

# When Fathers' Supportiveness Matters Most: Maternal and Paternal Parenting and Children's School Readiness

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Data from the NICHD Study of Early Child Care and Youth Development ( $N = 723$ ) were used to test whether the effects of fathers' supportive parenting on children's school readiness are greater when mothers are least supportive. We distinguished between academic and social dimensions of school readiness. Mothers' and fathers' parenting was assessed in dyadic parent-child videotaped sessions during the preschool period. Results for both academic and social outcomes indicated that fathers' supportiveness had larger benefits for children at lower levels of mothers' supportiveness. In fact, fathers' supportiveness was associated with children's school readiness only when mothers scored average or below on supportiveness. Mothers' supportiveness was similarly associated with children's social school readiness when fathers scored average or below on supportiveness. However, mothers' supportiveness was associated with children's academic school readiness even when fathers scored above average on supportiveness. The results suggest that fathers may influence child development most as potential buffers against unsupportive mother parenting. Further research is needed to replicate these analyses in a less socioeconomically advantaged sample.

*Keywords:* parenting style, mother-child relations, father-child relations, early child outcomes

Recent studies have demonstrated that fathers' supportive parenting behaviors independently contribute to the cognitive and socioemotional development of young children, over and above mothers' supportive parenting behaviors (NICHD Early Child Care Research Network [ECCRN], 2004; Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004). This development has greatly advanced research on parenting by documenting the importance of fathers, but it also raises new questions about the combined effects of mothers' and fathers' parenting. Correctly understood, the finding that paternal supportiveness predicts children's outcomes *on average* does not mean that paternal supportiveness is significant *across all families*. In this study, we tested the hypothesis that paternal supportiveness matters most in families where the level of maternal supportiveness is relatively low. That is, we propose that supportive fathers may

influence child development more as potential buffers against unsupportive mothers than as parents whose influence on their children's early cognitive and socioemotional development rivals that of mothers'.

To develop this hypothesis, we began with the premise that mothers typically serve as children's primary caregivers because they spend more time interacting and engaging with children during the early years (Sayer, Bianchi, & Robinson, 2004; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). Thus, their parenting behaviors, even if observed to be similar in *quality* to that of fathers, are likely to exert a greater influence on children simply because children are exposed to a greater *quantity* of those behaviors. If mothers' parenting exerts a stronger influence, their supportiveness may typically be enough to set children on a positive developmental trajectory, with fathers' supportiveness serving primarily to reinforce the effect of mothers'. However, in families where the level of maternal supportiveness is low, a highly supportive father may offer children a singular opportunity to realize their potential for positive development. This hypothesis does not imply that fathers are inconsequential when maternal supportiveness is high. Fathers may play many roles—such as primary earner and mother's key social support—that are consistently important for children's early development in two-parent families. At issue here is whether the effect of a father's supportive parenting behaviors on young children depends on a mother's own level of those behaviors.

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### Previous Literature on Maternal and Parental Supportiveness and Early Child Outcomes

Mothers' sensitivity toward their children during infancy and preschool is associated with optimal behavioral and cognitive outcomes in early childhood (Denham, Renwick, & Holt, 1991; Hubbs-Tait, Culp, Culp, & Miller, 2002; Landry, Smith, Swank, Assel, & Vellet, 2001; NICHD ECCRN, 2001). Sensitivity is typically defined as a combination of warmth and responsiveness. According to attachment theory, parental sensitivity encourages an infant or toddler to form a secure attachment, which promotes feelings of self-worth, exploration of the environment, and positive expectations from new relationships (Ainsworth, 1973; Bowlby, 1969; Bretherton, 1985; Matas, Arend, & Sroufe, 1978). These socioemotional dispositions in turn facilitate positive behavioral outcomes when children enter school (Eisenberg, Fabes, & Spinrad, 2006).

There is also a connection between stimulating maternal behaviors and optimal cognitive outcomes (Fagot & Gauvain, 1997; Hubbs-Tait et al., 2002) and, to a lesser extent, more favorable behavioral development (Zaslow et al., 2006). From a neo-Vygotskian perspective, the most effective type of parental stimulation, scaffolding, helps children with activities that they are unable to do on their own (Rogoff, 1990; Vygotsky, 1978). Examples can include making connections between objects and their functions or imparting strategies for solving problems. Other manifestations of parental stimulation include frequent and complex child-directed speech and the provision of learning materials and experiences (Bennett, Weigel, & Martin, 2002; Bradley, Corwyn, Burchinal, Pipes McAdoo, & Garcia Coll, 2001; Hart & Risley, 1995).

Studies with fathers of young children have found that as with mothers, sensitivity and stimulation predict enhanced child outcomes. Controlling for mothers' sensitivity, fathers' sensitivity contributes to children's early cognitive (Black, Dubowitz, & Starr, 1999; Cowan, Cowan, Heming, & Miller, 1991; NICHD ECCRN, 2005a) and behavioral (NICHD ECCRN, 2004; Youngblade & Belsky, 1992) development. Paternal stimulation is also associated with optimal cognitive outcomes (Tamis-LeMonda et al., 2004), net of maternal stimulation. Thus, it appears that fathers' parenting matters for young children's cognitive and socioemotional development. However, significant main effects for fathers' supportiveness may mask variation according to mothers' supportiveness.

### Theoretical Framework

In their bioecological model of human development, Bronfenbrenner and Ceci (1994) assert that proximal processes in a child's immediate environment—such as parent-child interactions—determine the degree to which that child's genetic potential for adaptive functioning is expressed. Effective proximal processes evoke reciprocal relationships between the child and the persons and objects in his or her environment that promote optimal development. Bronfenbrenner and Ceci posit that proximal processes pro-

mote functional behavior more strongly in disadvantaged environments because the children in them have the most to gain. This theory suggests that even if mothers' parenting behaviors typically have a stronger effect than fathers' because mothers tend to be the primary caregivers, the effect of fathers' parenting may vary across households. Specifically, families with a supportive mother may be considered, in the language of Bronfenbrenner and Ceci, advantaged environments; thus, fathers' parenting behaviors may make little additional contribution to young children's outcomes. By contrast, in families without a supportive mother (disadvantaged parenting environments), supportive father-child interactions may evoke children's potential for adaptive socioemotional and cognitive functioning that would remain otherwise unexpressed.

Attachment theory suggests specific mechanisms by which fathers may evoke positive developmental outcomes in children in the context of unsupportive maternal parenting. It holds that when mothers provide a sensitive caregiving environment, infants and toddlers learn to seek support in ways that foster prosocial behavior and self-regulation of affect (Main, 1990; Sroufe, Egeland, Carlson, & Collins, 2005). In these environments, sensitive parenting by a father should reinforce rather than fundamentally alter infants' attachment behaviors. When mothers provide an insensitive caregiving environment, children learn attachment strategies that undermine their capacities for effective exploration, emotional regulation, and relationship building (Cassidy & Berlin, 1994; Main, 1990). In these environments, sensitive parenting by a father may elicit profoundly different attachment-seeking behaviors in children, namely ones that foster secure father-child attachments (De Wolff & van IJzendoorn, 1997) and provide an alternative model for later experiences and relationships. Thus, in the context of maternal insensitivity, fathers' sensitivity may offer children a singular path to social and emotional competence.

A separate literature suggests a mechanism for paternal buffering in the cognitive domain. Smith, Landry, and Swank (2000) found that maternal scaffolding, observed during daily activities when children were 3 years old, predicted children's performance on tests of verbal and nonverbal reasoning 2 years later. The authors proposed that scaffolding enabled children to learn "how to learn" rather than to execute specific tasks (p. 28). Mothers' scaffolding in daily life was thought to promote logical reasoning about cause and effect, which was later transferable by children across contexts and tasks. This explanation suggests that children may not reap significant additional benefits from a stimulating father if the mother's scaffolding is sufficiently high to impart transferable skills. However, children whose mothers are not stimulating may benefit greatly from a stimulating father if he is the only parent willing or able to teach those skills. In these instances, fathers' scaffolding of children's learning may offer generalizable problem-solving skills that children would not develop otherwise.

The hypothesis that fathers' supportive parenting has a stronger impact on positive development when mothers are less supportive does not imply that the same relation holds for mothers' and fathers' harsh parenting. Our measure of

supportiveness is defined so that the low end refers to the absence of sensitive or simulating behaviors rather than the presence of harsh or abusive behaviors. The distinction between unsupportive and harsh parenting has been demonstrated empirically (Pettit, Bates, & Dodge, 1997), and the consequences of harsh parenting by even one parent can be severe for young children (Pettit et al., 1997; Weiss, Dodge, Bates, & Pettit, 1992). The hypothesis advanced here argues only that higher levels of fathers' supportiveness will benefit children increasingly as mothers' level of supportiveness declines.

### Previous Literature on Paternal Buffering

The hypothesis that fathers serve as buffers against maternal unsupportiveness has never been tested (to our knowledge), but indirect empirical support comes from three relevant strands of evidence. The first of these strands surrounds the effects of parents' mental health on children's psychosocial development. Several studies show that children whose mother is depressed are at greatly elevated risk of both internalizing and externalizing behavior problems (Downey & Coyne, 1990; Goodman, 2007). However, that risk is substantially reduced or even eliminated if the child has a coresident father who is not depressed (Foley et al., 2001; Goodman, Brogan, Lynch, & Fielding, 1993; Kahn, Brandt, & Whitaker, 2004). Thus, a nondepressed father buffers the child from the most severe consequences of a depressed mother. The well-established connection between maternal depression and less supportive parenting behaviors (see Lovejoy, Graczyk, O'Hare, & Neuman, 2000) suggests that supportive fathers may serve as buffers against less supportive (and not exclusively mentally ill) mothers more generally.

The second strand of evidence that bears on our hypothesis comes from the resilience literature. Several studies of children who have endured multiple risk factors such as economic hardship and family instability have found that the presence of a supportive nonparental adult differentiates children with positive young adult outcomes from those without (Werner & Smith, 1982). A grandmother, coach, or other adult mentor can be a powerful buffer against the ill effects of environmental risks on children's cognitive and socioemotional outcomes (Jenkins & Smith, 1990; Herrenkohl, Herrenkohl, & Egolf, 1994). Although these findings relate to nonparental adults, they may be true of secondary caregivers as well. If a child fails to receive adequate maternal support, the support received from a father may take on added importance because of its compensatory value.

Last, studies that have compared young children in two-parent families according to the number of supportive parents or secure attachment representations (none, one, or two) have found that children with one scored between those with none or two. For example, previous analyses from the EHS Project found that children with one highly supportive parent at age 2 scored between those with neither and those with both on cognition at ages 2, 3, and 5 (Martin, Ryan, & Brooks-Gunn, 2007; Ryan, Martin, & Brooks-

Gunn, 2006). Verschueren and Marcoen (1999) found that 5-year-olds with a secure attachment with one parent scored between those with secure attachments with neither and both on socioemotional competence. This research suggests that a healthy relationship with one parent buffers the child from an unhealthy relationship with the other.

### Complementary Analysis of Maternal Moderation of Paternal Supportiveness

Families without a supportive father, like those without a supportive mother, may also be conceptualized as disadvantaged environments. If so, mothers' parenting should exert a stronger influence on children when fathers are less supportive because children have more to gain. However, mothers are the more common primary caregiver; therefore, in most families, the moderating impact of fathers on mothers may be smaller than the moderating impact of mothers on fathers. Nonetheless, supportive mothers in the presence of unsupportive fathers may invoke the same mechanisms described above in generating salutary effects on children.

### The Present Study

Our study extends previous research by testing for buffering by fathers against mothers' unsupportive parenting behaviors using data from the NICHD Study of Early Child Care and Youth Development (SECCYD). We defined parental supportiveness to incorporate two types of parenting behaviors—sensitivity and stimulation—which correspond to the two key parenting constructs identified by Zaslow and colleagues (2006) in the developmental literature: affective responses to the child, including warmth, sensitivity, and responsiveness; and cognitive stimulation, including teaching behaviors and other activities that promote learning. We considered measures of both academic and social functioning at the time of school entry because both contribute to success in the classroom (Kagan, Moore, & Bredekamp, 1995) and are associated with parental supportiveness (Black et al., 1999; Landry et al., 2001; NICHD ECCRN, 2001, 2004, 2005a; Tamis-LeMonda et al., 2004). We tested our paternal buffering hypothesis by examining whether associations between fathers' supportiveness and children's outcomes are stronger when mothers' supportiveness is lower.

### Method

#### Sample

The NICHD SECCYD is a prospective, multisite study of 1,364 children and their families. Children were enrolled at 1 month of age at 10 sites throughout the United States. Data collection waves occurred periodically from 6 months through fifth grade. At each wave, there was a laboratory visit, a home visit, and a visit to the child care provider or school. In addition, questionnaires were completed by children's teachers in kindergarten and first grade. The study

participants are geographically diverse, but not representative of the United States (NICHD ECCRN, 2001).

To be eligible for the present study, children must have lived with two parents at 54 months, when parenting by both parents was first observed in all sites. There was no requirement that the parents be married or that the child be biologically related to the father. Of the 1,364 children enrolled at baseline, 1,084 participated at the 54-month wave (80%). The majority (904, or 83%) had coresident parents, 81% of whom ( $n = 730$ ) were both videotaped with the child. Seven children (<1%) who lacked all academic and social outcomes at kindergarten and first grade were dropped, leaving a final sample of 723 children, although the number of cases with valid values varies across outcomes and is noted in the tables.

The analytic sample of 723 children had, on average, a relatively advantaged socioeconomic background. As of 1 month after study enrollment, 87% had a family income that fell above the poverty line. Three quarters of mothers (77%) had some college education, and only 5% had not completed high school. Eighty-seven percent of mothers were White, 6% were African American, 4% were Hispanic American, and 3% were another race/ethnicity. Nearly all children's parents were married (94%). In all but 6% of cases, the father who was observed was biologically related to the child. The children were evenly split by sex. Compared with the full study sample of 1,364 children, our analytic sample was less likely to be poor (13% vs. 39%,  $p < .001$ ) and more likely to have two parents with some college education (66% vs. 41%,  $p < .001$ ). Mothers were more likely to be White (87% vs. 72%,  $p < .001$ ). Given our eligibility rules, parents were more likely to be married (94% vs. 43%,  $p < .001$ ).

In the present sample, the children's mean age was 68 months when kindergarten teachers rated them, 83 months when first-grade teachers rated them, and 84 months when they underwent academic achievement testing.

## Measures

**Maternal and paternal supportiveness.** When children were 54 months old, they were observed in a semistructured interaction with their father during a home visit and their mother during a laboratory visit. Both interactions were videotaped and coded by trained scorers. Each interaction lasted approximately 15 min. The present study relies on two of the six scales used to rate parents' behavior: Supportive Presence and Stimulation of Cognitive Development. Both were scored within a 7-point range (1 = *very low*, 7 = *very high*). Supportive Presence assessed parents' sensitivity and was defined as behavior that expressed positive regard and emotional support, such as attending to the child's cues and boosting the child's confidence. Stimulation measured parents' use of cognitive scaffolding and was defined as behavior that helped the child acquire new skills, encouraged problem solving, or taught principles. Examples include pointing out characteristics and functions of objects and suggesting more sophisticated play activities.

It should be noted that previous publications based on these data have used measures of parenting behavior called *sensitivity* that contrast with ours. NICHD ECCRN (2004) added two scales, Respect for Autonomy and Hostility, to the Supportive Presence scale used here. Belsky and Fearon (2004) did the same, and also added the Stimulation scale and a Quality of Assistance scale. We rely on the Supportive Presence scale alone to isolate emotional support from related parenting constructs.

The activities in the mother-child and father-child interactions varied slightly to maintain the child's interest. The mother-child interaction comprised three tasks. The first two were designed to be challenging to the child so that parental assistance would be required, and the last was designed to elicit free play. The first task was a maze on an Etch-A-Sketch toy, the second task was the construction of a series of towers using blocks, and the third task was a play activity with puppets. The father-child interaction comprised two tasks. The first, designed to elicit the father's assistance, entailed building a structure with chutes and ramps for marbles to run through. The second task, designed to elicit free play, centered on animal and jungle toys. Thus, both sets of parent-child activities aimed to elicit sensitive and stimulating parent behaviors that might emerge naturally in the child's daily life.

Study documentation provides only a range of interrater reliability statistics for the parental behavior scales, including those not considered here (.78-.92 for mothers, .71-.88 for fathers; NICHD ECCRN, 2005a). The mean Supportive Presence score among mothers in the present sample was 5.4 ( $SD = 1.2$ ), and the mean Stimulation of Cognitive Development score was 4.6 ( $SD = 1.2$ ). The mean Supportive Presence score among fathers was 5.3 ( $SD = 1.2$ ), and the mean Stimulation score was 4.4 ( $SD = 1.4$ ). The correlation between Supportive Presence and Stimulation was high for both mothers ( $r = .66$ ,  $p < .001$ ) and fathers ( $r = .68$ ,  $p < .001$ ). Because we conceptualized parents' sensitive and stimulating behaviors as aspects of a larger supportiveness construct, the two scales were added to form a single measure of *supportiveness* (mothers:  $M = 9.9$ ,  $SD = 2.1$ , range = 3-14; fathers:  $M = 9.8$ ,  $SD = 2.4$ , range = 2-14). Mothers' and fathers' supportiveness scores were only moderately correlated ( $r = .22$ ,  $p < .001$ ), allowing for the detection of differential effects of one parent's supportiveness at varying levels of the other's.

**Academic outcomes.** In the fall of kindergarten and spring of first grade, children's teachers completed the Academic Rating Scale from the Early Childhood Longitudinal Study (NICHD SECCYD, n.d.). Twenty-five items described language, literacy, and math skills. For each skill, teachers rated the child's knowledge and ability in comparison with other students of the same grade on a 5-point scale (1 = *not yet*, 5 = *proficient*). Items were averaged to create a total academic skill score ( $M = 3.1$ ,  $SD = 0.9$ , in kindergarten;  $M = 3.4$ ,  $SD = 0.9$ , in first grade).

Children's teachers also completed the Academic Competence scale from the Social Skills Rating System (SSRS)—Teacher Form (Gresham & Elliott, 1990). This

scale includes nine items describing the child's math, reading, and general intellectual performance. For each item, teachers used a 5-point scale to score the child according to his/her percentile ranking in his/her class (1 = lowest 10%, 5 = highest 10%). The scale score is standardized separately by sex using a national norming sample ( $M = 100$ ,  $SD = 15$ ). In the present sample, the scale mean was 99.8 in both kindergarten and first grade ( $SD = 11.2$  in kindergarten;  $11.1$  in first grade).

At both time points, children's scores on academic skill and academic competence were highly correlated ( $r = .70$ ,  $p < .001$ , in kindergarten;  $r = .73$ ,  $p < .001$ , in first grade). Therefore, they were standardized ( $M = 0$ ,  $SD = 1$ ) so they would share a common metric and then were averaged to create a composite called *teacher-rated academic competence*.

Children's academic achievement was directly assessed in the spring of first grade during a visit to the laboratory using two subtests of the Woodcock-Johnson Revised Tests of Achievement (Woodcock & Johnson, 1989). The first, Letter-Word Identification, tests early reading ability, and the second, Applied Problems, tests early math problem-solving ability. Standardized scores are calculated using a national norming sample ( $M = 100$ ,  $SD = 15$ ). In the present sample, the Letter-Word Identification subtest mean was 113 ( $SD = 15.7$ ), and the Applied Problems subtest mean was also 113 ( $SD = 16.3$ ). Thus, our sample scored nearly a standard deviation higher than the national average. Scores on the Letter-Word Identification and Applied Problems ( $r = .55$ ,  $p < .001$ ) subscales were averaged to create a measure called *academic achievement tests*. Scores were first standardized within the analytic sample ( $M = 0$ ,  $SD = 1$ ) so that all outcomes would share a common metric.

**Social outcomes.** Kindergarten and first-grade teachers rated children's behavior problems via the Child Behavior Checklist Teacher's Report Form (Achenbach, 1991), a list of 118 problem behaviors. Teachers rated how true each item was of the child during the past 2 months on a 3-point scale (0 = not at all true, 2 = very true). Items were combined to form a total problems score, which is normed separately by sex against a national sample to yield a  $t$  score ( $M = 50$ ,  $SD = 10$ ). In the present sample, the mean was 46.5 ( $SD = 9.4$ ) in kindergarten and 48.8 ( $SD = 9.2$ ) in first grade.

A measure of social skills was yielded by the scale of that name from the SSRS—Teacher Form (Gresham & Elliott, 1990). This scale includes 30 items ( $\alpha = .93$  in kindergarten and  $.94$  in first grade) that characterize children's behavior in the classroom (e.g., cooperation, initiative, and self-control). Teachers rated the frequency of each behavior on a 3-point scale (0 = never, 2 = very often). A standardized score is computed separately by sex using a national norming sample ( $M = 100$ ,  $SD = 15$ ). In the present sample, the mean was 104.7 ( $SD = 13.5$ ) in kindergarten and 104.9 ( $SD = 13.1$ ) in first grade. Children's scores on behavior problems (reflected) and social skills were highly correlated ( $r = .70$ ,  $p < .001$ , in kindergarten;  $r = .68$ ,  $p < .001$ , in first grade). Therefore, the two scores were standardized

within the analytic sample ( $M = 0$ ,  $SD = 1$ ) so they would share a common metric and then were averaged to form a composite called *teacher-rated social competence*.

**Controls.** All controls were identified in the literature as associated with both supportive parenting and children's early classroom performance. Descriptors of children's family background were drawn from the first interview, which occurred 1 month after study enrollment. Children were considered poor if their family's income fell below the poverty line. Because of the relatively high average level of parental education, a variable was created to indicate whether zero, one, or both parents had attended college or other education beyond high school. Given the small cell sizes, mothers' race/ethnicity was reduced to White versus not. Biological father was coded 1 if the father was biologically related to the child. Parents' marital status was not included as a separate covariate because of its overlap with biological father status. Child sex was coded 1 if the child was male.

### Analytic Plan

Scale scores for maternal and paternal supportiveness, as well as an interaction term (i.e., their product), were entered into ordinary least squares regression models of child outcomes from kindergarten and first grade. Following Aiken and West (1991), we mean-centered the supportiveness scales to ease the interpretation of interactions. All models included the background controls.

To rule out the possibility that the association between parenting at 54 months and child outcomes in kindergarten and first grade was driven by associations between parenting and earlier child outcomes, we added child outcomes assessed at 54 months as controls. The results did not substantively change with this specification; therefore, for the sake of parsimony, final models excluded 54-month values of child outcomes (analyses available on request). Similarly, to rule out the possibility that child outcomes at kindergarten and first grade were caused by contemporaneous parenting practices rather than parenting at 54 months, we ran all models of child outcomes at first grade adding measures of maternal and paternal supportiveness at first grade (parenting was not assessed in kindergarten). Inferences about the coefficients associated with 54-month parenting were unchanged. As above, the more parsimonious model was favored (analyses available on request).<sup>1</sup>

## Results

### Child Academic Outcomes and the Moderation of Fathers' Supportiveness by Mothers' Supportiveness

Regression results (see Table 1) should be interpreted with the caveat that because the scales were mean-centered,

<sup>1</sup> A measure of marital relationship quality at 54 months was included in exploratory models, but because it did not predict any of the child outcomes or modify the associations between parenting behaviors and child outcomes, it was dropped.

Table 1  
Results of Regression Models of Child Outcomes at Kindergarten and First Grade on Parenting at 54 Months

Variable	Kindergarten						First grade								
	Teacher-rated academic competence			Teacher-rated social competence			Teacher-rated academic competence			Teacher-rated social competence			Academic achievement tests		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
Maternal supportiveness	.07	.02	.17***	.05	.02	.11**	.06	.02	.13**	.05	.02	.11**	.06	.02	.15***
Paternal supportiveness	.02	.01	.05	.04	.02	.09*	-.01	.02	-.04	.01	.02	.03	.01	.01	.03
Maternal Supportiveness $\times$ Paternal Supportiveness	-.01	.01	-.09*	-.01	.01	-.08*	-.03	.01	-.14***	-.02	.01	-.09*	-.01	.01	-.06
Mother White	.12	.11	.04	.07	.11	.02	.17	.11	.06	.15	.10	.05	.17	.10	.06
Parental education	.23	.06	.17	.21	.06	.16***	.26	.06	.20***	.16	.06	.12**	.25	.05	.20***
Biological father	.22	.15	.05	.36	.15	.09*	.18	.14	.05	.37	.15	.10*	-.10	.14	-.03
In poverty	-.21	.11	-.08	.14	.11	.05	.00	.11	.00	-.01	.11	-.00	-.06	.11	-.03
Child sex	-.17	.07	-.09*	-.02	.07	-.01	.06	.07	.03	.09	.07	.05	-.07	.06	-.04
N	648			666			671			678			696		
R <sup>2</sup>	.17			.09			.12			.09			.12		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

the coefficient associated with each parent's supportiveness score refers to the increase in outcome associated with a 1-unit increase in that parent's supportiveness when the other parent's supportiveness was at its mean value. In addition, because all outcomes have been standardized, increases in outcomes are expressed in standard deviations. For example, in the case of teacher-rated academic competence in kindergarten, the *B* of .07 ( $p < .001$ ) for maternal supportiveness indicates that a 1-point increase in maternal supportiveness was associated with an increase of .07 standard deviations in academic competence when paternal supportiveness was at its mean. The nonsignificance of the *B* for paternal supportiveness indicates that a 1-point increase in that score was not associated with an increase in academic competence when maternal supportiveness was at its mean. It should be noted that the *B*s report the change in outcome associated with an increase of 1 point on the supportiveness scale, and the  $\beta$ s report the change in outcome associated with an increase of 1 standard deviation on the supportiveness scale.

There was a significant interaction between maternal and paternal supportiveness for academic competence in kindergarten and first grade. The size of the standardized beta for the interaction term ( $\beta = -.09$ ,  $p < .05$ , in kindergarten;  $\beta = -.14$ ,  $p < .001$ , in first grade) illustrated its nontriviality relative to maternal and paternal supportiveness ( $\beta = .17$ ,  $p < .001$ , and  $\beta = .05$ , *ns*, respectively in kindergarten;  $\beta = .13$ ,  $p < .01$ , and  $\beta = -.04$ , *ns*, respectively, in first grade). The negative sign of the interaction term in both grades indicates that there were decreasing returns to the child's academic competence when maternal and paternal supportiveness both increased. The interaction between maternal and paternal supportiveness did not significantly predict academic achievement tests in first grade.

Panel a of Figure 1 facilitates interpretation of the significant interactions by plotting changes in the association between paternal supportiveness and academic competence in kindergarten according to the level of maternal supportiveness. The *y*-axis presents the simple slope for paternal supportiveness, and the *x*-axis presents the full range of possible scores on maternal supportiveness. The solid line represents the simple slope estimates for paternal supportiveness. The dotted lines represent the 95% confidence interval around the estimates. Simple slopes and confidence intervals were calculated using the *lincom* command in STATA 10.0 (Statacorp, 2007). Academic competence in kindergarten was selected as an exemplar; academic competence in first grade should be similarly interpreted.

The association between paternal supportiveness and academic competence in kindergarten decreased as maternal supportiveness increased. For example, the estimated slope for paternal supportiveness was  $B = .12$  ( $p < .01$ ), or .12 standard deviations, when maternal supportiveness was 3, compared with  $B = .03$  ( $p < .05$ ), or .03 standard deviations, when maternal supportiveness was 9. In families where the mother scored above 9 on supportiveness, the father's supportiveness made no additional contribution to the child's academic competence in kindergarten.

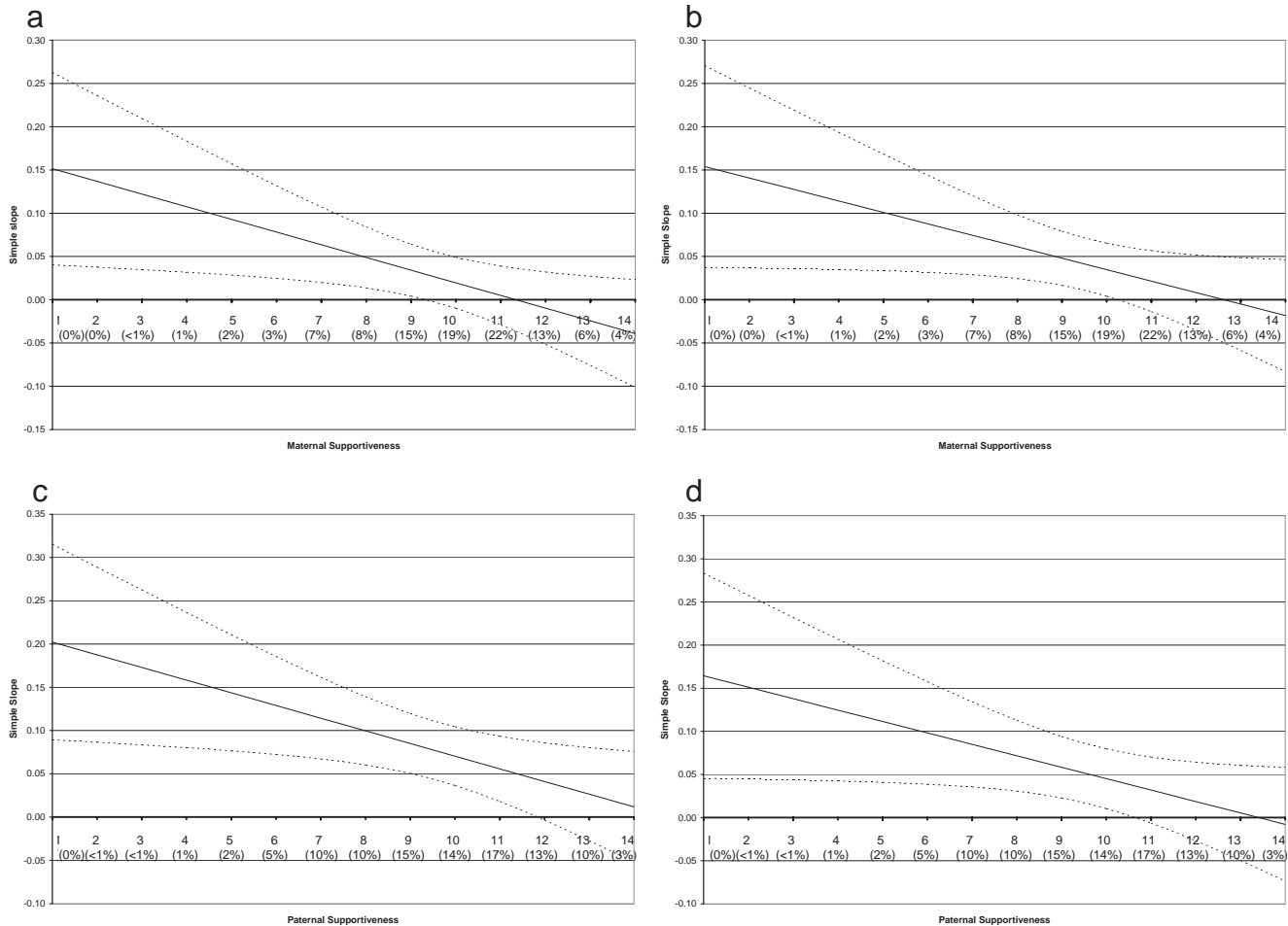


Figure 1. Figure presents simple slope (and 95% confidence interval) of paternal supportiveness on academic competence (Panel a) and social competence (Panel b) in kindergarten according to maternal supportiveness, and simple slope (and 95% confidence interval) of maternal supportiveness on academic competence (Panel c) and social competence (Panel d) in kindergarten according to paternal supportiveness. The solid line represents the simple slope estimates. The dotted lines represent the 95% confidence interval around the estimates.

### Child Social Outcomes and the Moderation of Fathers' Supportiveness by Mothers' Supportiveness

The results with respect to children's social outcomes in the classroom largely mirrored those found for academic outcomes (see Table 1). The standardized betas for the interaction term were of similar magnitude to those for maternal supportiveness, and their signs were negative in both kindergarten and first grade. Panel b of Figure 1 depicts the changing association between paternal supportiveness and social competence in kindergarten according to the level of maternal supportiveness. Results for social competence in first grade should be similarly interpreted. The association between paternal supportiveness and children's social competence in kindergarten declined as mothers' scores on supportiveness increased. For example, the estimated slope for paternal supportiveness was  $B = .13$  ( $p < .01$ ), or .13 standard deviations, when maternal supportive-

ness was 3, compared with  $B = .05$  ( $p < .01$ ), or .05 standard deviations, when maternal supportiveness was 9. When mothers scored higher than 10 on supportiveness, fathers' supportiveness made no additional contribution to children's social competence.

### Moderation of Maternal Supportiveness by Paternal Supportiveness

To determine the extent of fathers' moderating effect, we calculated simple slopes for maternal supportiveness across levels of paternal supportiveness using the above-described technique. As the significant interaction terms necessarily indicate, mothers' supportiveness mattered more to children's academic and social outcomes when the other parent's supportiveness was lower. However, mothers contributed to child outcomes across a wider range of fathers' supportiveness scores. Mothers' supportiveness increased

children's academic competence in kindergarten until fathers scored 12 (1 standard deviation above the mean on supportiveness) or higher (see Figure 1, Panel c). By comparison, fathers' supportiveness increased academic competence until mothers scored 10 or higher (recall the mean was 9.9). Panel d of Figure 1 shows that when fathers scored 11 or higher on supportiveness, mothers' supportiveness made no additional contribution to children's social competence. As stated above, fathers' supportiveness made no additional contribution to social competence when mothers scored 11 or higher.

### Interactive Effects of Maternal and Paternal Supportiveness by Developmental Domain

As stated earlier, for academic competence in kindergarten, paternal supportiveness mattered only when mothers scored 9 or lower, and for social competence in kindergarten, it mattered only when mothers scored 10 or lower. Thirty-seven percent of our sample of mothers scored 9 or lower, and 56% scored 10 or lower. Therefore, paternal supportiveness mattered for more families when predicting children's social competence than when predicting academic competence, a pattern that obtained across outcomes and time points. By contrast, maternal supportiveness mattered for more families when predicting academic versus social competence. For academic competence in kindergarten, maternal supportiveness mattered when fathers scored 11 or lower (74% of our sample). For social competence in kindergarten, it mattered when fathers scored 10 or lower (57% of our sample). Thus, fathers demonstrated a weaker moderating effect on mothers than mothers did on fathers for academic but not social competence.

### Discussion

Studies that have determined each parent's influence on the child by controlling for the other's have, importantly, established the relevance of both parents to young children's development. However, their strategy assumes the independence of maternal and paternal parenting effects when it may be reasonable to assume otherwise. In this study, we tested the hypothesis that fathers' supportiveness matters most in families where the level of mothers' supportiveness is relatively low. In doing so, we proposed that fathers' supportiveness may primarily influence child development by buffering against mothers' unsupportiveness. Our results support this hypothesis. Specifically, we found that paternal supportiveness had its strongest associations with children's school readiness when maternal supportiveness was lowest. In fact, paternal supportiveness was associated with school readiness indicators only when mothers scored at or below the mean on supportiveness. Maternal supportiveness was similarly associated with social competence when fathers scored at or below the mean on supportiveness. However, maternal supportiveness was associated with academic competence even when fathers scored roughly 1 standard deviation above the mean.

Although the range of possible values for the supportiveness scale was 1 to 14, the plurality of mothers scored between 9 and 12. No mothers scored below 3. Consequently, a nontrivial portion of the sample scored above the upper bound on significant effects of paternal supportiveness. For example, paternal supportiveness was associated with academic competence in kindergarten when maternal supportiveness was 9 or lower (37% of our sample). Inversely, paternal supportiveness was not associated with academic competence in kindergarten for most children in this sample (63%). Paternal supportiveness was associated with social competence in kindergarten when maternal supportiveness was 10 or lower (56% of our sample). Inversely, paternal supportiveness was not associated with social competence for the remaining 44% of children. Thus, it appears that, depending on the outcome, paternal supportiveness has no added benefit net of maternal supportiveness for approximately half our sample. By contrast, maternal supportiveness had no added benefit for academic competence for only 26% of our sample (those whose fathers scored 12 or higher on supportiveness). However, maternal supportiveness had no added benefit for social competence for the 43% of children in our sample whose fathers scored 11 or higher.

These results are consistent with our hypothesis that fathers' supportive parenting behaviors serve primarily to compensate children for a deficit in supportive parenting by mothers. It remains unknown whether fathers deliberately compensate for wives they perceive as unsupportive. Two fathers who are equally highly supportive in a videotaped task may make markedly different decisions about their time allocations depending on their wife's parenting skills. A supportive father who knows that his wife is depressed and hence unengaged in activities with their young child may spend increased time on parenting activities that would ordinarily be performed by his wife alone. An equally supportive father who is confident that his wife is sufficiently engaged with their child may opt out of those activities. Although the fathers in the two families are of equal *quality* with respect to supportiveness, the child in the family with the unsupportive mother would be exposed to a greater *quantity* of his/her father's parenting behaviors. Thus, the child with the unsupportive mother would benefit more than the child with the supportive mother from his or her father's supportiveness.

Alternatively, fathers may not try to balance the shortcomings in their wives' parenting behaviors. However, the children of unsupportive mothers may still benefit disproportionately from their fathers' supportiveness owing to a state of deprivation. The research on resiliency shows that young children who receive insufficient emotional support at home because of parental abuse or parental separation can profit from close ties with their grandparents (Dunn, Davies, O'Connor, & Sturgess, 2001; Herrenkohl et al., 1994). Nonparental adults who might otherwise be relatively unimportant take on central significance in such situations as nurturant caregivers and mentors. Bronfenbrenner and Ceci's (1994) theory suggests that such figures evoke in children socioemotional and cognitive competencies that would otherwise go undeveloped.



The results here should not be taken to suggest that highly supportive single mothers can singlehandedly fulfill their children's needs for emotional support and learning stimulation. Highly supportive mothers in this sample could rely (to varying degrees) on husbands who performed the functions that fathers fulfill aside from supportive parenting, such as material provision and emotional support (Carlson & McLanahan, 2002). In single-parent families, mothers must fulfill some of these functions, whereas other functions are simply left unfulfilled.

Mothers mattered for more families when predicting children's academic competence, and fathers mattered for more families when predicting children's social competence. This finding may support the theory advanced by some that fathers are particularly important for young children's development of social skills (Parke et al., 2002; Verschueren & Marcoen, 1999). For example, father-child play is often thought to be more arousing than mother-child play and hence potentially more instructive for skills surrounding emotional regulation and conflict resolution.

The current study has several limitations. First, the interaction between maternal and paternal supportiveness was small. However, this was due in part to the small size of the main effects. We note that these are consistent with past studies (including those based on the present data) linking observed parenting to cognitive and social outcomes in toddlerhood through school entry (e.g., Landry et al., 2001; Tamis-LeMonda et al., 2004; NICHD ECCRN, 2005b). We also stress that while parenting typically explains small-to-modest amounts of unique variance in child outcomes (Vandell, 2000), a predictor can be of great practical importance even if it is unable to explain more than a small amount of variance (Rosenthal, Rosnow, & Rubin, 2000). Nonetheless, the modesty of the current results suggests only *tentative* support of the paternal buffering hypothesis. Furthermore, this tentative support can be generalized only to our age range of study (54 months through first grade).

Moreover, the negative interaction between maternal and paternal supportiveness might reflect ceiling effects on the measures of teacher-rated competence in our sample. Teachers evaluated children's academic and social competence relative to grade-specific milestones. Because our sample is socioeconomically advantaged, a relatively high proportion should be performing above grade level. Perhaps paternal supportiveness might matter even in the face of high maternal supportiveness if there were more sensitive measures of competence. This may explain our failure to obtain a significant buffering effect on the direct assessment of academic achievement in first grade; however, the sign and size of the interaction for that outcome were consistent with the other academic outcome measures, suggesting the possibility of Type II error.

Another limitation of this study is that the sample is not representative of families with young children nationwide. Not only does the NICHD SECCYD disproportionately capture families who are socioeconomically advantaged, but the cases included in this analysis were particularly advantaged because all parents coresided. It is possible that paternal supportiveness would show stronger main effects

and weaker buffering effects in a disadvantaged sample, given the inverse association between socioeconomic status and maternal supportiveness (Bradley et al., 2001; Yeung, Linver, & Brooks-Gunn, 2002). This dynamic may explain the failure of a previous study of the EHS Project, an exclusively low-income sample, to detect an interaction between maternal and paternal supportiveness (Martin et al., 2007).

Another limitation of the sample is the small number of minority families included. Research on young children has shown that the effects of certain parenting behaviors such as intrusiveness and physical discipline vary according to race/ethnicity (Deater-Deckard & Dodge, 1997; Ispa et al., 2004). It will be necessary to repeat these analyses in minority populations larger than that captured here to explore the possibility of alternative findings.

A final limitation is that the mother-child interaction took place in the laboratory setting, whereas the father-child interaction occurred at home, introducing a lack of comparability between mothers' and fathers' scale scores to an unknown degree. Moreover, it is possible that because mothers' scores were based on more tasks, their scores are more valid than fathers'.

Despite these limitations, this study's findings tentatively support the novel hypothesis that fathers' supportive parenting behaviors contribute to children's school readiness skills only when mothers are at average or lower levels of supportiveness. Thus, it is possible that fathers' supportive parenting serves to reinforce mothers' supportive parenting and compensate for mothers' unsupportive parenting.

## References

- Achenbach, T. M. (1991). *Manual for the Teacher's Report Form and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. M. Caldwell & H. N. Ricciuti (Eds.), *Review of child development research: Vol. 3. Child development and social policy* (pp. 1-94). Chicago: University of Chicago Press.
- Belsky, J., & Fearon, R. M. P. (2004). Exploring marriage-parenting typologies and their contextual antecedents and developmental sequelae. *Development and Psychopathology, 16*, 501-523.
- Bennett, K. K., Weigel, D. J., & Martin, S. S. (2002). Children's acquisition of early literacy skills: Examining family contributions. *Early Childhood Research Quarterly, 17*, 295-317.
- Black, M. M., Dubowitz, H., & Starr, R. H. (1999). African American fathers in low income, urban families: Development, behavior, and home environment of their three-year-old children. *Child Development, 70*, 967-978.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bradley, R. H., Corwyn, R. F., Burchinal, M., Pipes McAdoo, H., & Garcia Coll, C. (2001). The home environments of children in the United States. Part II: Relations with behavioral development through age thirteen. *Child Development, 72*, 1868-1886.
- Bretherton, I. (1985). Attachment theory: Retrospect and prospect. *Monographs of the Society for Research in Child Development, 50*(1-2, Serial No. 209).

- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature–nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, *101*, 568–586.
- Carlson, M. J., & McLanahan, S. (2002). Fragile families, father involvement, and public policy. In C. S. Tamis-LeMonda & N. Cabrera (Eds.), *Handbook of father involvement: Multidisciplinary perspectives* (pp. 461–488). Mahwah, NJ: Erlbaum.
- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development*, *65*, 971–991.
- Cowan, C. P., Cowan, P. A., Heming, G., & Miller, N. B. (1991). Becoming a family: Marriage, parenting, and child development. In P. A. Cowan & M. Hetherington (Eds.), *Family transitions* (pp. 79–109). Hillsdale, NJ: Erlbaum.
- Deater-Deckard, K., & Dodge, K. A. (1997). Externalizing behavior problems and discipline revisited: Nonlinear effects and variation by culture, context, and gender. *Psychological Inquiry*, *8*, 161–175.
- Denham, S. A., Renwick, S. M., & Holt, R. W. (1991). Working and playing together: Prediction of preschool social–emotional competence from mother–child interaction. *Child Development*, *62*, 242–249.
- De Wolff, M. S., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, *68*, 571–591.
- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin*, *108*, 50–76.
- Dunn, J., Davies, L., O'Connor, T. G., & Sturgess, W. (2001). Family lives and friendships: The perspectives of children in step-, single-parent, and nonstep families. *Journal of Family Psychology*, *15*, 272–287.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 646–718). New York: Wiley.
- Fagot, B. I., & Gauvain, M. (1997). Mother–child problem solving: Continuity through the early childhood years. *Developmental Psychology*, *33*, 480–488.
- Foley, D. L., Pickles, A., Simonoff, E., Maes, H. H., Silberg, J. L., Hewitt, J. K., & Eaves, L. J. (2001). Parental concordance and comorbidity for psychiatric disorder and associate risks for current psychiatric symptoms and disorders in a community sample of juvenile twins. *Journal of Child Psychology and Psychiatry*, *42*, 381–394.
- Goodman, S. H. (2007). Depression in mothers. *Annual Review of Clinical Psychology*, *3*, 107–135.
- Goodman, S. H., Brogan, D., Lynch, M. E., & Fielding, B. (1993). Social and emotional competence in children of depressed mothers. *Child Development*, *64*, 516–531.
- Gresham, F. M., & Elliott, S. N. (1990). *The Social Skills Rating System*. Circle Pines, MN: American Guidance System.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Brookes Publishing.
- Herrenkohl, F. C., Herrenkohl, R. C., & Egolf, B. (1994). Resilient early school-age children from maltreating homes: Outcomes in late adolescence. *American Journal of Orthopsychiatry*, *64*, 301–309.
- Hubbs-Tait, L., Culp, A. M., Culp, R. E., & Miller, C. E. (2002). Relation of maternal cognitive stimulation, emotional support, and intrusive behavior during Head Start to children's kindergarten cognitive abilities. *Child Development*, *73*, 110–131.
- Ispa, J. M., Fine, M. A., Halgunseth, L. C., Harper, S., Robinson, J., Boyce, L., . . . Brady-Smith, C. (2004). Maternal intrusiveness, maternal warmth, and mother–toddler relationship outcomes: Variations across low-income ethnic and acculturation groups. *Child Development*, *75*, 1613–1631.
- Jenkins, J. M., & Smith, M. A. (1990). Factors protecting children living in disharmonious homes: Maternal reports. *Journal of the American Academy of Child & Adolescent Psychiatry*, *29*, 60–69.
- Kagan, S. L., Moore, E., & Bredekamp, S. (Eds.). (1995). *Reconsidering children's early development and learning: Towards common views and vocabulary*. Washington, DC: National Educational Goals Panel.
- Kahn, R. S., Brandt, D., & Whitaker, R. C. (2004). Combined effect of mothers' and fathers' mental health symptoms on children's behavioral and emotional well-being. *Archives of Pediatrics and Adolescent Medicine*, *158*, 721–729.
- Landry, S. H., Smith, K. E., Swank, P. R., Assel, M. A., & Vellet, S. (2001). Does early responsive parenting have a special importance for children's development or is consistency across early childhood necessary? *Developmental Psychology*, *37*, 387–403.
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, *20*, 561–592.
- Main, M. (1990). Cross-cultural studies of attachment organization: Recent studies, changing methodologies, and the concept of conditional strategies. *Human Development*, *33*, 48–61.
- Martin, A., Ryan, R. M., & Brooks-Gunn, J. (2007). The joint influence of mother and father parenting on child cognitive outcomes at age 5. *Early Childhood Research Quarterly*, *22*, 423–439.
- Matas, L., Arend, R. A., & Sroufe, L. A. (1978). The continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development*, *49*, 547–556.
- NICHD Early Child Care Research Network. (2001). Nonmaternal care and family factors in early development: An overview of the NICHD Study of Early Child Care. *Journal of Applied Developmental Psychology*, *22*, 457–492.
- NICHD Early Child Care Research Network. (2004). Fathers' and mothers' parenting behavior and beliefs as predictors of children's social adjustment in the transition to school. *Journal of Family Psychology*, *18*, 628–638.
- NICHD Early Child Care Research Network. (Ed.). (2005a). *Child care and child development: Results from the NICHD Study of Early Child Care and Youth Development*. New York: Guilford Press.
- NICHD Early Child Care Research Network. (2005b). Predicting individual differences in attention, memory, and planning in first graders from experiences at home, child care, and school. *Developmental Psychology*, *41*, 99–114.
- NICHD Study of Early Child Care and Youth Development. (n.d.). *Instrument documentation—Phase II*. Retrieved from <https://secc.rti.org/Phase2InstrumentDoc.pdf>
- Parke, R. D., McDowell, D. J., Kim, M., Killian, C., Dennis, J., Flyr, M. L., & Wild, M. N. (2002). Fathers' contribution to children's peer relationships. In C. S. Tamis-LeMonda & N. Cabrera (Eds.), *Handbook of father involvement: Multidisciplinary perspectives* (pp. 141–167). Mahwah, NJ: Erlbaum.
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development*, *68*, 908–925.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Rosenthal, R., Rosnow, R. L., & Rubin, D. R. (2000). *Contrasts and effect sizes in behavioral research*. Cambridge, England: Cambridge University Press.
- Ryan, R. M., Martin, A., & Brooks-Gunn, J. (2006). Is one good

- parent good enough? Patterns of mother and father parenting and child cognitive outcomes at 24 and 36 months. *Parenting: Science and Practice*, 6, 211–228.
- Sayer, L. C., Bianchi, S. M., & Robinson, J. P. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. *American Journal of Sociology*, 110, 1–43.
- Smith, K. E., Landry, S. H., & Swank, P. R. (2000). Does the content of mothers' verbal stimulation explain differences in children's development of verbal and nonverbal skills? *Journal of School Psychology*, 38, 27–49.
- Sroufe, L. A., Egeland, B., Carlson, E., & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. New York: Guilford Press.
- Statacorp. (2007). *Stata statistical software: Release 10.0* [Computer software]. College Station, TX: Stata Corporation.
- Tamis-LeMonda, C. S., Shannon, J. D., Cabrera, N. J., & Lamb, M. E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development*, 75, 1806–1820.
- Vandell, D. L. (2000). Parents, peer groups, and other socializing influences. *Developmental Psychology*, 36, 699–710.
- Verschueren, K., & Marcoen, A. (1999). Representation of self and socioemotional competence in kindergarteners: Differential and combined effects of attachment to mother and father. *Child Development*, 70, 183–201.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Weiss, B., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1992). Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. *Child Development*, 63, 1321–1335.
- Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw Hill.
- Woodcock, R., & Johnson, M. (1989). *Woodcock-Johnson Psycho-Educational Test Battery—Revised*. Chicago: Riverside Publishing.
- Yeung, W. J., Linver, M. R., & Brooks-Gunn, J. (2002). How money matters for young children's development: Parental investment and family processes. *Child Development*, 73, 1861–1879.
- Yeung, W. J., Sandberg, J., Davis-Kean, P., & Hofferth, S. (2001). Children's time-use with fathers in intact families. *Journal of Marriage and Family*, 63, 136–154.
- Youngblade, L. M., & Belsky, J. (1992). Parent-child antecedents of 5-year-olds' close friendships: A longitudinal analysis. *Developmental Psychology*, 28, 700–713.
- Zaslow, M. J., Gallagher, M., Hair, E. C., Egeland, B., Weinfield, N. S., Ogawa, J. R., . . . De Temple, J. M. (2006). Longitudinal prediction of child outcomes from differing measures of parenting in a low-income sample. *Developmental Psychology*, 42, 27–37.

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