

SHARED PARENTING IN FRAGILE FAMILIES*

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Abstract

This paper uses data from the Fragile Families and Child Wellbeing Study to examine the frequency of parent-child interaction in several areas across a range of family types. Overall, we find that few individual characteristics of mothers or fathers are consistently associated with how often parents engage in activities with their one-year-old children. The nature of parents' relationship, however, does appear to be important for parenting. Non-resident fathers exhibit significantly lower levels of interaction with their children in activities such as care giving, playing and cognitive stimulation, than resident fathers. In addition, the father's supportiveness toward the mother affects several mother-child and father-child activities. Future research with a larger sample and a greater number of comparable parenting items will be useful for improving our understanding of how mother-father relationships, mothers' parenting, and fathers' parenting are linked to each other and, ultimately, to children's wellbeing.

INTRODUCTION

Dramatic demographic, social and economic changes since the mid-1900s have fundamentally altered the state of America's families: trends in marriage, divorce and fertility have altered family structure and stability, while changes in attitudes, norms and behavior, particularly with respect to gender and childrearing, have shifted the nature of roles and affective ties within families. Particularly with respect to parenting, rising labor force participation by women has increased the extent to which mothers share responsibility for the family's economic wellbeing. At the same time, fathering has broadened beyond breadwinning to include greater emotional involvement and direct participation in caregiving. Together, these changes have led to a blurring of the 'traditional' gender-based division of labor within families and greater fluidity in the roles of mothers and fathers.

Since appropriate parental support and control are fundamental for children's development and wellbeing (Baumrind 1996), it is important to understand how mothers and fathers are operating as parents in the context of greater variation in the organization of the family. In this paper, we use early data from a new birth cohort study to examine mothers' and fathers' interaction with their 12-month old children. We describe the frequency of mother-child and father-child activities across several domains, with attention to variation by parents' relationship status. Then, for two identical parenting items we examine linkages between what mothers do and what fathers do and assess whether they operate as complements or substitutes.

BACKGROUND

As the nature of fathering began to change in the latter decades of the twentieth century, a vast social and psychological literature developed on father involvement, its antecedents and the

consequences for children. Yet, less attention has been paid to the implications for mothers' parenting—the indirect consequences for children via mothers—of greater (and more diverse) father involvement. While recent research has begun to explore the extent to which mothers and fathers share responsibilities for childrearing (e.g. Fuligni and Brooks-Gunn 2001), much remains to be learned about the conjoint involvement of mothers and fathers in their children's lives and factors that may affect the allocation of childrearing tasks. In particular, little information exists about shared parenting by unmarried parents.

Today, nearly one-third of births occur outside of marriage, with even higher proportions among minority populations. The rise in the fraction of births that are nonmarital, along with demographic changes in marriage and divorce, have yielded a growing group of “fragile families”—unmarried parents who are raising their children together.¹ New research shows that more than four-fifths of unmarried couples are in a romantic relationship—and just under half are living together—at the time of their child's birth (McLanahan, Garfinkel, Reichman and Teitler, forthcoming). Therefore, we have reason to believe that unmarried parents are sharing childrearing responsibilities, contrary to the conventional wisdom that single mothers typically raise their children alone. In order to understand how unmarried-parent families may differ from more traditional families, and particularly what are the consequences for children, it is important to examine the nature of parenting across different family types. Because greater variation has been observed in fathers' parenting behavior compared to mothers' behavior, fathers' involvement with their children may be particularly important in accounting for differences in child wellbeing across families (Gottman 1998). Therefore, it is important to understand the nature of mothers' and fathers' parenting and characteristics associated with particular parenting

¹ Such families are deemed “fragile” because of the multiple risks associated with nonmarital childbearing (including poverty) and to signify the vulnerability of the parents' relationship.

arrangements. While we cannot yet examine the implications for children's wellbeing with the data we have available, this paper provides an initial investigation of the frequency that young children interact with their mother and father.

DATA, SAMPLE AND VARIABLES

Data and sample

We use data from the Fragile Families and Child Wellbeing Study, a new national study designed to provide a longitudinal examination of the conditions and capabilities of unmarried parents and the consequences for children. The study provides detailed information about the characteristics of unmarried mothers and fathers, the nature of relationships between them, and their involvement with their children. The study follows a birth cohort of about 3,700 children born to unmarried parents in twenty U.S. cities; the full sample is representative of all nonmarital births to parents residing in cities with populations over 200,000.² Also, a comparison group of married parents is interviewed in each of the twenty cities, and the full sample of married births is approximately 1,100. New mothers are interviewed in person at the hospital within 48 hours of having given birth, and fathers are interviewed in person either in the hospital or are located as soon as possible thereafter. Follow-up interviews will be conducted when the child is 12, 30 and 48 months old.

Overall response rates in the Fragile Families study are extremely high. Eighty-five percent of eligible mothers were interviewed (89 percent of unmarried and 83 percent of married mothers). Of the eligible fathers, 76 percent participated in the study, but response rates varied

² The twenty cities are: Oakland, CA; San Jose, CA; Jacksonville, FL; Chicago, IL; Indianapolis, IN; Boston, MA; Baltimore, MD; Detroit, MI; Newark, NJ; New York City, NY; Toledo, OH; Philadelphia, PA; Pittsburgh, PA; Nashville, TN; Austin, TX ; Corpus Christi, TX; San Antonio, TX; Norfolk, VA; Richmond, VA; and Milwaukee, WI.

greatly by fathers' relationship status with the mothers; the study is most representative of fathers who are in a romantic relationship with the mother, moderately representative of fathers who are friends with the mother, and least representative of fathers who have little or no contact with the mother. However, since all mothers are asked questions about the fathers, we have some information about the missing fathers that enables us to generalize about all unmarried fathers for some characteristics.

In this paper, we use data from the 12-month follow-up survey for the first two cities—Oakland, California and Austin, Texas. We have information on 575 mothers, interviewed approximately one year after their child's birth.³

Variables

We focus on the frequency of mothers' and fathers' interaction with their children on several items.⁴ We use reports by mothers for both mothers' and fathers' activities; this is because not all fathers were interviewed, so by using mothers' reports, we are able to examine *all* fathers.⁵ Each individual item is coded to have four categories for the frequency that parents engaged in the activity in the past month: 1 (not at all), 2 (at least once a month), 3 (at least once a week) and 4 (nearly every day); higher scores indicate greater frequency. For mothers, we examine items in three domains—warmth (playing “peek-a-boo” or “gotcha;” and singing songs or nursery rhymes), cognitive stimulation (reading stories) and harshness (spanking). For

³ We originally expected to utilize data for all 20 cities for this paper; however, only data for two cities are available as of this writing. We will use the full sample when it becomes available.

⁴ Unfortunately, in the initial 12-month follow-up data for Austin and Oakland, the items for mothers and fathers were not standardized, so we cannot directly compare parents' involvement on all measures; this has been remedied in the revised version of the 12-month survey which is being used for the subsequent 18 cities in the Fragile Families Study.

⁵ In the future, with a larger sample and standardized items, we will examine the extent to which mothers' reports are similar to fathers' reports.

fathers, we analyze items in four domains—caretaking (feeding or giving bottle), playing (playing outside; and playing inside), cognitive stimulation (reading) and harshness (spanking).

For our independent variables, we focus on a range of characteristics that may be linked to parenting. We examine parents' relationship status approximately one year after the birth of their child based on mothers' reports about their marital status, cohabitation status, and the nature of relationship with the baby's father at the 12-month follow-up survey. From this information, we develop mutually exclusive and exhaustive categories of: married (omitted category in multivariate analyses), cohabiting, visiting (romantically involved but living apart), and not in a romantic relationship. We include various background characteristics reported by the mother (unless indicated otherwise) from the baseline survey (i.e. at the time the child was born). Mother's age and father's age are specified as continuous variables. Mother's and father's race/ethnicity is represented by dummy variables for non-Hispanic white, non-Hispanic black, Hispanic (omitted), and other race. Mother's and father's education are each included as categorical variables of less than high school education (omitted), high school degree, some college, and college degree or higher.⁶ Father's work status at 12 months is determined by the father's report of whether he worked in the week prior to the survey if the father was interviewed; if the father was not interviewed, we use the mother's report (if available) about whether the father is currently working. Mother's work status is based on her report of whether she worked in the week prior to the follow-up survey. Whether the mother has other children is determined by her report that she has other children with the father or by another man; whether the father has other children is based on the mother's report that she has other children with the father or that he has children by another woman.

⁶ Because of the small sample size, categories of some college and having a college degree or higher are combined into one category in the regression models.

We also include a variable indicating the quality of relationship between the parents: supportiveness in the relationship is measured by mothers' reports about the frequency that the father: "is fair and willing to compromise when [they] have a disagreement;" "expresses affection or love for [her];" and "encourages or helps [her] to do things that are important to [her]." Response options are "never" (1), "sometimes" (2), and "often" (3). Factor analysis showed that these items could be combined into a single index, so the items were averaged to obtain an overall supportiveness score (range=1 to 3; alpha=.64); higher scores indicate a greater level of supportiveness.

DESCRIPTIVE CHARACTERISTICS

Descriptive information about the sample, by relationship status at the time of the child's birth, is shown in Table 1. Overall, the mean age of mothers in the sample is 25 years. Fifteen percent of mothers are non-Hispanic white, 36 percent are non-Hispanic black, 44 percent are Hispanic and 5 percent are of other race. Forty-five percent of mothers have less than a high-school education, 26 percent have a high-school degree, 20 percent have some college, and about 10 percent have a college degree. Forty-seven percent of mothers worked in the week prior to the survey. Nearly two-thirds of mothers have other children.

Fathers are slightly older than mothers, on average, with a mean age of almost 28 years. The racial/ethnic distribution of fathers is similar to that of mothers. A slightly greater fraction of fathers have exactly a high school degree (31 percent), although the proportions with some college or a college degree are similar to mothers. Three-fourths of fathers worked in the week prior to the survey, and fifty-seven percent of fathers have other children.

Differences can be observed between married and unmarried parents as a group. Married parents are older, more likely to be non-Hispanic white, and have higher educational attainment

than their unmarried counterparts. Married fathers are more likely to be working than unmarried fathers, although the difference between married and cohabiting fathers is slight. With respect to father's supportiveness in the relationship, married mothers report somewhat higher supportiveness than unmarried mothers. However, there does not seem to be a clear distinction by marital status for mother's employment, and whether either the mother or the father has other children.

Examining differences *within* categories of unmarried parents, few large differences are noted. Cohabiting mothers and fathers are less likely to have a high school degree than parents in 'visiting' relationships and parents who are not romantically involved. Yet, cohabiting fathers are much more likely to be working than other unmarried fathers. Overall, within-group differences among types of unmarried parents are much smaller than the between-group differences for married and unmarried parents.

Table 2 shows frequencies of parent-child activities by parents' relationship status approximately 12 months after the birth of their child. Percentages in each frequency category are presented, as well as the overall mean on a scale of 1 (not at all) to 4 (nearly every day). Overall, about two-thirds of mothers report that they play games such as "peek-a-boo" or "gotcha" with their child nearly every day, and about the same proportion sing songs nearly every day. Reading stories happens less frequently, on average: about 30 percent of mothers read stories nearly every day, while 40 percent read at least once a week, 21 percent read at least once a month, and fully 10 percent report that they never read stories to their child in the past month. Only a small fraction of mothers report frequent harsh behavior toward their child—one percent spank almost daily; more than three-quarters of mothers indicate that they do not spank their child at all.

Since only fathers who see their children can have interaction with them, we first examine the proportion of fathers who have seen their child in the past month, as reported by the child's mother. Not surprisingly, all mothers in married or cohabiting relationships (i.e. the father is co-resident with the child) report that the father has seen the child in the past month. Eighty percent of mothers in a romantic but not co-residential relationship with the father ('visiting'), report that he has seen the child at least once in the past 30 days, and half of mothers that are not romantically involved report some father-child contact in the previous month.

Of fathers who did see their child in the past 30 days, there is notable variation in the frequency of interaction across the different activities. Also, the frequency of parent-child activities varies by relationship type more for fathers than for mothers. Of those fathers who saw their child in the past month, fifty-eighty percent overall fed or gave a bottle to their child nearly every day; this activity is most common among co-residential fathers (married or cohabiting). Playing outside occurs slightly less frequently than feeding, although 84 percent of fathers played outside with their child at least once a week in the past week. Playing inside is very common, with fully 80 percent of mothers reporting that the father plays inside with their child nearly every day. Again, married and cohabiting fathers are much more likely to have played inside than visiting or non-romantic fathers. Reading is the activity in which fathers, on average, engage least frequently. Only 15 percent of fathers read to their child nearly every day, a third read at least once a week, 19 percent read at least once a month, and fully a third report that they do not read to their child at all. Frequent spanking is not common among fathers, and there is only minimal variation by parents' relationship status.

Whether mean differences across categories of parents' relationships are statistically significant is assessed using multiple-comparison tests shown in the right-most column of the

table. With respect to mother-child activities, few significant differences are noted. Mothers who are not romantically involved with the baby's father read to their children less frequently than married mothers. The only other significant difference is in harsh parenting behavior: mothers who are in 'visiting' relationships with the father spank their child more frequently than married mothers, cohabiting mothers and those not romantically involved with the father. Twenty-eight percent of mothers in 'visiting' relationships report spanking their child at least once a week compared to less than eight percent of all other mothers. However, it is important to note that the number of mothers in visiting relationships is very small ($n=31$), so these estimates may not be reliable.

Greater significant differences by relationship type are observed in the frequency with which fathers engage in activities with their child. In particular, across nearly all items, fathers who are co-resident (either married or cohabiting) have more frequent interaction with their child than those who live outside the child's household.⁷ Fathers who have no romantic relationship with the child's mother have significantly lower frequency of feeding the child, playing outside, playing inside and reading to the child than either married or cohabiting fathers. Visiting fathers also have a lower frequency of feeding the child and playing inside than either married or cohabiting fathers; the magnitude of the differences for playing outside and reading are reasonably large, and these would likely be statistically significant with the full sample.

MULTIVARIATE RESULTS

Given significant differences in parenting by relationship type, particularly for measures of father-child activities, we were interested to estimate multivariate models controlling for key background characteristics. We estimate OLS regression models for each of the parent-child

activity items.⁸ Then, for the two parenting items that are identical for fathers and mothers (reading and spanking), we estimate regression models for one parent’s behavior controlling for that of the other parent. This allows us to evaluate whether mothers and fathers appear to operate as complements or substitutes in their parenting.

In all of the models, we include parents’ relationship status one year after the birth of their child, with married as the omitted category. For all regression models, we combine couples in visiting relationships with those who have no romantic relationship into a “non-resident” category; we do this both because the number in the visiting status is very small and because there were very few significant bivariate differences in parent-child activities between visitors and non-romantics. We include the background characteristics of the parent described earlier—race/ethnicity, age, education, employment status and whether the parent has other children. Finally, we include the measure of the supportiveness in the relationship as reported by the mother.⁹

Table 3 shows regression results for the frequency with which the mother engages in activities with the child. Examining the independent variables across the four outcomes, we find that race/ethnicity is significantly related to three mother-child items. Black and white mothers are more likely to play “peek-a-boo” or “gotcha” with their child than Hispanic mothers; yet, it may be that Hispanic mothers are not familiar with the terms “peek-a-boo” and “gotcha” so may

⁷ It is important to note that part of this difference may reflect the greater ability of mothers to observe the behavior of co-resident fathers, rather than fathers’ actual behavior.

⁸ We also estimated multinomial logit models comparing categories of the frequency of involvement, but the models were compromised by the small cell sizes. Therefore, for this paper we have estimated OLS models treating the frequency of parent-child activities (ranging from 1 to 4) as a continuous variable; when the full sample is available, we will likely estimate multinomial logit models.

⁹ We use the mother’s report of supportiveness across all models, including those predicting father-child activities (instead of the father’s report of the mother’s supportiveness), because research indicates that mothers may operate as ‘gatekeepers’ to the child, either preventing or encouraging the father’s involvement based on her feelings toward him [cites]. Therefore, her assessment of the quality of relationship may matter more for his involvement than his assessment.

have reported lower frequency on this item for language reasons. Relative to Hispanic mothers, both black and white mothers read to their child more frequently on average. Also, black parents spank their child more frequently than Hispanic parents, although there is no difference between white and Hispanic parents.

Education is significantly linked to both playing games such as “peek-a-boo” and reading to the child: higher educated mothers are more likely to play games and read than mothers with less than a high school degree. Mother’s employment status is not an important factor in how frequently she engages in activities with her child, but her work status shows a marginally significant association with spanking: employed mothers spank their children more often, on average, than unemployed mothers. Also, women with other children spank their children less frequently than women who do not have other children.

Turning to the mother-father relationship, parents’ relationship status one year after the birth of their child is not a major factor for the items of mother-child interaction examined here. There is a marginally-significant association with reading—cohabiting mothers read to their children less frequently than married mothers. For neither items reflecting parental warmth nor harshness do cohabiting mothers or those living separately from the father display significantly different behavior with respect to their children than married mothers. The quality of parents’ relationship is important for two of the mother-child activities: greater supportiveness by the father toward the mother is linked to more frequent singing by the mother and more frequent reading.

Shown in Table 4 are regression estimates for the frequency of father-child activities. Overall, few background characteristics of fathers appear to matter for the frequency with which

they interact with their child.¹⁰ Older fathers are slightly less likely to feed or spank their child, although the significance in both cases is only marginal. Black fathers spank their child more often, on average, which is consistent with our result that black mothers also spank their child more frequently. Fathers with some college education typically feed their child and play inside with their child more often than fathers with less than a high school education. Fathers' education is not linked to the frequency of reading, and the direction of the effects is that education is negatively associated with reading, a rather puzzling result. As with mothers, fathers' being employed is associated with a greater frequency of spanking, although the significance is only marginal. Fathers with other children are less likely to read to their child; this could be because caring for other children reduces the time available for reading.

Contrary to the findings for mothers, parents' relationship status is a notable factor linked to the frequency of activities that reflect caregiving, playing and cognitive stimulation. Non-resident fathers are shown to feed their child, play with their child (either outside or inside), and read to their child less frequently than married fathers. At the same time, there is no significant distinction in the frequency that married or cohabiting fathers engage with their children, indicating that living arrangements (i.e. co-residence) is more salient for father involvement than the legal status of the union. The supportiveness in the relationship (reported by the mother) has a marginally-significant link to playing outside and a large and significant association with the frequency of reading.

After examining how personal and relationship characteristics of parents are associated with the frequency of their interaction with their child, we were also interested to examine the extent to which parents appear to function as complements or substitutes to one another. There

¹⁰ It is important to note that because these models are only estimated for those fathers who have seen their child in the past 30 days, the numbers of cases are quite low. Therefore, these results should be viewed as rather tentative.

are theoretical reasons to expect either situation. Because of homogamy in partnering, we would expect that parents who have a child together share similar values and tastes with respect to parenting; therefore, we would expect parents to serve as complements and that the ‘closer’ the union, the greater the complementarity (i.e. parents who are not co-resident may be the least homogamous). On the other hand, we might expect that parents divide the tasks of childrearing with each parent emphasizing different aspects of parenting; in this case, we would expect them to be substitutes, with a negative relationship between the frequency of one parent’s engaging in an activity and the frequency of the other parent’s engaging in the same activity.

Unfortunately, there are only two identical parent-child activity items in the follow-up data for the first two cities in the Fragile Families study—reading and spanking. First, we ran Pearson’s correlation coefficients for the frequency that mothers and fathers read to and spank their children, respectively. For the sample as a whole, we find that the frequency of mothers’ and fathers’ reading is correlated at $r=.41$. By relationship status, we find that the correlation is similar for married ($r=.46$) and cohabiting ($r=.47$) couples but much lower for mothers and fathers who are living separately ($r=.34$). With respect to spanking, we find that the correlation for the whole sample is slightly higher than for reading ($r=.48$), and the pattern by relationship status differs: cohabiting parents exhibit the greatest similarity in their spanking behavior ($r=.57$) compared to either married couples ($r=.46$) or couples living apart ($r=.45$).

In order to hold constant the background variables that may be affecting the correlations, we estimated regression models predicting mothers’ reading and spanking behavior, controlling for fathers’ behavior.¹¹ These estimates are shown in Table 5. The first model includes only the variable for the frequency of father’s reading (or spanking). These figures are slightly different from the correlation coefficients for the whole sample because of listwise deletion of missing

data on all independent variables entered in Model 2; these are the same independent variables utilized in the models shown in Table 3.

For the reading variable, as with the unrestricted correlations, there is a strong positive association between the frequency that fathers read to their children and the frequency that mothers read. Adding the control variables in Model 2 does not diminish this relationship at all—how often fathers read is strongly linked to how often mothers read holding constant the mothers' age, race, education, employment status and parity, as well as the type and quality of relationship she has with the baby's father. It is striking, however, to note that if the father is non-resident and his reading is controlled, the mother reads to her child *more* frequently, on average, than married mothers. This is in contrast to the small and insignificant effect of non-resident relationship status shown in the model for reading in Table 3 (that does not include a measure of his reading).

For spanking, the strong bivariate relationship also persists after the independent variables are included. If the father spansks the child more frequently, the mother is also likely to spank more frequently. We also tried interacting the parents' relationship status with the father's behavior in order to determine whether the father's parenting had differential effects on the mother's parenting depending on the type of their relationship. We did not find any significant interaction effects for either reading or spanking, indicating that the father's behavior does not affect the mother's behavior in a different manner for cohabiting or non-resident fathers, as compared to married fathers.

¹¹ Because of small sample sizes, we were not able to estimate regressions within relationship statuses.

LIMITATIONS

This research faces multiple limitations. First, as noted earlier, the sample is very small, and we look forward to continuing this research when we have a greater number of cases from the Fragile Families data. Second, the new data will also enable us to look at a larger number of parent-child activities across multiple domains that are identical for mothers and fathers. Finally, using mothers' reports for what fathers do may be seriously biasing our understanding of fathers' actual behavior. This may be particularly problematic for couples where the father lives away from the mother and child, as she has less awareness about the nature and frequency of his engagement with the child than if she observes his behavior within the household.

CONCLUSION

This paper has provided an initial examination of the frequency of parent-child interaction in several areas across a range of family types. Overall, we find that few individual characteristics of mothers or fathers are consistently associated with how often parents engage in activities with their one-year-old children. The nature of parents' relationship, however, does appear to be important for parenting: in particular, fathers who are not co-resident exhibit significantly lower frequency of interaction with their children in activities of caregiving, playing and cognitive stimulation. Also, beyond the type of relationship parents' have, the supportiveness displayed by the father is a salient factor for several mother-child and father-child activities. Future research with a larger sample and a greater number of comparable parenting items will be useful for improving our understanding of how the mother-father relationship, mother's parenting, and father's parenting are linked to each other and, ultimately, to children's wellbeing.

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Table 1. Sample Description by Relationship Status One Year after Child's Birth

	Total	Married	Cohabiting	Visiting	Not Romantic
<u>Mother's characteristics</u>					
<i>Age</i>					
Under 20	17.3	6.8	18.6	19.4	25.7
20-24	35.8	26.1	4.1	45.2	38.3
25-29	25.7	33.0	24.0	16.1	21.9
30 and older	21.3	34.1	16.4	19.4	14.2
Mean age	25.09	27.61	24.30	24.71	23.49
<i>Race</i>					
Non-Hispanic white	15.4	29.7	7.7	3.2	11.5
Non-Hispanic black	36.0	16.6	36.6	71.0	48.1
Hispanic	43.9	46.3	52.5	22.6	36.6
Other	4.7	7.4	3.3	3.2	3.9
<i>Education</i>					
Less than high school	44.7	34.1	51.9	45.2	47.5
High school or the equivalent	26.0	19.3	27.9	35.5	29.0
Some college	19.6	21.0	18.0	19.4	19.7
College degree or higher	9.8	25.6	2.2	0.0	3.8
Mother worked last week (time 2)	46.6	47.2	40.8	48.4	51.6
Mother has other children (time 2)	62.4	62.3	66.3	67.7	57.3
<u>Father's characteristics</u>					
<i>Age</i>					
Under 20	7.2	2.9	6.0	6.5	12.8
20-24	30.6	20.6	35.5	45.2	32.8
25-29	28.3	27.4	27.9	16.1	31.7
30 and older	33.9	49.1	30.6	32.3	22.8
Mean age	27.7	29.7	27.3	27.3	26.3
<i>Race</i>					
Non-Hispanic white	14.2	30.9	7.6	3.2	6.6
Non-Hispanic black	38.5	15.4	40.8	71.0	52.8
Hispanic	43.5	48.0	48.9	19.4	37.9
Other	3.9	5.7	2.7	6.5	2.8
<i>Education</i>					
Less than high school	37.8	35.5	46.8	10.7	35.7
High school or the equivalent	30.6	21.5	29.0	71.4	35.0
Some college	22.2	20.9	21.3	17.9	25.5
College degree or higher	9.3	22.1	3.0	0.0	3.8
Father worked last week (time 2)	74.6	88.1	80.5	45.2	59.9
Father has other children (time 2)	57.2	58.8	59.7	65.5	51.3
<u>Mother's relationship with father (time 2)</u>					
Mean supportiveness score (range=1-3)	2.44	2.57	2.49	2.39	2.03
Number of cases (<i>n</i>)	575	176	184	31	184

Table 2. Frequency of Parent-Child Activities by Relationship Status

	Total (a)	Married (b)	Cohabiting (c)	Visiting (d)	Not Romantic (e)	Significant Differences ¹
<u>Mother-child activities</u>						
<i>Warmth</i>						
Play "peek-a-boo" or "gotcha"						
Not at all	2.1	3.4	1.1	0.0	2.2	
At least once a month	5.3	4.6	4.4	3.5	7.2	
At least once a week	25.1	19.3	29.5	31.0	25.0	
Nearly every day	67.5	72.7	65.0	65.5	65.6	
Mean report (range=1-4)	3.58	3.61	3.58	3.62	3.54	(no signif.)
Sing songs or nursery rhymes						
Not at all	2.3	1.1	3.3	0.0	2.8	
At least once a month	7.0	5.1	6.6	6.9	9.5	
At least once a week	25.8	20.5	28.4	20.7	29.1	
Nearly every day	64.9	73.3	61.8	72.4	58.7	
Mean report (range=1-4)	3.5	3.66	3.49	3.66	3.44	b>e
<i>Cognitive stimulation</i>						
Read stories						
Not at all	10.2	9.1	15.3	10.3	6.1	
At least once a month	20.7	18.8	20.8	13.8	23.9	
At least once a week	39.7	38.1	38.8	51.7	40.0	
Nearly every day	29.5	34.1	25.1	24.1	30.0	
Mean report (range=1-4)	2.88	2.97	2.74	2.90	2.94	(no signif.)
<i>Harshness</i>						
Spank child						
Not at all	77.5	82.4	75.4	58.6	77.8	
At least once a month	16.8	15.3	21.3	13.8	14.4	
At least once a week	4.6	1.1	2.7	24.1	6.7	
Nearly every day	1.1	1.1	0.6	3.5	1.1	
Mean report (range=1-4)	1.29	1.21	1.28	1.72	1.31	d>b,c,e
<u>Father-child activities</u>						
Ever see child in past month	83.7	100.0	100.0	80.0	50.3	
Of those who <u>did</u> see child in past month:						
<i>Caretaking</i>						
Feed or give bottle						
Not at all	7.5	4.0	3.8	16.7	22.5	
At least once a month	5.5	4.0	3.3	8.3	14.1	
At least once a week	29.0	28.7	25.0	37.5	38.0	
Nearly every day	58.0	63.2	67.9	37.5	25.4	
Mean report (range=1-4)	3.38	3.51	3.57	2.96	2.66	d<b,c; e<b,c

Table 2 (continued). Frequency of Parent-Child Activities by Relationship Status

	Total (a)	Married (b)	Cohabiting (c)	Visiting (d)	Not romantic (e)	Significant Differences ¹
<u>Father-child activities (continued)</u>						
<i>Active play</i>						
Play outside						
Not at all	7.7	4.6	7.1	8.3	17.7	
At least once a month	8.2	4.0	5.4	8.3	26.5	
At least once a week	41.7	47.4	39.7	45.8	32.4	
Nearly every day	42.4	44.0	47.8	37.5	23.5	
Mean report (range=1-4)	3.19	3.31	3.28	3.13	2.62	e<b,c
Play inside						
Not at all	4.2	0.6	1.1	12.5	20.0	
At least once a month	3.8	2.3	0.5	4.2	16.9	
At least once a week	12.0	7.5	6.0	41.7	30.8	
Nearly every day	80.0	89.7	92.4	41.7	32.3	
Mean report (range=1-4)	3.68	3.86	3.90	3.13	2.75	d<b,c; e<b,c,d
<i>Cognitive stimulation</i>						
Read to child						
Not at all	33.9	23.4	33.7	52.2	59.3	
At least once a month	19.4	21.1	20.1	17.4	13.6	
At least once a week	32.3	36.6	31.5	21.7	23.7	
Nearly every day	14.5	18.9	14.7	8.7	3.4	
Mean report (range=1-4)	2.27	2.51	2.27	1.87	1.71	d<b; d<b,c
<i>Harshness</i>						
Spank child						
Not at all	85.9	89.1	81.0	87.5	89.9	
At least once a month	11.9	9.2	15.8	12.5	8.7	
At least once a week	2.0	1.7	2.7	0.0	1.5	
Nearly every day	0.2	0.0	0.5	0.0	0.0	
Mean report (range=1-4)	1.17	1.13	1.23	1.13	1.12	(no signif.)
Number of cases (<i>n</i>)	575	176	184	31	184	

¹Computed using oneway analysis-of-variance with Scheffe multiple-comparison tests. A less conservative significance level of $p < .1$ is used, because of the relatively small sample size.

Table 3. OLS Regression Estimates: Frequency of Mother-Child Activities

	<i>Warmth</i>				<i>Cognitive Stimulation</i>		<i>Harshness</i>	
	Peek-a-boo		Singing		Reading		Spanking	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
<u>Mother's characteristics</u>								
<i>Age</i>	-.005	.005	.010 +	.006	-.006	.007	-.002	.005
<i>Race (omitted=Hispanic)</i>								
Non-Hispanic white	.284 **	.095	.063	.099	.470 ***	.128	.033	.080
Non-Hispanic black	.147 *	.071	-.044	.074	.325 **	.096	.351 ***	.060
Other	.002	.144	-.049	.150	-.143	.193	.086	.121
<i>Education (omitted=less than HS)</i>								
High school or the equivalent	.171 *	.075	.082	.079	.181 +	.101	.022	.063
Some college or higher	.231 **	.084	.086	.088	.169	.113	-.021	.070
Worked last week (time 2)	-.018	.060	.017	.063	-.103	.081	.096 +	.051
Has other children (time 2)	-.023	.064	-.034	.067	-.039	.086	-.145 **	.054
<u>Mother's relationship with father (time 2)</u>								
<i>Relationship status (omitted=married)</i>								
Cohabiting	.048	.077	-.074	.081	-.180 +	.104	.001	.065
Non-resident	-.023	.081	-.010	.084	-.007	.108	-.013	.068
Supportiveness (range=1-3)	.084	.065	.329 ***	.068	.215 **	.087	-.065	.054
Constant	3.316 **	.215	2.471 ***	.224	2.372 ***	.289	1.421 ***	.180
Model F-test	3.39 ***		3.97 ***		4.84 ***		5.31 ***	
R-squared	.065		.075		.090		.098	
Number of cases (<i>n</i>)	550		549		550		550	

+*p*<.10 **p*<.05 ***p*<.01 ****p*<.001

Table 4. OLS Regression Estimates: Frequency of Father-Child Activities

	<i>Caregiving</i>		<i>Playing</i>				<i>Cognitive Stimulation</i>		<i>Harshness</i>	
	Feeding		Playing outside		Playing inside		Reading		Spanking	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
<u>Father's characteristics</u>										
<i>Age</i>	-.013 +	.007	.000	.007	-.005	.005	.011	.008	-.006 +	.004
<i>Race (omitted=Hispanic)</i>										
Non-Hispanic white	-.055	.139	-.162	.142	-.154	.104	.057	.165	.064	.070
Non-Hispanic black	.033	.123	-.093	.126	-.033	.093	-.071	.146	.141 *	.062
Other	.527 *	.238	.207	.242	-.014	.177	.081	.278	.127	.119
<i>Education (omitted=less than HS)</i>										
High school or the equivalent	.019	.118	-.013	.120	.064	.089	-.199	.139	.023	.059
Some college or higher	.338 **	.126	.042	.129	.200 *	.095	-.126	.151	.036	.063
Worked last week (time 2)	.047	.119	.017	.121	.064	.089	-.061	.143	.100 +	.059
Has other children (time 2)	.024	.100	-.089	.102	.006	.075	-.201 +	.117	-.053	.050
<u>Mother's relationship with father (time 2)</u>										
<i>Relationship status (omitted=married)</i>										
Cohabiting	.100	.113	.023	.114	-.001	.084	-.104	.130	.059	.056
Non-resident	-.667 ***	.144	-.380 *	.146	-.933 ***	.109	-.511 **	.173	-.091	.072
Supportiveness (range=1-3)	.141	.100	.183 +	.102	.072	.075	.356 **	.117	-.057	.050
Constant	3.335 ***	.329	2.878 ***	.336	3.662	.246	1.466 ***	.389	1.346	.165
Model F-test	5.80 ***		2.17 *		11.83 ***		3.94 ***		1.68 +	
R-squared	.165		.069		.290		.122		.054	
Number of cases (<i>n</i>)	335		333		331		325		335	

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Table 5. OLS Regression Estimates: Frequency of Mother-Child Activities, Controlling for Father-Child Activities

	Reading				Spanking			
	Model 1		Model 2		Model 1		Model 2	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
<i>Frequency of father's reading</i>	.360 ***	.039	.361 ***	.040	.610 ***	.053	.582 ***	.055
<u>Mother's characteristics</u>								
<i>Age</i>			-.007	.007			.003	.004
<i>Race (omitted=Hispanic)</i>								
Non-Hispanic white			.299 *	.136			-.008	.076
Non-Hispanic black			.245 *	.108			.238 ***	.060
Other			-.093	.203			.093	.112
<i>Education (omitted=less than HS)</i>								
High school or the equivalent			.168	.110			.012	.061
Some college or higher			.224 +	.122			.006	.069
Worked last week (time 2)			-.086	.085			.070	.048
Has other children (time 2)			-.037	.090			-.067	.050
<u>Mother's relationship with father (time 2)</u>								
<i>Relationship status (omitted=married)</i>								
Cohabiting			-.107	.099			-.014	.056
Non-resident			.266 *	.133			.016	.072
Supportiveness (range=1-3)			.021	.090			-.041	.050
Constant	2.063 ***	.098	1.999 ***	.298	.551 ***	.066	.523	.055
Model F-test	85.75 ***		10.72 ***		131.44 ***		14.09 ***	
R-squared	.166		.234		.230		.283	
Number of cases (<i>n</i>)	434		434		442		442	

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$