenting conflict T3 for fathers and mothers (through coparenting conflict T2), and physical care T1 had a positive indirect effect on coparenting conflict T3 for fathers (through coparenting conflict T2).

Mother report of coparenting conflict T1 was negatively related to cognitive stimulation T3 ($\beta = -.05$, $p < .05$), and father report of coparenting conflict T1 was positively related to physical care T3 (β = .04, $p < .05$). There were no indirect associations between coparenting conflict and later engagement in either the father or mother models.

To examine whether the models varied by partner relationship happiness, we tested and compared an unconstrained model (path coefficients were allowed to be unequal) for fathers who indicated that they were very happy in their partner relationships at 9 and 48 months in comparison with fathers who indicated that they were not happy or somewhat happy at 9 or 48 months. The chi-square difference test revealed that the models were not significantly different from each other: $\Delta\chi^2(285) = 45$, *ns*. To examine whether the models varied by child gender, we tested and compared an unconstrained model for boys and then for girls. The chi-square difference test revealed that the models were not significantly different from each other: $\Delta\chi^2(df = 286) = 59$, *ns*.

Discussion

Family systems theory suggests reciprocal associations between the coparenting and parent–child subsystems (Davies, Sturge-Apple, & Cummings, 2004). Although the findings of our analysis provide some evidence in support of the reciprocal association between coparenting conflict and father engagement, the evidence for a unidirectional hypothesis is stronger. That is, although coparenting conflict at 9 months predicted father engagement at 48 months, these effects were not consistent across mothers and fathers, and the significant associations between early coparenting conflict and later father engagement were quite small. Our findings are consistent with past research showing that father engagement is likely to predict later coparenting (Jia & Schoppe-Sullivan, 2011).

The inconsistent and small effects of coparenting conflict on later father engagement point to the need for additional studies in this area. It is possible that had we used a better measure of coparenting conflict, the link to parenting might have been stronger. Moreover, we were not able to test the association between 9-month coparenting conflict and 24-month father engagement variables because of poor model fit. One ramification of omitting these variables is that we may have missed possible effects of coparenting conflict on 24-month engagement.

The direct and indirect findings suggest that fathers' engagement with young children has different longitudinal associations on coparenting (conflict in our study) depending on the type of activity in which fathers are engaged. Consistent with Jia and Schoppe-Sullivan's (2011) study, we found that fathers' engagement in physical care at 9 months is associated with higher levels of coparenting conflict (as perceived by fathers at 24 months and by mothers at 48 months). Schoppe-Sullivan et al. (2008) hypothesized that fathers' involvement in physical care may upset mothers' sense of maternal identity and arouse maternal gatekeeping. Mothers and fathers may also have different standards for what they consider proper care of children, and these differences may be manifested in higher levels of conflict when fathers and mothers share physical care tasks. It is also possible that because fathers spend more time in physical care than in cognitively stimulating activities (Cabrera et al., in press), there is more opportunity for conflict with their partners. An important question for future research may be the long-term effects of shared caregiving of children on the coparenting and partner relationships and ultimately on children.

Whereas fathers' physical care at 9 months was associated with increased levels of later coparenting conflict, fathers' cognitive stimulation at 9 months was associated with lower levels of later coparenting conflict. Again, we surmise that cultural norms for fathers' engagement with children continue to place high value on play and cognitive stimulation (Pleck, 2010). Fathers' participation in cognitively stimulating activities may be associated therefore with lower levels of coparenting conflict because both mothers' and fathers' expectations for fathering behavior are being met.

Our results did not support the hypothesis that the association between coparenting conflict and father engagement would be stronger among fathers reporting unhappy partnerships in comparison with couples reporting happy partnerships. It is possible that partner distress and unhappiness have a spillover effect (see McHale, 1995) rather than a moderating effect on coparenting conflict and father engagement. It is also possible that our measure of marital unhappiness was limited because it was based on one item. Our findings also did not support the hypothesis that child gender would moderate the associations between coparenting conflict and father engagement. AQ: 3

In regards to limitations, the present study examines only one component of coparenting conflict—arguing about children. Other aspects of coparenting conflict, such as nonverbal expressions of differences, may be important correlates of father engagement. Also, the ECLS–B item on coparenting conflict asks about all

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children in the family; parents may argue differently in relation to each child. In addition, single-item measures may not be sufficiently sensitive to detect change in father engagement over time, and they may reduce model fit in SEM (Grewal et al., 2004). It would also have been preferable to have a measure of how parents resolve coparenting conflict. We did not include the play variable in the path analysis because it did not have good fit in the measurement model. Play is an important father engagement variable (Lamb, 1997) that may be reciprocally related to coparenting conflict. The relatively low reliability of the cognitive stimulation measure also may underestimate the relationship between this measured variable and coparenting conflict. There was also possible bias in the sample because missing father engagement and coparenting conflict data were more likely to occur among lower SES and unmarried couples. Our findings may therefore be more representative of higher SES and married couples.

Conclusion

The main take-home message of this study is that there are more consistent longitudinal associations between early father engagement and later coparenting conflict than between early coparenting conflict and later engagement. Moreover, the direction of effects depends on the type of father involvement behavior. Fathers who engage in higher levels of early cognitive stimulation have less coparenting conflict over time, but fathers who engage in high physical care have more coparenting conflict. It will be important to continue to examine the relationships between father engagement and coparenting and to use validated measures of these constructs. Our findings suggest that programs that focus on increasing fathers' engagement in cognitively stimulating activities may also lead to less coparenting conflict between mothers and fathers. Practitioners should also be aware that they may need to address heightened coparenting conflict issues among couples that share children's physical care.

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