

Family Instability and Complexity after a Nonmarital Birth:
Outcomes for Children in Fragile Families

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Abstract

This paper uses data from the first four waves of the Fragile Families and Child Wellbeing Study to examine the following questions: (1) what are unmarried parents' capabilities at the time of their child's birth, and what is the nature of their relationship at birth and over time? (2) How do family structure and stability affect parental resources (financial and health)? (3) How do family structure and stability affect the level and quality of parental investments in children? And (4) how do family structure and stability affect children's cognitive and socio-emotional development? We argue that although unmarried parents have "high hopes" for their relationships at the time their child is born, low capabilities and distrust lead to high rates of union instability and growing family complexity. Instability and complexity, in turn, reduce parental resources by lowering parental resources (financial and health), paternal investments, and the quality of mothers' parenting, all of which undermine children's cognitive and socio-emotional development. At the aggregate level, these pathways explain how non-marital childbearing contributes to the persistence of disadvantage across generations.

INTRODUCTION

Non-marital childbearing increased dramatically in the United State during the latter half of the twentieth century, changing the context in which American children are raised and giving rise to a new family form – *fragile families* – defined as unmarried couples with children. As shown in Figure 1, the proportion of all children born to unmarried parents grew from about 4 percent in 1940 to nearly 40 percent in 2006, an increase of almost ten fold (Ventura 2009). Although the rate of increase was similar for whites and non-whites, the impact was more dramatic for non-whites because they started from a much higher base.

Figure 1 about here

Some analysts argue that the changes in family formation are a sign of progress, reflecting an expansion of individual freedom and the growing economic independence of women (Coontz 1998). Others are less sanguine. Pointing to the high poverty rates of single mothers, they argue that the increase in *fragile families* does not bode well for children and may even be perpetuating economic and racial disparities in future generations. (Garfinkel and McLanahan 1986, McLanahan and Percheski 2008). In addition to debates over the long term implications of non-marital childbearing, researchers disagree about the causes of these trends. Whereas some researchers argue that the increase in non-marital childbearing signals that young adults are rejecting marriage (Popenoe 1998), others argue that the meaning of marriage has changed

(Cherlin 2005) or that changes in the economy have made low-skilled men less ‘marriageable’ (Wilson 1988).

To resolve these academic debates and to provide policy makers with better information about the long term implications of the rise in non-marital childbearing, a team of researchers at Columbia and Princeton Universities designed and implemented a large national survey of *Fragile Families and Child Wellbeing*. Between the spring of 1998 and fall of 2000, we interviewed approximately 5000 parents who had recently given birth in hospitals in large cities. Because we were interested in how policy environments might shape the experiences of parents and children in fragile families, we drew our sample from twenty large cities with different labor markets and different policy regimes. Specifically, we grouped cities according their welfare and child support policies and their labor market conditions; then sampled cities within each strata, hospitals within each city, and births within each hospital. The final sample contained nearly 5000 births, including approximately 3600 births to unmarried parents and approximately 1200 births to married parents. When weighted, the data are nationally representative of all births in large US cities (populations of 200,000 or more). A more detailed description of the study design is provided in Reichman et al. (2001).

Mothers were interviewed at the hospital soon after giving birth. When possible, fathers were also interviewed at the hospital; otherwise, they were interviewed over the phone as soon as possible after the birth. Our decision to sample mothers at the hospital yielded very high response rates: about 88 percent for married parents and unmarried mothers and 75 percent of unmarried fathers. At the time of their child’s birth, parents were asked a series of questions about their demographic characteristics, education and

employment histories, access to social and financial support, health and health behaviors, attitudes and values towards marriage and parenting, and relationships. Both mothers and fathers were re-interviewed when the child was one, three and five years old. At the three and five year interviews, mothers were interviewed in their homes, and children's home environment and cognitive and emotional development were assessed.

The Questions

The study was designed to address a number of basic questions about the nature and consequences of fragile families for parents and children. Our first set of questions was:

- *What is the nature of parental relationships at birth? What are parents' capabilities? What happens to relationships over time?*

At the time we began our study, numerous (and often conflicting) stories existed about the nature of parental relationships and capabilities in fragile families. One group of analysts argued that unmarried parents were similar to married parents in terms of their relationships and capabilities. This perspective relied heavily on a Scandinavian model where most non-marital births are to cohabiting parents in stable unions. A second group of analysts argued that parental relationships in fragile families were committed but parental capabilities were much lower, giving rise to the term 'poor man's marriage.' And a third perspective saw relationships in fragile families as the product of casual relationships with minimal commitment on the part of fathers (See Furstenberg 2008 for a review of the qualitative literature). The issue of fathers' ability to support their children was especially important for policy makers. Since the mid 1970s, the federal government had been passing legislation designed to strengthen child support enforcement, and there was considerable interest in obtaining good estimates of

unmarried fathers' "ability to pay." And yet the data needed to make such estimates was severely lacking, in part because many non-resident fathers were 'missing' from our national surveys, especially unmarried fathers. (Garfinkel et al. 1998)

Resolving the debate over the nature of parental relationships and capabilities is crucial for resolving the debate over whether society should be concerned about the growth of non-marital childbearing and for developing policies for fragile families. If parental relationships and capabilities in fragile families are similar to relationships and capabilities in married-parent families, this finding would suggest that fragile families should be viewed as an alternative family form rather than a cause of concern. If parental relationships are committed but capabilities are much lower in fragile families, this finding would suggest that we should be concerned about the economic situation of these families but not their social capital. And finally, if parental relationships are weak and uncommitted, this finding would suggest that the new family forms are undermining children's long term life chances and that something should be done to improve the social as well as the economic capital in these families.

- *How do family structure and stability affect parents' economic and psychological resources?*

A second question that motivated our study was whether the new family forms that we were observing were affecting parents' future resources and ability to raise their child. We knew from exiting research that marriage was positively associated with adults' physical and mental health as well as their economic wellbeing (Waite and Gallagher 2002). Hence, an important question for our research team was whether the benefits and costs associated with marriage would extend to parents in cohabiting unions. We also wanted to know whether marriages that occurred after a non-marital birth produced the

same benefits as marriages that occurred prior to birth. On the one hand, we might expect entrances into and exits from marriage to have stronger effects on income and health than entrances into and exits from cohabiting unions insofar as marriage represents a stronger commitment to sharing resources. On the other hand, we might expect entrances into and exits from cohabiting unions to be more consequential insofar as cohabiting parents have fewer resources to begin with. Finally, we were interested in whether family instability per se, net of family structure, affected parental resources, especially parents' mental health. Prior research on divorce and remarriage suggested that change itself has short term negative effects on parents' mental health, and we suspected that unmarried parents might be exposed to higher levels of instability than married parents.

- *How do family structure and stability affect the level and quality of parental investments in children?*

A third set of questions centered on whether family structure and stability affected parental investments in children and the quality of parenting. Past research indicated that when fathers live apart from their child, they spend less time with the child. Research on fathers' financial contributions painted a similar picture (Garfinkel et al. 1998). However, as before, most of what we knew about non-resident fathers' contributions of time and money was based on men who had been married to their child's mother and who had lived with their child for some period of time. Whether the process would be similar for fathers who never married or lived with their child's mother was unclear. On the one hand, we might expect contributions of time and money to be lower among unmarried fathers because their legal and social responsibilities for their child were weaker. On the other hand, a large ethnographic literature suggested that poor unmarried fathers

continued to contribute to their children on an ‘as needs’ basis long after their relationship with their child’s mother ended (Furstenberg 2008).

The quality of mothers’ parenting in fragile families was also in question. Since most children born to unmarried parents live with their mothers, and since custodial parents automatically share their income with their child, our main question for mothers’ parenting was whether family structure and instability affected the quantity and quality of the time mothers spent with the child. We were especially interested in whether mothers engaged in cognitively stimulating activities (e.g. reading), whether their discipline practices were harsh, and whether they were emotionally responsive to their child’s needs. Based on our reading of the literature on divorce and single parenting, we expected family instability to be associated with lower quality mothering in the period immediately following a change in family structure (Hetherington 1989) and perhaps over the longer term if mothers were exposed to ongoing financial stress (McLloyd 1990)

- *How do family structure and stability affect children’s cognitive and socio-emotional development?*

Finally, and most importantly, we were interested in how children were faring in fragile families. A large literature suggested that family structure was associated with a wide range of negative outcomes in children. According to this literature, children who grow up with two biological parents are more likely to complete high school and less likely to engage in risky behavior than children who grow up with only one biological parent (McLanahan and Sandefur 1994). Again, since most of this research was based on children of divorced parents, important questions remained as to whether these findings could be generalized to children in fragile families.

We also had questions about the potential impact of family instability, net of the effect of family structure. A long standing question in the literature on single mothers was whether growing up in a stable single mother household was better or worse for children than growing up with married parents who later divorced. That said, if cohabiting unions and single mothers household were less stable than married-parent households, as many analysts suggested, children born to unmarried mothers were less likely to experience a stable family life.

FINDINGS

In the next section, I summarize findings related to each of the question described above. Most of these findings are based on research conducted by members of the Columbia-Princeton research team, including graduate students and post doctoral fellows at both institutions. A more extensive discussion of the methods and findings from each of these studies is available at the Fragile Families website.

Parents' Capabilities and Relationships

High Hopes

One of the biggest surprises to emerge from the *Fragile Families and Child Wellbeing Study* was the finding that a large proportion of unmarried parents were in committed or quasi-committed relationships at the time their child was born. Over 50 percent of the couples in our study were cohabiting at birth, and another 32 percent were in non-cohabiting romantic relationships. In total, over 80 percent of unmarried parents were romantically involved, and another eight percent were “just friends.” Less than 10

percent of mothers said they had “little or no contact” with their child’s father. When we looked at these figures by race and ethnicity (now shown here), we found that the proportion of parents that were romantically involved was similar for whites, Blacks and Hispanics, although Black couples were less likely to be cohabiting than whites and Hispanics. At the time we first presented these findings, they appeared to be at odds with national estimates based on the National Survey of Family Growth. However, more recent estimates based on the NSFG have borne out the fact that half of unmarried parents are cohabiting at birth (Kennedy and Bumpass 2008)

Figure 1 about here

Father involvement was also high around the time of the birth. According to mothers’ reports, 80 percent of fathers gave money to the mother or bought things for the child during the pregnancy; 88 percent visited the mother and baby at the hospital, and 84 percent of the mothers said the fathers’ name would be on the child’s birth certificate (Table 1). These figures belie the argument that most unmarried parents are in casual unions or that unmarried fathers have very few commitments to their child.

Table 1 about here

Furthermore, we found that most unmarried parents had ‘high hopes’ about their future together. Three quarters of mothers and 90 percent of fathers said that their chances of marrying each other were “fifty-fifty or better” (Waller and McLanahan 2005) Part of the reason fathers appear to be more positive than mothers is that they are a more select sample than mothers. Only 75 percent of fathers agreed to be interviewed, and these men were clearly more committed to the mothers and children than the men who did not participate. However, even when we limit our sample to couples for whom we

have interviews with both parents, fathers are more optimistic than the mothers about their chances of marriage.

To examine whether unmarried parents hold more negative views towards marriage than married parents, we asked both mothers and fathers several questions about their attitudes toward marriage, single motherhood, and the opposite sex. As shown in Table 2, most parents held positive views of marriage, although unmarried parents were less positive than married parents. As before, fathers were more positive than mothers. Although marriage is clearly the ideal state, both mothers and fathers agreed with the statement that ‘a single mother can raise a child alone.’ Support for single motherhood was much greater among mothers than among fathers; also unmarried parents were much more positive towards single mother households than married parents, although both groups scored fairly high on this indicator. Although unmarried parents did not differ from married parents in terms of relationship quality (limited to parents in romantic relationships), both mothers and fathers were much more distrustful of the opposite sex than married parents. Finally unmarried mothers reported more violence than married mothers.

Table 2 about here

Low Capabilities

Whereas parental relationships in fragile families appear to be quite hopeful at the time of the child’s birth, the story for capabilities is much less positive. As shown in Table 3, the unmarried parents in our study were younger, more likely to be in their teens, and less likely to be white than the married parents. Despite being younger, they were more likely to have had a child by another partner. Fertility differences were even larger

when we conditioned on whether the mother was having a first birth. Among women having their first child, 44 percent were in their teens; and among mothers with more than one child, over two thirds (66.6 percent) had a child by another father. The prevalence of *multi-partnered fertility*, defined as having children by more than one fathers, is one of the important new findings to have emerged from our study, and this phenomenon is expected to have important implications for many aspects of family life, including parenting relationships, parenting and child wellbeing. Finally, unmarried parents are much less likely than married parents to have lived with both of their biological parents growing up.

Tables 3 and 4 about here

The education gap between married and unmarried parents is striking, with very little overlap at the high and low ends of the distributions. More than a third of married parents had a college degree as compared to less than three percent of unmarried parents. In contrast, 45 percent of unmarried mothers and 41 percent of unmarried fathers lacked a high school diploma as compared to less than 20 percent of married parents. Not surprisingly, unmarried parents had much lower earnings and much higher poverty rates than married parents.

The data for health, mental health and risky behaviors presents a similar picture, with unmarried parents reporting poorer overall health, more health limitations, more depression and more drug use than married parents (DeKlyen et al. 2006). Whereas fathers' drinking was not significantly different for married and unmarried fathers, unmarried mothers were more likely to report drinking during pregnancy than married mothers (Table 4). Finally, unmarried fathers were much more likely than married fathers

to have been incarcerated at some point in their lives. The results for incarceration underscore the large disparities between married and unmarried fathers, and they also highlight the important role of penal institutions in the lives of fragile families.

Two important points emerge from the findings discussed thus far. First, there is very little support for the claim that fragile families are equally viable settings for raising children as married-parent families. Thus, even at the very beginning of study, we can see that there is reason to be concerned about the parents and children in these families. Second, these data underscore the fact that there is enormous selection into non-marital childbearing. Married and unmarried parents are drawn from very different populations, and these differences must be taken into account in any comparison of behaviors or outcomes between these two groups.

Stability and Instability

Despite their “high hopes,” most unmarried parents were unable to maintain stable unions. Only 15 percent of our couples were married at the time of the five year interview and only 36 percent were still romantically involved. (Recall that at birth 80 percent were romantically involved.) Among couples who were cohabiting at birth, the picture was somewhat better: 26 percent were married to each other and another 26 percent were cohabiting. Less than half had ended their romantic relationship. Interesting, among couples who reported ‘no romantic relationship’ at birth, 4 percent were married at year 5, 7 percent were cohabiting and 2 percent were in a romantic union.

Several factors were identified as important predictors of whether parents stayed together or not. Fathers’ earnings, mothers’ education, pro-marriage attitudes and relationship quality were positively associated with a greater likelihood of marriage,

whereas being Black, fathers' multi-partnered fertility, and mothers' distrust of men were associated with less marriage (Carlson et al 2004).

Our findings regarding the predictors of marriage were generally consistent with what we expected with one exception: fathers' multi-partnered fertility. Originally, we thought that multi-partnered fertility would reduce union stability by increasing household complexity. However, if this type of complexity was the primary mechanism, we would have expected mothers' multi-partnered fertility to have a stronger effect on marriage than fathers' multi-partnered fertility. Mothers' children are more likely than fathers' children to live with the couple, and thus mothers' multi-partnered fertility should create more complexity. And yet fathers' multi-partnered fertility is the factor that is most strongly associated with union dissolution. In depth interviews with a subset of couple in the Fragile Families Study provided some insight into this puzzle (Edin and England 2007). According to these interviews, jealousy is a serious problem for many couples; and fathers' contact with children in other households leads to more jealousy and more couple conflict.

We also looked at whether the factors that predicted marriage – education, earnings, pro-marriage attitudes, gender trust, and relationship quality – might also explain race/ethnic differences in marriage after a non-marital birth. We found that while individual-level factors such as those described above could explain a small portion of the race/ethnic marriage gap, the biggest factor by far was the race/difference in the number of “marriageable” men per woman in each city, where ‘marriageable’ is defined as having a job. Indeed, differences in the ratio of marriageable men to all women ca

account for a large part of the marriage gap between blacks and whites and between blacks and Hispanics (Harknett and McLanahan 2004).

Comparing family structures at birth and age five provides only a partial picture of the degree of instability in fragile families since it ignores changes in non-residential partnerships (Osborne and McLanahan 2007). To gain a more comprehensive picture of the extent of instability in fragile families, we calculated the number of changes in mothers' residential and non-residential (dating) partnerships transitions over the entire five year period. Since our data did not contain complete partnership histories, our estimates understate the true level of instability, especially turnover in dating relationships. We found that the average number of residential changes was nearly three times as high among unmarried mothers as compared with married mothers, 1.09 versus .32 (Beck et al, 2008) . Even more striking, the average number of changes in dating partnership was nearly four times as high among unmarried mothers as compared with married mothers, 1.46 versus .35.

These findings underscore the importance of taking dating relationships into account when describing children's exposure to family instability, especially children living with single mothers. For example, if we ask what proportion of unmarried mothers never cohabited with a man during the five year period, the answer is 30 percent. However, if we ask what proportion never experienced a change in a dating partner, the answer is 3 percent. Stability in the romantic lives of single mothers is very rare.

Finally, to document the growing complexity in fragile families, we looked at the proportion of mothers who had a child with a new partner between the birth of the focal child and the five year interview. Among mothers who were single when their child was

born, the number was 15 percent, among mothers who were cohabiting, the number was 5 percent, and among married mothers, the number was 1 percent (Bzostek et al 2007).

Trajectories in Parents' Economic Wellbeing and Health

The findings presented thus far show that unmarried parents are very disadvantaged relative to married parents at the time their child is born, both in terms of their individual capabilities and their relationship commitments. In the remaining sections of the paper, we ask whether these gaps continue to grow after the child is born and whether family structure and stability affect trajectories in parents' economic wellbeing and health. We begin by focusing on parents' economic status.

Economic Resources

To examine the link between family structure/stability and economic resources, we examined fathers' earnings trajectories and mothers' income trajectories between birth and year 5. Figure 3 reports findings for fathers' earnings. The estimates in Figure 3 are based on growth curve models that distinguish among multiple groups of fathers. Figure 3 reports trajectories for four of these groups: fathers who are stably married after birth, fathers who marry after the birth of their child, fathers who begin cohabiting after birth, and fathers who remain single throughout the five years (Garfinkel et al. 2009)

Figure 3 about here

As we expected, married fathers start out with much higher earnings than unmarried fathers, even after we control for differences in a host of demographic and human capital variables. Among unmarried fathers differences in earnings at birth are minimal. Over time, however, disparities among unmarried fathers emerge depending on fathers' family formation behavior. Fathers who marry after birth show the largest gains

(steepest slopes) in earnings, followed by fathers who begin cohabiting after birth.

Fathers who remain single over the five year period show the smallest gains in earnings.

The trajectories in Figure 3 do not tell us anything about the timing of the change in fathers' partnership status or whether it occurred before or after the change in the earnings. This distinction is important if we want to argue that changes in family structure have a causal effect on fathers' earnings. To investigate further, we looked at year-specific changes in fathers' partnership status and earnings. As shown in Table 5, there is very good evidence that both changes occur in the same year. In separate analyses (not shown here), we estimated similar models for the number of hours fathers worked and found that work hours increase markedly in the year fathers' married and remained high thereafter. We also estimated models that looked at within-father changes in marital status and earnings. The results from the latter (fixed effects) models were consistent with those from the growth curve models, suggesting that the association between marriage and increases in fathers' earnings is not due to unobserved characteristics of the father that do not change. This finding is true for marriage but not for cohabitation. We should note that these results do not prove that marriage causes men's earnings to rise. It is possible that the increase in work hours and earnings is making the father more 'marriageable' in the eyes of both parents. Both changes occurred during the same time period.

Table 5 about here

Similar analyses were conducted for mothers' household income, adjusted for family size. Since children typically live with their mothers after a non-marital birth, mothers' income is a pretty good proxy for children's economic status. Figure 4

compares income trajectories for five groups: mothers in stable married unions, those in stable cohabiting unions, those in stable single mother households, those who exit marriage, and those who enter a co-residential union with the father (marriage or cohabitation).

Figure 4 about here

According to Figure 4, married mothers have the highest level of economic well being at the time their child is born, followed by mothers who are married at birth and subsequently divorce, and then by all types of unmarried mothers. After birth, mothers who divorce experience a steep decline in economic status, whereas mothers who enter a coresidential union experience an increase in economic status. The income trajectory for mothers who enter a coresidential union after birth is similar to the trajectory for stably married mothers. Mothers who are stably single show a smaller income gain than unmarried mothers who enter a coresidential union.

As in the case of fathers, we examined the year specific effects of family structure change to see if the change in mothers' union status occurred in the same year as the change in economic status. For mothers who divorced or enter marriage/cohabitation after birth, both events occur in the same time period, which is consistent with the argument that union formation/dissolution causes a change in family income.

Health and Mental Health

Mothers' mental health is an important resource for children insofar as it is known to affect the quality of parenting (Kiernan and Huerta 2008). To determine whether family structure/stability lead to changes in mothers' health, we estimated growth curve models similar to those described in the previous section on earnings and income. To

measure mothers' physical health, we used self-reported health status. To measure mothers' mental health we used a composite score created by summing three dichotomously coded items—heavy episodic drinking (i.e., binge drinking), illicit drug use, and diagnosis of a major depressive episode. Depression was measured using the Composite International Diagnostic Interview Short Form (CIDI-SF) Version 1.0 November 1998 (see Kessler et al. 1998). Figure 5 reports the finding for five groups: mothers in stable unions (married, cohabiting, and single), mothers who divorced after birth, and mothers who experience multiple partnership changes. We created a separate category for mothers who experienced multiple changes in family status because we believed that ongoing instability might be especially deleterious for mothers' health.

Figure 5 about here

Whereas in the analysis of mothers' income, married mothers started out much better off than unmarried mothers, in the case of mental health problems, they start out at the high and low ends of the spectrum, with stably married mothers having the fewest mental health problems and divorced mothers having the most problems. Stably cohabiting mothers start out in the middle and stably single mothers start out about the same as mothers who subsequently divorce. The trajectories for mothers' mental health are consistent with what we would expect. Divorced mothers and mothers who experience multiple changes in family structure have worse trajectories (steeper slopes) than other mothers.

As in the previous analyses, we looked at whether the change in family structure occurred in the same year as the change in mental health problems, and once again, the data showed that the two events line up. The negative effect of family structure change on

mental health is greatest in the year in which the family change occurs and declines thereafter. This finding is consistent with the argument that family structure changes have short term consequences for mental health, and that most mothers recover in the absence of additional stressors. Finally, we conducted similar analyses using mothers' self reported health in place of mental health problems and found similar results. In other research, we examined the effects of family structure and stability on fathers' health and mental health problems (Meadows 2009). However, we found no evidence that family change was associated with changes in fathers' health and health behavior.

Parental Contributions and Parenting

In the previous section we showed how family structure and instability affect parental resources in fragile families. In this section we ask whether structure and stability also affect parental investments in children.

Fathers' investments

As noted in a previous section, the proportion of unmarried fathers who live with their child declines markedly over time, from 51 percent at year one, to 42 percent at year three and 36 percent at year five. Thus, a key question is whether or not these fathers continue to parent their child.

Table 6 about here

Although, in principle, fathers could continue to fulfill their parenting role after they move out of the household, theory tells us that it is much more costly for them to do so (Willis 2000). According to our estimates, a large majority of non-resident fathers continue to see their child, although contact declines over time. One year after the child's birth, 88 percent of non-resident fathers reported seeing their child at least once since the

last survey, dropping to 78 percent in year three and 72 percent in year five. A similar pattern is observed for frequent contact. One year post birth, about 63 percent of non-resident fathers reported seeing their child at least once in the past month (an average of 12 days a month), dropping to 55 percent and 51 percent at years 3 and 5. In short, about two thirds of unmarried fathers reported high levels of involvement with their child 5 years after birth: one third of all fathers are living with their child and another third is seeing their child on a regular basis (Carlson et al. 2009).

Several factors are associated with fathers' involvement. White fathers and immigrant fathers are less likely to maintain contact (conditional on non-residence). Multi-partnered fertility also reduces contact as does either the mother or father having a new partner. Finally, parents' ability to cooperate is strongly associated with fathers' involvement with his child. When the child's mother trusts the father and when she believes he shares her views about childrearing, the father is much more likely to be involved with the child on a regular basis (Carlson et al 2009). Although one might argue that causality is operating in the opposite direction—father-involvement is leading to better cooperation—our analyses indicate that most of the effect is going from cooperation to involvement.

We also looked at non-resident fathers' financial contributions to their child, measured as informal and formal financial contributions (child support) and in-kind contributions such as buying diapers or toys. Interestingly, informal contributions to children are much more common than formal contributions one year after birth; however, this pattern shifts over time, with informal contributions declining from 72 percent to 37 percent of non-resident fathers, and formal contributions increasing from 11 percent to 57

percent of fathers (Nepomnyaschy & Garfinkel 2006). In-kind contributions also decline over time, from 56 percent to 43 percent of fathers. Interestingly, stronger child support enforcement does not appear to increase the amount of money the father contributes, at least not during the first five years after birth. Rather, strong enforcement simply replaces informal payments with formal payments. In the long run, however, analyses suggest that strong enforcement does increase payments (Nepomnyaschy and Garfinkel 2006).

Mothers' parenting

In another set of papers we examined the association between family structure and mothers' parenting, measured as maternal stress (mothers' reports of how difficult they find the job of parenting) and parenting behaviors, such as harsh punishment, warmth, and engagement in literacy activities (Cooper et al forthcoming, Beck et al 2009). Each of these measures has been shown to affect children's cognitive and socio-emotional development. Family structure was measured as whether the child was living with both biological parents at age five. Family instability was measured by three indicators: total number of residential partnership changes, total number of non-residential partnership changes, and the sum of these two measures. We also distinguished between residential partnership changes that occurred between birth and age 3 (early transitions) and those that occurred between age 3 and age 3 (recent transitions).

Table 7 about there

We found that mothers who are not living with their child's biological father at age five are less likely to engage in literacy activities than mothers who are living with the child's father. Except for literacy, however, family structure per se is not associated with parenting quality. In contrast, we found that total transitions increase maternal stress

and harsh parenting, but are unrelated to literacy behaviors. Indeed, early residential transitions are associated small increases in literacy promoting behaviors. The finding that recent transitions are more negative than distal transitions is consistent with prior research on divorce which suggests that marital status changes have short term negative effects on mothers' parenting (Hetherington 1989). These results are also consistent with our findings for mothers' mental health (Meadows et al. 2008)

Figures 6 and 7 about here

Interestingly, the effect of family instability depends on mothers' education. As shown in Figure 6, each partnership transition increases maternal stress among mothers with less than a college degree, with the strongest effect appearing for mothers with only a high school degree. Among mothers with a college degree, however, each transition reduces stress. The latter finding is puzzling not only because the transitions effect is in the wrong direction but also because these mothers report relatively high levels of stress in the absence of any instability.

In contrast to our finding for maternal stress, the effect of instability on mothers' engagement in literacy activities is more negative among educated mothers, especially among mothers with a college degree. Whereas college educated mothers in stable households report more engagement in literacy activities than less educated mothers, this advantage drops sharply with each partnership transition so that by two transitions, mothers with a college degree show about the same level of engagement as mothers with a high school education. The large drop in literacy activities among college educated mothers may be due to the fact that educated mothers typically engage in very high levels

of literacy promoting activities to begin with and thus partnership interruptions have a much greater effect on these women.

To determine if the associations between family structure/stability and mothers' parenting were causal, we conducted several robustness checks. First, we re-estimated our models using a more extensive set of controls, including mothers' test scores, mothers' relationship history and grandparents' mental health history. Next we added a measure of mothers' parenting at year 3 to our model. The logic behind this strategy (lagged dependent variable) was that controlling for parenting at year 3 should control for any unobserved variables that were associated with parenting and child outcomes and that did not change over time. Finally, we estimated models that looked at whether future instability (between years 3 and 5) was associated with parenting at year 3. The logic behind this 'falsification test' was that the future could not predict the past and that if such an association existed, this would be evidence that unobserved variables were part of the story. Harsh parenting and literacy passed all of the robustness checks. However, maternal stress did not pass the falsification test. Although this last finding reduces our confidence that stress has a causal effect on mothering, we cannot rule out the possibility that mothers' *anticipation* of a future partnership transition is responsible for stress at year 3, in which case we could not rule out a causal interpretation. (For more details about the analysis, see Beck et al. (2008))

Child Wellbeing

A final set of analyses examined the associations between family structure /stability and child wellbeing at age five. Our measures of child wellbeing included the child's cognitive ability (measured by the Peabody Picture Vocabulary Test) and the

child's socio-emotional development (measured by subscales of the Behavior Problems Checklist), including externalizing behavior (aggression, rule breaking), social problems (problems getting along), and attention problems (problems focusing). These variables are frequently used to measure children's capabilities at the time they enter school, and they have been shown to correlate with children's long term academic and social success.

Table 8

As with mothers' parenting, we found that instability was associated with lower cognitive test scores and higher levels of behavior problems with the exception of internalizing behaviors which showed no difference by family stability. The results for behavior problems were only significant for boys, which is consistent with some past research suggesting that family disruption is harder for boys or at least that problems do not show up in girls until adolescence. Residential and non-residential instability were important for PPVT scores and externalizing behavior, but not for the other two outcomes

Also, being born to a single mother is associated with more externalizing behavior and social problems and with *higher* PPVT scores. The latter finding is puzzling and requires further investigation. Being born to cohabiting parents is associated with an increase in social problems. We ran the same set of robustness check for the child outcomes that we ran for mothers' parenting behavior, and we also estimated fixed effects models. Each of the indicators for behavior problems passed all three tests. In contrast, our indicator of cognitive ability did not pass the falsification test. As was true for our parenting measure in the previous section, we cannot rule out the possibility that children's cognitive scores at age 3 are caused by a pending change in family structure (see Cooper et al for more details).

Finally, we examined the extent to which parental resources and parenting quality could account for the associations between family structure/stability and children's cognitive and socio-emotional development at age five. We found that four factors—material hardship, the quality of mothers' relationship with the biological father, maternal depression, and mothers' use of psychological punishment—accounted for between one and two thirds of the association between instability and poor child outcomes.

Summing Up

So, what have we learned regarding the four questions laid out at the beginning of the paper? And what can we say about the implication of family change for the future life chances of children from fragile families? With respect to the first question – *What is the nature of parental relationships and capabilities at birth, and what happens to relationships over time* – unmarried parents are clearly very different from married parents in terms of their capabilities. Moreover, although many unmarried parents have 'high hopes' for a future together, very few follow through on their plans to marry, with nearly two thirds ending their relationship by the time their child is age five. Once the parents' romantic relationship ends, the children in these families experience high levels of partnership instability and household complexity as mothers form new partnerships and have children with new men. These findings underscore the fact that children born into fragile families are disadvantaged relative to other children in terms of both parents' capabilities and social capital.

With respect to the second question – *What happens to parental resources over time* – I would argue that family structure and instability both operate in ways that reduce parental resources. Marriage increases fathers' work hours and earnings and mothers'

household income. Instability and being single reduce economic resources. Instability also increases mothers' mental health problems, at least in the short run. In turn, the reduction in parental resources along with ongoing instability and growing complexity lead to fewer parental investments and lower quality parenting, which answers the third question – *How do family structure/stability affect parental investments in children?*

With respect to the fourth question – *How do family structure and stability affect child outcomes* – I argue that both structure and instability are both important for child wellbeing. Being born to a single mother increases children's behavior problems, and partnership instability, especially coresidential instability, has significant negative effects on cognitive ability as well as behavior problems. Of particular note, instability has a stronger effect on boys' behavior than on girls' behavior. The fact that boys are more sensitive to family disruption at an early age can be consequential since problem behavior in the early grades is likely to interfere with long term learning. Although it is much too early to say whether gender differences in children's response to family instability might account for some of the growing gender gap in children's school achievement that has emerged during the past decade, this issue is extremely important and must be followed carefully.

Finally, what can be said about whether the changes in family structure/stability are actually reducing the opportunities of disadvantaged children above and beyond what they would have been had their parents married before they were born? Although we cannot rule out the possibility that the observed associations between family structure and the various outcomes examined in this paper – parental resources, parental investments and child wellbeing – are due to a third unobserved variable such as parents' commitment

to family and children, the results presented here have undergone a number of robustness checks and the evidence is consistent with a causal interpretation. At the same time, the findings clearly show that being born to married parents who then divorce also reduces parental resources and investments with equally negative effects on child outcomes. Thus it is not marital status per se but rather the stability of the parental relationship that appears to promote children's long term wellbeing. Marital status at birth is a reasonably good proxy for whether children will grow up in a stable household.

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Figure 1

Births to Unmarried Mothers, U.S.

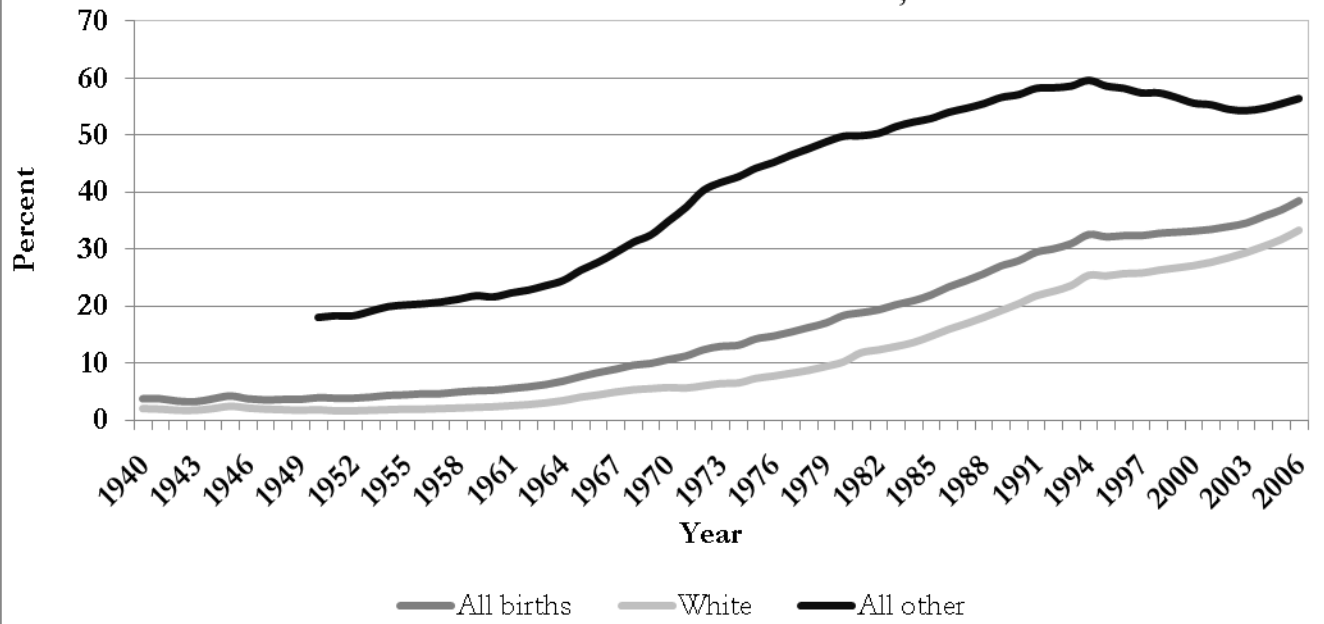


Figure 2

Relationships at Birth

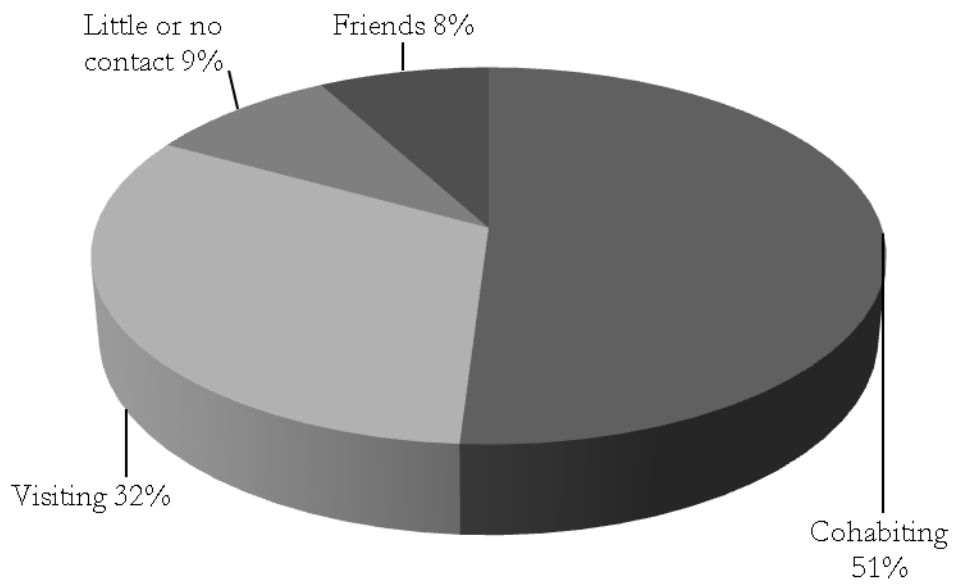
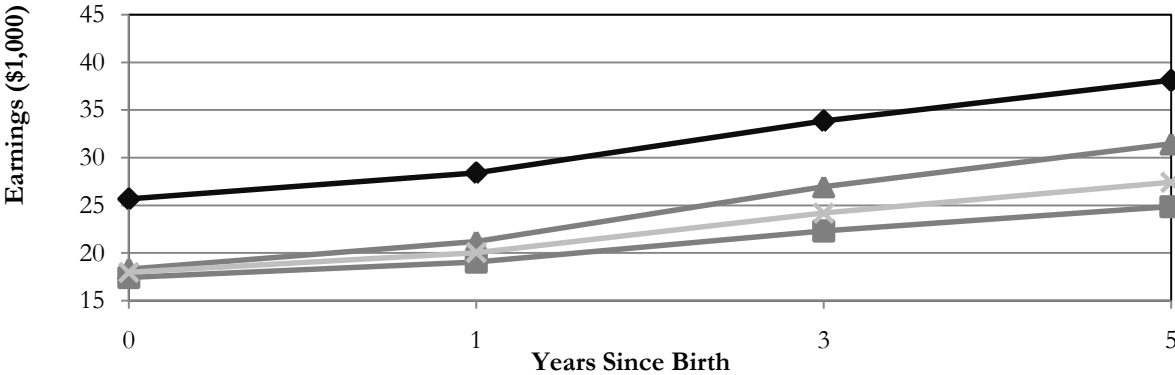


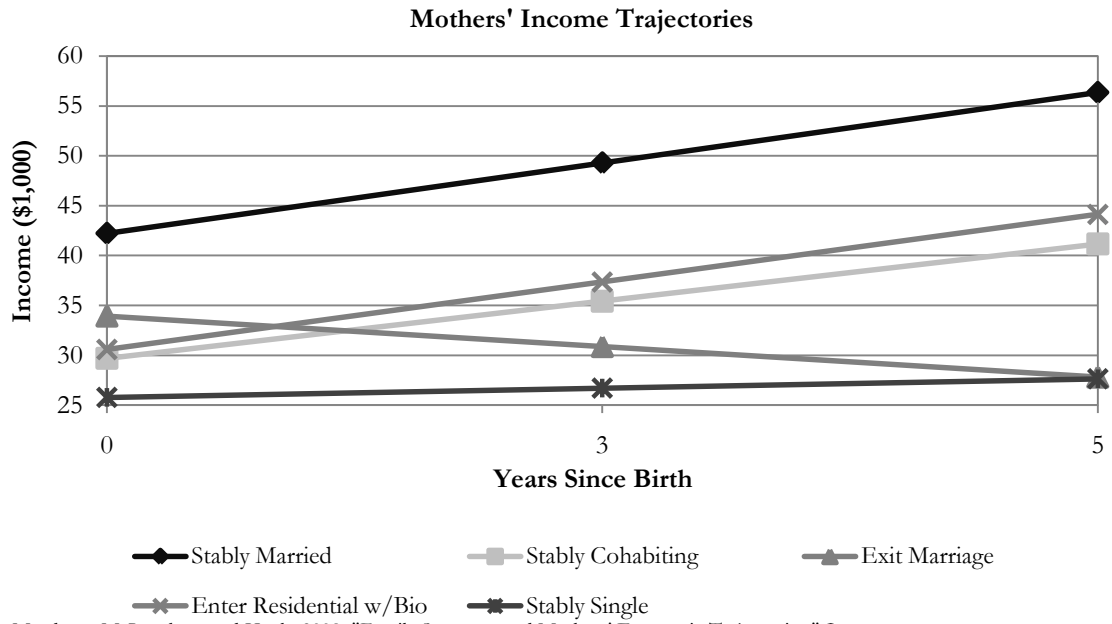
Figure 3

Fathers' Earning Trajectories (with controls)



◆ Continuously Married ■ Continuously Single ▲ Enter Marriage ✕ Enter Cohabitation
Source: Garfinkel, McLanahan, Meadows and Mincy. 2008. "Unmarried Fathers' Earning Trajectories: Does Partnership Status Matter?" *CRCW Working Paper WP09-22-FF*.

Figure 4



Source: Meadows, McLanahan, and Knab. 2008. "Family Structure and Mothers' Economic Trajectories." *In progress*.

Figure 5

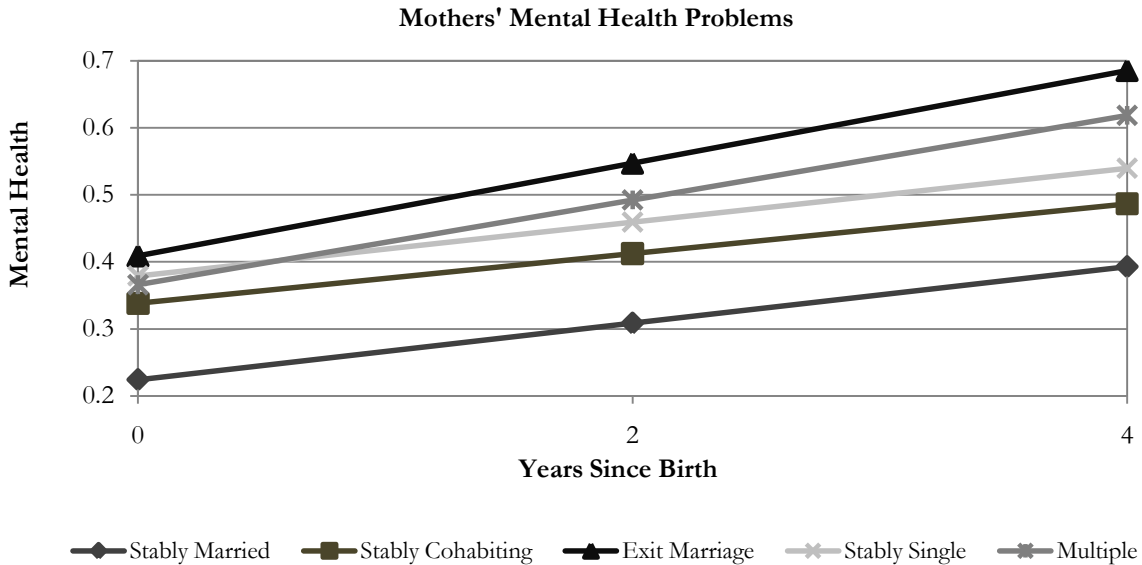
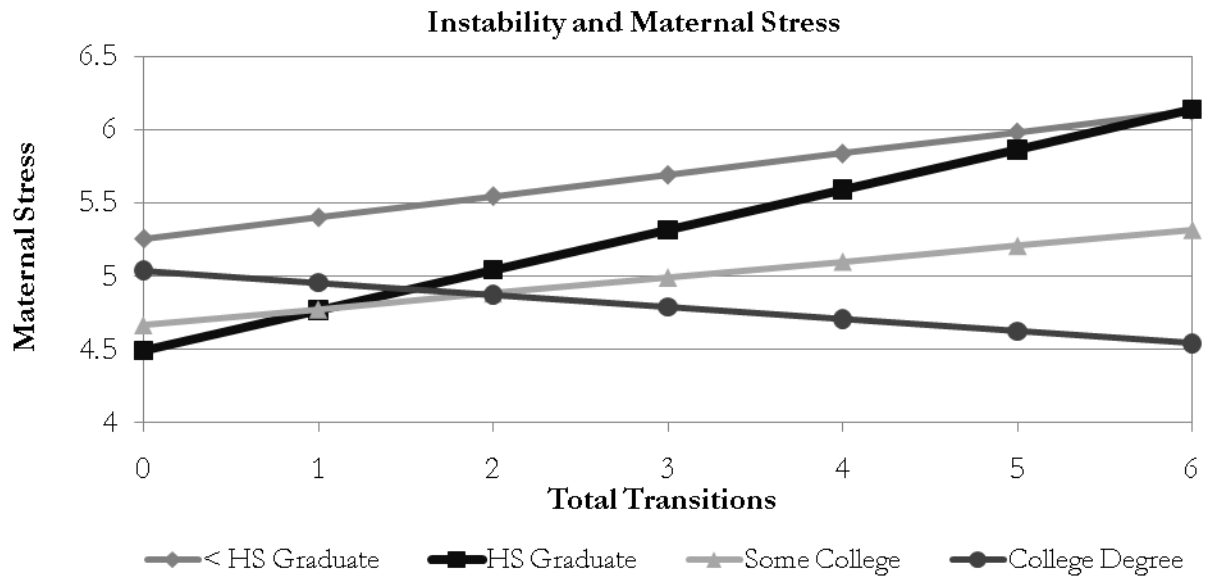
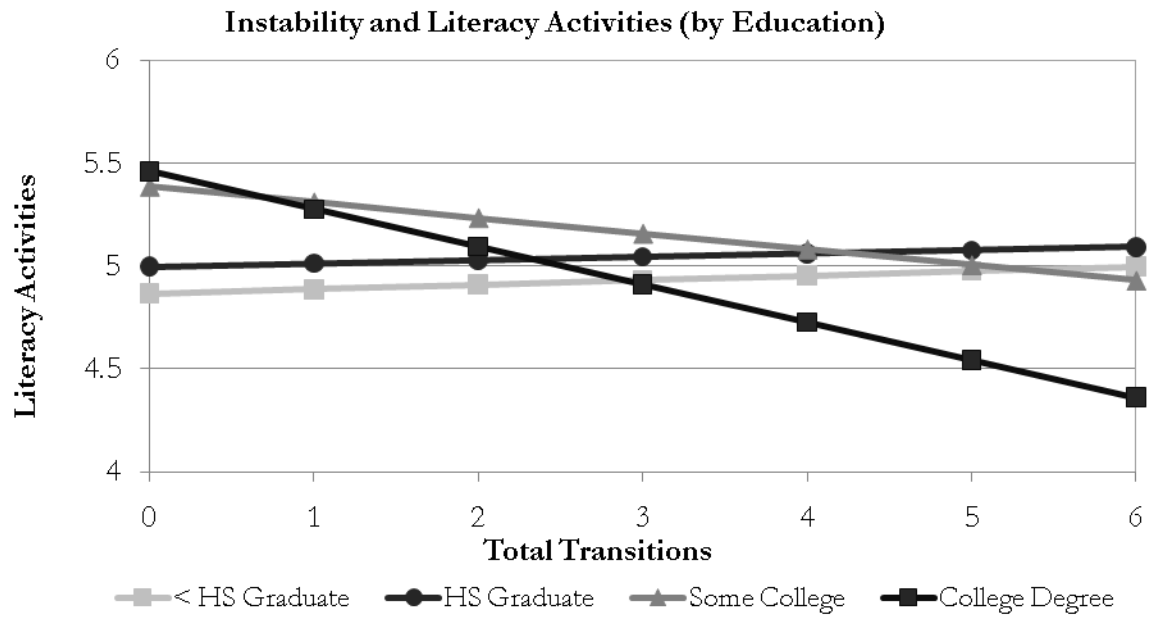


Figure 6



Source: Beck, Cooper, McLanahan, and Brooks-Gunn. 2009. "Relationship Transitions and Maternal Parenting" *CRCW Working Paper WP08-12-08*.

Figure 7



Source: Beck, Cooper, McLanahan, and Brooks-Gunn. 2009. "Relationship Transitions and Maternal Parenting" *CRCW Working Paper WP08-12-08*.

Table 1: Father's Involvement at Birth

	(%)
	Total
Gave money/bought things for child	80
Helped in another way	76
Visited baby's mother in hospital	88
Child will take father's surname	92
Father's name is on birth certificate	84
Mother says father wants to be involved	95
Mother wants father to be involved	94

Table 2: Marriage Attitudes & Relationship Quality

	Mothers		Fathers	
	<i>Married</i>	<i>Unmarried</i>	<i>Married</i>	<i>Unmarried</i>
Chances of marriage (50/50 or better)	--	75.0	--	90.0
Marriage is better for kids (agree or strongly agree)	83.4	64.6	90.5	78.3
Single mother can raise child alone (agree or strongly agree)	59.5	84.3	33.8	51.9
Men/women cannot be trusted to be faithful (agree or strongly agree)	10.4	25.7	4.5	15.8
Men/women are out to take advantage (agree or strongly agree)	11.6	19.1	5.1	17.5
Supportiveness scale (1-3)	2.7	2.6	2.7	2.6
Any violence*	4.5	7.3	--	--

*Uses questions from 1year

Table 3: Demographic Characteristics

	Mothers		Fathers	
	<i>Married</i>	<i>Unmarried</i>	<i>Married</i>	<i>Unmarried</i>
Age (mean)	29.3	23.6	31.8	26.8
Teen parent*	3.7 (7.5)	26.0 (44.2)	0.1 (0.4)	14.2 (25.2)
First birth	35.3	45.2	34.7	49.4
Child with other partner†	11.7 (17.7)	36.7 (66.6)	17.8 (27.1)	39.7 (68.2)
<i>Race</i>				
White, non-Hispanic	48.9	21.9	50.6	17.8
Black, non-Hispanic	11.7	39.2	13.8	43.0
Hispanic	28.6	35.5	29.4	35.0
Other	10.8	3.4	6.1	4.3
Immigrant	28.7	18.3	25.9	17.9
Two parents growing up	61.9	40.3	68.1	42.8

* () = Conditional on first births

† () = Conditional on higher order birth

Table 4: Human Capital & Health

	Mothers		Fathers	
	<i>Married</i>	<i>Unmarried</i>	<i>Married</i>	<i>Unmarried</i>
<i>Education</i>				
Less than high school	17.8	44.9	18.8	41.3
High school or equivalent	25.5	36.7	21.4	37.6
Some college	21.1	15.8	30.3	17.4
College or higher	35.7	2.4	29.5	3.7
Earnings (\$ mean)	25,618.9	11,114.2	38,568.5	18,801.5
Worked last year	79.3	81.4	95.7	88.4
Poverty status	14.0	42.8	13.2	33.9
Not working at birth	--	--	5.7	23.7
<i>Health^a</i>				
Poor/fair health	10.4	15.8	8.1	14.3
Health limitations	7.1	10.1	5.4	12.1
Depression	13.2	15.9	8.1	13.1
Heavy drinking	2.0	7.8	25.1	27.2
Illegal drugs	0.3	2.4	1.6	8.8
Father incarcerated	8.0	38.5	7.3	36.4

Notes:

¹ Analyses based on baseline and one year data from the Fragile Families and Child Wellbeing Study

² Data are weighted using pweights, psu, and strata

^a DeKlyen, McLanahan, Brooks-Gunn, and Knab. 2006. "The Mental Health of Married, Cohabiting, and Non-Coresident Parents With infants." *American Journal of Public Health*. 96(10): 1836-1841.

Table 5: Changes in Earnings

	One-Year	Three-Year	Five-Year
<i>Enter Marriage</i>			
Baseline to One-Year	0.29 ***	0.44 ***	0.66 ***
One-Year to three-Year	0.19 *	0.38 ***	0.58 ***
Three-Year to Five-Year	0.14 †	0.45 ***	0.67 ***
<i>Enter Cohabitation</i>			
Baseline to One-Year	0.16	0.41 ***	0.54 ***
One-Year to three-Year	0.2	0.23	0.36 †
Three-Year to Five-Year	0.01	-0.1	0.33 *

† p < .10 * p < .05 ** p < .01 *** p < .01, two-tailed tests

Source: Garfinkel, McLanahan, Meadows, and Mincy. 2009. "Unmarried Fathers' Earnings Trajectories: Does Partnership Status Matter?" *CRCW Working Paper WP09-02-FF*.

Table 6: Father Involvement

	(%)	One-Year	Three-Year	Five-Year
<i>All fathers¹</i>				
Lives with child		51	42	36
<i>Non-resident fathers</i>				
Saw child past year		88	78	72
Saw child past month		63	55	51
Formal child support ²		11	41	57
Informal support		72	42	37
In-kind support		56	47	43

Source: ¹Carlson, McLanahan, and Brooks-Gunn. 2008. "Co-Parenting and Nonresident Fathers' Involvement with Young Children After A Nonmarital Birth." *Demography*. 45(2): 461-488.

²Nepomnyaschy and Garfinkel. 2007. "Child Support Enforcement and Fathers' Contributions to Their Nonmarital Children." *CRCW Working Paper 2006-09-FF*.

Table 7: Family Structure/Stability and Parenting

	Maternal Stress	Harsh Parenting	Literacy- Promoting Behaviors
<i>Structure</i>			
Single at Five-Year	-0.15	-0.38	-0.34
Single at Baseline	-0.22	-0.22	0.17
<i>Instability</i>			
Total	0.18	0.11	0.001
Residential	0.13	0.19	0.05
Non-Residential	0.21	0.08	-0.02
Early	0.08	0.06	0.11
Late	0.28	0.31	-0.03

Source: Beck, Cooper, McLanahan, and Brooks-Gunn. 2009. "Relationship Transitions and Maternal Parenting." *CRCW Working Paper WP08-12-08*.

Table 8: Family Structure/Stability and Child Wellbeing

	PPVT	External	Attention	Social
<i>Structure</i>				
Single at Baseline	1.67	0.53	0.11	0.21
Cohabiting at Baseline	0.25	0.06	-0.04	0.36
<i>Instability</i>				
Residential	0.75	0.29	0.05	0.11
Non-Residential	0.37	0.15	0.01	0.01

Source: Cooper, Osborne, Beck, and McLanahan. 2008. "Partnership Instability and Child Wellbeing during the Transition to Elementary School" *CRCW Working Paper WP08-08-FF*.