

The Fragile Families and Child Wellbeing Study changed its name to The Future of Families and Child Wellbeing Study (FFCWS). Due to the issue date of this document, FFCWS will be referenced by its former name. Any further reference to FFCWS should kindly observe this name change.

**CHILD SUPPORT AND MINORITY FATHERS IN FRAGILE
FAMILIES**

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Child Support and Minority Fathers in Fragile Families

Child support reforms in the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) have substantially improved child support outcomes for children born to unmarried parents, thereby decreasing minority status gaps. However, in the years following PRWORA, racial inequalities in employment and earnings among less-educated men increased, possibly contributing to larger minority status gaps in child support outcomes. We examine minority status differentials in child support outcomes for children of unmarried parents born two years after the passage of PRWORA. We include a rich set of controls that have been previously unavailable in order to reduce omitted variable bias that has been present in much prior research in this area. We find no statistically significant difference between the award probabilities of black and white unmarried parents. However, among those with awards, blacks are far less likely to comply (make payments) than are whites. Introduction of control variables explains 22% of the white-black difference in the probability of compliance, but this difference remains substantial and significant. We find lower award probabilities among Hispanic fathers, but no white-Hispanic difference in compliance rates. When controls are added, we explain half of the white-Hispanic difference in award rates and this difference becomes statistically insignificant.

INTRODUCTION

During the 1990s, tight labor markets and welfare reforms, included in the Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA) of 1996, increased employment rates among minority single mothers and reduced minority status gaps in child poverty. Still, at fifty percent, poverty rates of black and Hispanic children are two-thirds higher than the poverty rate of white children, partly because the former are more likely to live with single mothers (U.S. Census Bureau 2004). A seminal paper published in this journal nearly 20 years ago showed that a minority single mother was less likely to have a child support award or a payment, even after controlling for characteristics that reflect her need for child support payments and proxy the father's ability to pay (Beller and Graham 1986a). Therefore, one strategy to further reduce minority status gaps in child poverty is to reduce minority status gaps in child support outcomes.

Even before PRWORA, federal and state governments made concerted efforts to strengthen child support enforcement (Garfinkel 1992, 2001; Garfinkel et al. 1998). These changes may already have had some effect on minority status gaps in child support outcomes. For example, between 1989 and 1997, the proportion of black custodial mothers reporting no child support award declined from 65% to 50 percent. For white custodial mothers, reports of no child support award rose from 27 to 30% during the same period (Huang 2004).

Fortunately, the child-support provisions of PRWORA strengthened child support enforcement in ways that were especially likely to improve child support outcomes for children born to unmarried parents (Case, Lin and McLanahan 2003; Freeman and Waldfogel 2001; Garfinkel 2001; Legler 1996; Sorensen and Hill 2004). Most importantly, expansion of in-hospital paternity establishment increased child support payments by unwed fathers (Mincy,

Garfinkel and Nepomnyaschy Forthcoming; Sorensen and Hill 2004). Because minority, especially black, children are more likely to be born to unmarried parents, this should have reduced minority status gaps in child support outcomes. On the other hand, improvements in the employment and earnings of minority, especially black, less-educated men lagged well behind those of their white and Hispanic counterparts during the 1990s (Holzer and Offner Forthcoming). This could have reduced the capacity of minority nonresident fathers to meet their child support obligations and reduced the willingness of minority custodial mothers to cooperate with the formal child support enforcement system. This would have sustained long-standing minority status gaps in child support outcomes (Beller and Graham 1986a; Beller and Graham 1993).

This paper uses data from the three-year wave of the Fragile Families and Child Wellbeing Survey to examine minority status gaps in child support outcomes for children born to unmarried parents two years after PRWORA. We focus on children born to unmarried parents because the growth in the number of these children is the most important demographic change in the child support caseload since 1975, when Congress gave the federal government major responsibility for child support enforcement (Garfinkel 2001). To date no study has focused on minority status gaps in child support outcomes for children born to unmarried parents after PRWORA and none employed the rich array of controls for mothers', (previously unavailable) fathers' and children's characteristics, which are available in our data. As a result, we provide the most up-to-date estimates of the effects of minority status on child support outcomes for children born to unmarried parents and these estimates are less likely, than estimates from previous studies, to be biased by omitted variables (such as cohabitation and multiple partner fertility) that are correlated with minority status. We focus on child support outcomes at three years, because

child support receipt for unmarried mothers stabilizes by the time children are three years old (Bartfeld and Meyer 2001).

We organize the paper as follows. The next section reviews the literature on the determinants of child support outcomes to clarify how minority status gaps in such outcomes are expected and to provide rationale for the variables we ultimately include in our empirical model. The third section describes our data and the methods we use to generate consistent estimates of minority status gaps in child support outcomes. The fourth section presents our findings and the final section discusses the implications of our findings for future research and policy.

PREVIOUS LITERATURE

Beller and Graham (1986a) were primarily interested in the effects of marital and minority status on child support outcomes. Their economic model, fully developed in Beller and Graham (Beller and Graham 1993), explained these effects along with the effects of other economic factors, non-economic factors and the legal environment.

Economic Factors

The main economic factors of interest were the mother's need for child support income and the father's ability to pay. Both were expected to improve child support outcomes. Beller and Graham (1993) used several variables as proxies for the mother's need for child support income: the number of children in the custodial family, and the mothers' current marital status, age, and educational attainment. The first two variables had theoretically unambiguous effects on child support outcomes.

They argued that the benefits of child support income were higher for mothers with more children; therefore, child support outcomes were expected to improve with the number of

children. This was supported by most empirical studies of award levels, award probabilities, receipt probabilities, and the amount of child support received (Argys, Peters and Waldman 2001; Bartfeld and Meyer 2001; Beller and Graham 1986b; Case et al. 2003; Graham 1995; Hanson et al. 1996; Miller and Garfinkel 1999; Robins 1992). Although two studies, which directly controlled for mother's income, found that ever-married mothers with more children had lower award probabilities (Teachman 1990), lower probabilities of receiving any child support, and lower child support payments (Teachman 1991).

Because of her husband's income, Beller and Graham (1993) also expected a currently married (or remarried) mother to have less need for child support income than a divorced mother. Therefore, a divorced mother was expected to have better child support outcomes than a currently married or remarried mother. Several empirical studies found this for award levels, award probabilities, receipt probabilities and child support received (Argys et al. 2001; Beller and Graham 1986a; Case et al. 2003; Graham 1995; Hanson et al. 1996; Robins 1992). Divorced mothers were also expected to have better child support outcomes than never-married mothers, because the need to establish paternity would subject a never-married mother to additional costs of collecting child support income. Several empirical studies also found this for award levels, award probabilities, receipt probabilities, and child support received (Argys et al. 2001; Beller and Graham 1986a; Beller and Graham 1993; Case et al. 2003; Hanson et al. 1996; Robins 1992).

The other two proxies for the mother's need for child support income (age and education) have theoretically ambiguous effects on child support outcomes. In particular, older and more educated mothers were expected to face lower costs of collecting child support income and receive lower benefits from child support income. Therefore, the effects of age and education on

child support outcomes were ambiguous. Empirical studies have consistently found that more educated mothers have higher award levels, award probabilities, compliance and child support payments (Bartfeld and Meyer 2001; Beller and Graham 1986a; Beller and Graham 1993; Case et al. 2003; Hanson et al. 1996; Miller and Garfinkel 1999; Nichols-Casebolt and Garfinkel 1991; Teachman 1990). These studies also found similar results for older women, except Argys et al. (2001), who found that older unmarried mothers had lower award probabilities than younger mothers.

Although Beller and Graham (1986a; 1993) lacked direct measures of the father's ability to pay, a few studies have included direct measures of the father's earnings or predictions of his income based upon the coefficients of earnings equations using the mother's characteristics (Garfinkel and Oellerich 1989). Teachman (1990; 1991) found that fathers' earnings increased award probabilities and award levels for ever-married mothers, although the first result was only marginally significant. Argys et al. (2001) found positive effects of fathers' income and education on award probabilities and award levels for ever-married and unmarried mothers, but none of these effects was statistically significant. Hanson et al. (1996) found positive and statistically significant relationships between predicted fathers' income and award probabilities, award levels, and amounts received. However, Miller and Garfinkel (1999) found that predicted fathers' income had a negative relationship with award probabilities for never-married mothers, but this relationship was not statistically insignificant.

Lacking direct measures of the father's ability to pay, most studies have assumed positive assortative mating and used the mother's minority status and human capital characteristics (such as age and education) as proxies for the father's current and permanent income. Thus, after controlling for age and education Beller and Graham (1993) predicted that white custodial

mothers would have better child support outcomes than black and Hispanic mothers. Thus, the primary reason they expected minority status gaps in child support outcomes was that minority status was a proxy for the father's income. A second reason they expected such gaps was that minority custodial mothers would be less able to use the courts to obtain child support awards or child support payments.

Several empirical studies found support for the prediction that minority custodial mothers have lower probabilities of having a child support award (award probabilities), award levels, probabilities of receiving any child support (receipt probabilities), or amounts of child support received (child support receipts) (Argys et al. 2001; Bartfeld and Meyer 2001; Beller and Graham 1986a; Beller and Graham 1993; Graham 1995; Hanson et al. 1996; Miller and Garfinkel 1999; Nichols-Casebolt and Garfinkel 1991; Robins 1992; Sorensen and Hill 2004).

Non-economic Factors

Beller and Graham (1993) expected non-economic factors to affect child support outcomes through their effect on the father's willingness to pay child support or the cost to the mother of collecting child support income. They expected fathers with voluntary child support awards to be more willing to pay than fathers with court-ordered awards. Teachman (1991) and Beller and Graham (1993) found this for compliance or both compliance and the amount received. Beller and Graham (1993) also expected that more amicable, on-going relationships between mothers and fathers would lower the cost of collecting child support income, which in turn, would improve child support outcomes. Unfortunately, they had no data to test this hypothesis. However, Teachman (1990; 1991) found that mothers' assessment of the degree of bitterness between parents at the time of the divorce had no significant effect on award probabilities.

Some prior studies used involvement with children to indicate fathers' willingness to pay or altruism toward their children. Teachman (1991) found that receipt probabilities were higher among divorced fathers who visited their children at least as frequently as agreed upon by the parents as compared with fathers who did not. However, Weiss and Willis (1985) argued that reverse causality could explain the association between visitation and child support outcomes, since visitation could have resulted from fathers' attempts to monitor how their child support payments were spent. To mitigate the possibility of reverse causality Argys et al. (2001) included dummy variables measuring the frequency with which fathers had contact with their children, lagged one year. They found that fathers who had monthly or less frequent contact with their children had significantly higher award probabilities than fathers who had no contact. They also found that frequency of contact increased award levels, but the statistical significance of these findings was sensitive to state fixed effects.

The Legal Environment

Finally, Beller and Graham (1993) expected the legal environment to affect child support outcomes in several ways. First, they expected child support guidelines to increase award levels for parents who would have agreed to lower amounts voluntarily. Argys et al. (2001) argued that award probabilities also increased with the adoption of presumptive guidelines, because judges would have less discretion to set zero orders for lower income fathers in states where guidelines are expressed as a percentage of income. They found that child support guidelines increased award probabilities, but they had no significant effect on award amounts.

Second, Beller and Graham (1993) expected stronger enforcement policies to improve child support outcomes by lowering the costs mothers incurred in seeking child support income or increasing sanctions for noncompliance. Consistent with these expectations, Argys et al.

(2001) found that never-married mothers in states with higher paternity establishment rates had higher awards. Miller and Garfinkel (1999) found that never-married mothers in states with higher paternity establishment rates, expenditures per female headed family, and collection rates had higher award probabilities, while they found lower award probabilities for never-married mothers in states with genetic testing and provisions that allowed paternity to be established until children were 18 years old.

Two studies using nationally representative data found positive effects of various child support enforcement policies on child support receipts. Beller and Graham (1993) found this result for immediate wage withholding, tax intercepts, liens on property, and criminal penalties for nonsupport, while Garfinkel and Robins (1994) found that the amount of child support received or the collection rate improved in states with higher ratios of collections to expenditures and in states that had adopted wage withholding for delinquent payments, immediate wage withholding, provisions that required publication of child support enforcement services, and provisions that required payment of child support through an agency. They found that charging fees for child support services in non-AFDC (Aid to Families with Dependent Children) cases reduced the amount received and the collection rate.

More recent empirical studies included state fixed effects and found less support for the effects of specific child support enforcement policies on receipt probabilities or amounts received. They also found that different policies affected the child support receipts of ever-married and never-married mothers. Case et al. (2003) found that the amount of child support received by ever-married mothers increased only in response to the adoption of wage withholding after delinquent payments, while Sorensen and Hill (2004) found that the probability of receiving child support and welfare, relative to the probability of receiving welfare alone, rose

in states that adopted tax intercepts, immediate wage withholding, and in states with higher expenditures per single parent family. Case et al. (2003) also found that never-married mothers who lived in states that adopted genetic testing had higher receipt probabilities, while Sorensen and Hill (2004) found that never-married mothers who lived in states that implemented in-hospital paternity establishment programs also had higher probabilities of receiving child support relative to receiving welfare. However, Freeman and Waldfogel (2001) argued that child support enforcement policies operated in combination with one another and with total expenditures on child support enforcement. Using an index that increased with the number of child support enforcement policies used in a state, they found that never-married mothers who lived in states with more child support enforcement laws and the highest expenditures had the highest receipt probabilities.

Finally, Beller and Graham (1993) also expected the mother's use of public benefits to increase awards, because benefit programs required mothers to sign over their rights to child support to the state. Even if a mother did not want child support income from the father, state efforts to recover the costs of public benefits removed her discretion.

Limitations of Previous Studies

This paper extends the literature in two important ways. First, we estimate minority status gaps in child support outcomes for children born to unmarried parents after PWRORA, which strengthened child support enforcement in ways that could have reduced those gaps. Second, the paper removes several sources of measurement error, which could have biased previous estimates of minority status gaps in child support outcomes.

For the most part, previous studies involved births occurring prior to 1996. As a result, they reflect little of the effects of the state mandates included in PRWORA. Some mandates

expanded and strengthened in-hospital paternity establishment programs, which all states were required to initiate by the Omnibus Budget Reconciliation Act of 1993. For example, states had to require unmarried parents to sign voluntary acknowledgement of paternity forms as a condition of including the father's name on their baby's birth certificate and make such an acknowledgement a rebuttable presumption of paternity. Another mandate required states to give their child support enforcement agencies authority to order putative fathers to take genetic tests, which also result in a rebuttable presumption of paternity, if the tests did not exclude the father. States had to impose sanctions on Temporary Assistance for Needy Families (TANF) recipients (of at least 25% of the family grant) who failed to cooperate in processes designed to establish paternity and obtain a child support order (Legler 1996).

Figure 1 illustrates the acceleration in the number of paternities established after 1996. Such an expansion could have had the effect of increasing the risk that all unmarried fathers of children born after PRWORA were exposed to child support enforcement tools, which were also strengthened by PRWORA. For example, the national registry of new hires would have made it easier to locate putative fathers for the purpose of establishing child support orders and centralized state registries of child support orders, along with automated enforcement procedures, could have increased child support compliance. The general application of these tools could have reduced minority status gaps in award rates and child support compliance.

Inadequate controls for several factors that are correlated with minority status could have biased previous estimates of minority status gaps in child support outcomes. These factors include the father's employment status, whether or not the mother lived with the biological father of her child(ren), and whether or not she had children by different fathers. Controls for the father's employment status are important, because minority, especially black, men had lower

employment rates than their non-Hispanic white counterparts during the 1990s (Holzer and Offner Forthcoming). This would lower award probabilities and compliance rates among minority fathers. Using characteristics of the mother to proxy the father's ability to pay may be less effective after 1990, because race and ethnic differences in women's employment rates fell much more rapidly among women than men in the 1990s.

Controlling for whether or not the mother lived with the father of her children is important for three reasons. First, almost all of the increase in non-marital births among non-Hispanic white women can be explained by births to cohabiting women. By contrast, births to cohabiting women account for smaller proportions of the increase in unmarried births among minority, especially black, women (Wu, Bumpass and Musick 2001; Wu and Wolfe 2001). Thus, less than one-quarter of black unmarried births occur to cohabiting women, while about half of white and Hispanic unmarried births occur to cohabiting women (Bumpass and Lu 2000). Second, unless they receive public benefits, unmarried mothers who cohabit with the fathers of their children are ineligible for child support. Third, once formerly cohabiting fathers become nonresident fathers, the former are more likely to comply because they have higher incomes (Primus and Beeson 2000). Since minority fathers are less likely to cohabit with the mothers of their children, they should have higher award rates and lower compliance rates than majority fathers. However, after controlling for residential status, we would expect lower award and compliance rates for minority unwed fathers.

Of the studies previously cited, only Bartfeld and Meyer (2001) and Argys et al. (2001) included a control for whether or not the mother was cohabiting. However, among unmarried mothers who identified themselves as the household heads, Bartfeld and Meyer (2001) were unable to distinguish between those who were cohabiting with the biological fathers of their

children and those who were cohabiting with other men. Therefore, some of the custodial mothers included in their sample were living with the biological fathers of their children and were ineligible for child support. This source of measurement error would have affected the white and black custodial mothers in their sample differently, possibly, biasing their estimates of minority status gaps in receipt probabilities.

Controls for the parents' previous children are important because children born to unmarried minority mothers were more likely to have different fathers than children born to unmarried white mothers (Mincy 2001). This undoubtedly produced biased estimates of minority status gaps in previous studies. For example, Argys et al. (2001) estimated a hazard model of the probability of having a child support award. Their dependent variable was assigned unity for years in which the mother had an award and zero for years in which she did not. For the unmarried mothers in their sample, they used the date of birth of the oldest child as the date of eligibility for child support, but they apparently made no allowance for the possibility that children born to unmarried mothers had different fathers. A mother with children by two different fathers was still at risk of obtaining a child support award during the years that she had an award for her first child, but not for her second child. In other words, the dependent variable was erroneously assigned a one during person-years in which it should have been assigned a zero. Again, this measurement error differentially affected minority and white unmarried mothers, possibly biasing their estimates of minority status gaps in award probabilities.

To summarize, we contribute to the literature in two important ways. First, we focus on minority status differentials in child support outcomes for children born at least two years after PRWORA. By this time, the child support enforcement system had become better positioned to secure child support awards and payments for all children born to unmarried parents, which

should result in smaller minority status differentials. Second, our estimates of minority status differentials are less likely to suffer from biases due to measurement error, because our measures of child support outcomes are with respect to a particular child, called the focal child, and for this child we control for whether or not the mother lived with the biological father. In addition, we include controls for the father's employment status, as reported by mother and a rich array of mothers', (previously unavailable) fathers' and children's characteristics.

DATA AND METHODS

Data

Our estimates of minority status gaps in child support outcomes rely on data from the three-year follow-up of the Fragile Families and Child Wellbeing Study of parents with births between 1998 and 2000 in large U.S. cities (3,700 nonmarital births). Mothers and fathers were interviewed in the hospital or shortly after the birth of a child in 20 U.S. cities in 15 states and are reinterviewed when the child is 1, three and five years old. The data are representative of such births in these 20 cities, as well all U.S. cities with populations of 200,000 or more.

Our sample consists of mothers with a nonmarital birth, who were interviewed at all three waves (birth, 1-yr and three-yr), and were associated with fathers whose racial/ethnic background was identified. We exclude from our analyses those mothers who report cohabiting with the father of their child at all three survey waves. We believe that these consistent cohabitators are unlikely to be involved in the child support system, and like married couples, may be considered ineligible. We included in the analysis mothers who were noncohabitators at any wave, even if they had cohabited at some point, because during the period of nonresidency they would have been eligible for child support. Prior research has shown that once a child support order is in place, amending that order is difficult and not often done, especially among low-

income families (Waller and Plotnick 2001). Therefore, it is quite possible that there is a child support order in place even for couples who are currently cohabiting, if they were not cohabiting at some prior point.¹

Most of the analyses are based on mothers' reports about themselves and about the fathers' characteristics and behaviors. In a few cases, where mothers did not know or refused to answer questions about the father, we substituted fathers' reports about themselves if they were interviewed. Of the 3,700 unmarried mothers interviewed at baseline, 3,009 were reinterviewed at both the one and three-year follow-up. Mothers who are currently married and living with the father (396 cases) are not asked any questions about child support and are therefore not included in the analysis. Another 476 mothers report cohabiting with the father at all three surveys, and are excluded. We also drop those cases where the father has died or the mother reports that he has primary custody of the child (47 cases). Because we only focus on fathers with identified racial and ethnic background, we drop those who report non-Hispanic "other" race (47 cases). Of the remaining 2,043 mothers who were eligible for child support, 45 were dropped due to missing data on the covariates. In order to minimize data loss, observations were dropped only for those variables that had fewer than 10 missing cases. For the remainder of missing cases, dummy variables were created and included in the regressions. Finally, an additional 13 cases were dropped that were missing observations on whether there was a child support order. The analyses in our paper are based on a final sample of 1,985 mothers with nonmarital births who have not been consistently living with the father of their child.

The outcomes of interest are whether the parents have a child support order and whether the father is complying with that order (whether he has paid on the order in the past 12 months).

¹ Excluding only those mothers who were consistently cohabiting with the father of the child is the least exclusionary restriction. We also ran models excluding mothers who were cohabiting with the father at the 3-year survey and got very similar results.

The independent variable of interest is the minority status of the father. Fathers, based on mothers' reports, are classified into three minority status categories: non-Hispanic white, non-Hispanic black, and Hispanic. In our attempt to understand the source of differences in child support outcomes by minority status, we include a large set of covariates, which are divided into two conceptually distinct groups: economic variables related to fathers' ability to pay child support and mothers' need for child support; and non-economic variables that are related to fathers' willingness to pay, his commitment to the child, and parents' relationship quality. We also include a variable about whether the mother received help from a child support agency.

To reduce the risk of reverse causality, we measure most covariates using the baseline survey. Questions related to parents' multiple partner fertility, fathers' incarceration status, and assistance the mother received from a child support agency were only asked at the one-year survey. We test for the possibility of reverse causality, by limiting our sample to cases in which there was no child support order prior to the one-year survey. Finally, we include three aggregate measures of the local economic climate and legal environment: two city-level indicators (metropolitan area unemployment rate and a child support effectiveness index)² and one state-level indicator (maximum TANF benefit).

The economic variables include father's age, incarceration history, level of education, multiple partner fertility, employment and disability status, and whether he had an alcohol or drug problem that affected employment. Also included are mother's welfare participation, employment and health status and nativity. U.S. born mothers should be more likely to both have an order and receive a payment on that order, since immigrant mothers are less likely to be

² The child support enforcement index combines the year that states enacted certain child support legislation, total state child support expenditures per capita, and a city-level effectiveness ratio constructed using 2000 Census data.

eligible for or participate in TANF and other public assistance programs and may be more disadvantaged than native-born mothers.

The non-economic variables include: three measures of homogamy (whether parents are the same minority status and the difference in their education and ages), parents' relationship status at the time of the birth, how supportive the father was of mother before the birth, the number of years they knew each other before the pregnancy, whether the mother wanted him involved in raising the child and several measures of father involvement prior to or at the time of the birth (whether he visited in the hospital, whether he contributed cash or in-kind during the pregnancy, and whether he intended to support the child in the future). We also include whether the mother has other children with the current father or children with other fathers, whether she had a problem with drugs or alcohol, the gender of the child, and whether the mother received help from a child support agency. Although mother's involvement with drugs or alcohol may be related to her need for child support, we include it as another measure of fathers' willingness to pay, since in this case, the father cannot be sure that his payments are being spent on his children.

Methods

We proceed in several steps. First, we present descriptive statistics for our entire sample and broken down by the racial and ethnic background of the father. Next, we examine the prevalence of child support orders and compliance for the entire sample and again by minority status. Then we proceed to our multivariate analyses. We estimate maximum likelihood probit equations using Stata/SE 8 statistical software. We report marginal effects, calculated from probit coefficients, and z-statistics. The figures presented should be interpreted as the change in the

probability of the dependent variable associated with a discrete change in a bivariate independent variable and an infinitesimal change in a continuous independent variable (StataCorp 2003).

For both child support orders and compliance with orders, we present four models. In Model 1 we include only the father's minority status categories: non-Hispanic black and Hispanic (with white as the omitted category). In Model 2, we add the economic variables, in Model 3 we add the non-economic variables, and in Model 4 we add the legal environment/local economic climate variables. We observe the coefficient on the minority status variables to see how much of the difference between minority and white fathers may be explained by the addition of other variables to the models. Then we discuss the important determinants of each outcome.

FINDINGS

Characteristics of Unwed Parents

Table 1 presents characteristics of our entire sample and then disaggregated by minority status of the father. Tests of significance were performed to determine whether the characteristics of non-Hispanic black and Hispanic parents differ from those of non-Hispanic white parents.

Hispanic fathers have much lower levels of education than white fathers, with 51% of Hispanic fathers as compared with 33% of white fathers not having completed high school, and only 14% of Hispanic fathers as compared with 29% of white fathers obtaining some post-secondary education. Black and Hispanic fathers are less likely to have been working at the baseline survey (66 and 76% vs. 84 percent) and more likely to have multiple partner fertility (51 and 45% vs. 34 percent), but less likely to have had a problem with alcohol or drugs (6 and 10% vs. 15 percent) than white fathers. Both black and Hispanic mothers are less likely to have been working prior to the birth than white mothers (65% and 64% vs. 84 percent). Black mothers

were more likely to have received Food Stamps or TANF prior to the birth (51% vs. 43 percent), while Hispanic mothers were much less likely to report very good or excellent health status at the time of the birth (59% vs. 71 percent) than white mothers.

Turning now to the non-economic variables, the data show that black parents were much less likely to have been cohabiting at the time of the child's birth than were white parents (27% vs. 45 percent), but were more than twice as likely to be romantically involved at the birth than white parents (52% vs. 26 percent).³ Hispanic parents also differ significantly from whites on these measures, but not as dramatically as black parents. Black mothers were more likely to say that they wanted the father involved in the child's life (94% vs. 90 percent) than white mothers. Black mothers were also more likely to have children with other fathers (46% vs. 30 percent), while both black and Hispanic mothers were more likely to have other children with the current father (29 and 31% vs. 17 percent) than were white mothers, indicating that minority mothers have more children overall than white mothers. Both black and Hispanic mothers were much less likely to report a problem with drugs or alcohol at the time of the birth (3 and 3% vs. 7 percent) than white mothers. Finally, minority and white mothers did not differ significantly on whether they had been assisted by a child support agency.

It appears that both black and Hispanic mothers lived in states that had more generous welfare benefits than white mothers, while Hispanic mothers lived in cities with higher unemployment rates, than white mothers. Finally, black mothers lived in cities with much stronger child support enforcement, while Hispanic mothers lived in cities with weaker enforcement than white mothers.

Child Support Outcomes

³ At the baseline survey, unmarried parents' relationship status was classified into several mutually exclusive categories: cohabiting, not cohabiting but romantically involved, friends, hardly talk and never talk.

Table 2 describes the child support outcomes of interest at the three-year interview for all parents in the sample and then disaggregated by minority status. Only 37% of all unmarried parents who have not been consistently cohabiting have child support orders at the three-year survey. We find marginally significant differences in the rate of child support orders between black and white mothers (38% vs. 44 percent), but we find much larger differences between Hispanic and white mothers (32% vs. 44 percent). Of those mothers with an order, 62% have received a payment in the past year. On this measure, there is no difference between Hispanic and white mothers, but a substantial difference between black and white mothers (58% vs. 75 percent).

Multivariate Analyses

Tables 3 and 4 present four models for each child support outcome: the first model includes only the minority status variables, the second model adds economic variables, the third model adds the non-economic variables described in a previous section, and the final model adds city and state level factors.

Child Support Orders. Table 3 presents the findings for the probability of having a child support order. The bivariate model confirms the findings in Table 2. There is a six percentage point difference between black and white parents on the probability of having an order and this difference does not reach conventional levels of significance, while Hispanic parents are 12 percentage points less likely to have an order than are white parents. As expected, when economic variables are added in Model 2, the coefficient for the Hispanic dummy variable is reduced almost in half, and is no longer significant, with Hispanic parents being six percentage points less likely to have an order. After adding the non-economic variables, this coefficient increases slightly (by one percentage point). The final model, adding city and state aggregate-level variables, indicates that both black and Hispanic parents are equally less likely to have a

child support order than are white parents (six and seven percentage points less likely), although these differences do not reach conventional levels of significance. It is interesting to note that the covariates included in our models explained about one half of the difference between Hispanics and whites but reduced none of the difference between blacks and whites on this outcome measure. In results not shown, we included a variable for whether the mother was interviewed in Spanish. This variable was not a significant predictor of having a child support order and did not reduce the size of the coefficient on Hispanic minority status.

We also examined minority status differences in paternity establishment in order to understand whether these differences may be responsible for the unexplained portion of the disparity in child support orders (these results are not shown). We found very small differences in paternity establishment by minority status, but these differences were completely eliminated when adding the economic variables to the model. Therefore, we rule out the possibility that disparities in paternity establishment are responsible for the lower likelihood of child support orders for minority families.

Several economic variables are important predictors of having an order. Fathers with more education are more likely to have an order than those who did not complete high school. Curiously, fathers who are over 20 are less likely to have an order than those who are younger, while fathers who have children with other mothers are more likely to have an order than those who do not. As expected, mothers who have been on TANF as well as those who are native born are more likely to have orders. There are just a few non-economic variables that are predictive of orders in our model. Mothers who wanted the father involved in the child's life are 14 percentage points more likely to have an order, while those who have children with other fathers are less likely. Because this variable was taken from the one-year survey, there is some

possibility of reverse causation. We checked for this bias by estimating the equation after excluding the 29 mothers who had children with other fathers after the birth of the focal child. The results are unaffected. Because some of the variables measuring father commitment may be highly correlated, we performed joint tests of significance and found that this set of indicators (whether father visited in the hospital, contributed cash or in-kind during the pregnancy, intended to contribute at the time of the birth, was supportive of mother prior to birth and the mother wanted him involved) was not jointly significant in predicting the probability of having an order.

Finally, mothers who received help from a child support agency are 39 percentage points more likely to have orders. Because this variable was taken from the one-year survey, there is a strong possibility that this very large effect is due to reverse causation. Mothers who had child support orders may have contacted a child support agency to get other assistance. We test for this bias by estimating the model only for mothers who did not have an order at the one-year survey. We find that mothers who did not have an order at one-year and got help from a child support agency at one-year were 19 percentage points more likely ($z = 4.86$) to have an order by the three-year survey than mothers who did not get help (these results are not shown). Therefore, although some portion of the effect of getting help from a child support agency is due to reverse causation, it is still a very strong predictor of having an order.

Mothers living in states with more generous welfare benefits are less likely to have a child support order, with a \$100 increase in the maximum TANF benefit associated with a two percentage point decline in the probability of an order. Mothers living in states with higher unemployment are more likely to have a child support order. A one point increase in the metropolitan unemployment rate is associated with a two percentage point increase in the probability of having a child support order. On the one hand, we would expect that a higher

unemployment rate would make it more difficult for fathers to pay support, and therefore lower the likelihood that there would be an order. On the other hand, a higher unemployment rate may make it more important for mothers to get child support and therefore increase their motivation to pursue the father and get an order. It appears that the mothers' effect dominates in this situation. The city-level child support effectiveness index was also a highly significant predictor of having a child support order, with parents living in a city that is one standard deviation above the mean on this measure being 23 percentage points more likely to have an order than mothers living in a city at the mean.

Compliance. Table 4 presents the results for our measure of compliance with an order, or the probability that the father has made a payment given that he has an order. Model 1, consistent with the bivariate findings from Table 2, shows that there is no difference between Hispanic and white fathers on this measure, while black fathers are 18 percentage points less likely to have made a payment on an order than are white fathers. When economic variables are added in Model 2, the coefficient for blacks is slightly reduced by two percentage points but remains significant. In the final model, with all covariates included, black fathers are 14 percentage points less likely to be in compliance with an order than are white fathers. Thus, the variables in our models are only able to explain four percentage points of the difference in compliance rates between black and white fathers (or 22 percent).

Important economic determinants of compliance include whether the father has any post-secondary education (although not statistically significant), whether he was working at the baseline interview, and whether he was 30 year old or more; with these fathers being 12, 13, and 14 percentage points more likely to comply with an order than those who had not completed high school, were unemployed at baseline, or were less than 30, respectively. Fathers who had a

history of incarceration were 13 percentage points less likely to comply. Mothers who reported very good or excellent health were nine percentage points more likely to receive a payment on an order. A few non-economic variables are associated with compliance. Contrary to expectations, mothers who were romantically involved with the father at the time of the birth were 11 percentage points less likely to have received a payment than those who were in a less intimate relationship with the father (friends or no relationship). Fathers who visited the mother at the hospital and who were more supportive of her before the birth were 18 and nine percentage points more likely to be compliant with orders, respectively (although the supportiveness index coefficient is not statistically significant). We again performed joint tests of significance on the set of variables measuring father commitment and found that jointly these variables were significantly predictive of compliance with an order. Contrary to expectations, receiving help from a child support agency is not predictive of compliance once an order has been established. None of the aggregate-level city or state level variables was predictive of compliance.

Alternate Specifications

In order to test the robustness of these results, we also estimated these effects including some contemporaneous covariates that may have a stronger effect on the likelihood that parents have child support orders or that fathers make payments on those orders than those measured at earlier periods. We looked at the following variables measured at the three-year survey: whether either parent is married to or living with a new partner, TANF receipt in the past 12 months, both parents' employment status, whether father saw the child since child's first birthday, whether father had any history of incarceration, and presence of father's informal contributions to mother. The only variable that had any impact on the minority status coefficients in the equation predicting child support orders was presence of informal support. Adding this variable to our

original full model reduced the difference between black and white parents (coefficient changed from $-.07$ to $-.04$, and became insignificant). When all these contemporaneous variables were added to the model at the same time, there was no further reduction in the differences between minority and white parents on the probability of having an order.

We examined these same contemporaneous variables and their effects on the relationship between compliance with child support orders and minority status. Again, we entered them each separately into our fully controlled model and observed the changes in the minority status coefficients. The only variable that affected the difference between black and white fathers on compliance was whether the father was working at the three-year interview (coefficient changed from $-.14$ to $-.11$, and became statistically insignificant). In the final equation we add all the contemporaneous variables to the model simultaneously and find no further decrease in the difference between black and white parents on compliance

In another specification, we included fathers' earnings in the models. Because mothers were not asked to report on fathers' earnings at the baseline survey, we first included fathers' self-reported earnings (limiting the sample only to those fathers interviewed), and then we used the self-reported earnings to predict earnings for all fathers (including those who were not interviewed). The predictions were based on the set of fathers' demographic characteristics as reported by mothers. When we used fathers' actual earnings for the smaller sample of interviewed fathers, we found no change in the size of the coefficients, although the differences were no longer statistically significant. The loss of statistical significance may be due to the substantial reduction in the sample sizes for the two analyses (orders, $N=1300$; compliance, $N=476$). In the second set of equations, where fathers' earnings were predicted and included in the equation, the minority status coefficients become very unstable and their significance

completely drops away. We attribute this instability to the fact that earnings were predicted with the same father characteristics which are then included in the final regression. Finally, we also estimated the original models using city fixed effects in place of the three city and state aggregate-level variables related to the local economic climate and legal environment (results not shown). The difference between blacks and whites on the probability of having an order and complying with that order was reduced by five and three percentage points, respectively in both equations, while the Hispanic coefficients remained basically unchanged.

IMPLICATIONS

During the 1990s, tight labor markets and welfare reforms, included in PRWORA, increased employment rates among minority single mothers and reduced minority status gaps in child poverty. Still, at fifty percent, poverty rates of black and Hispanic children are two-thirds higher than the poverty rate of white children, partly because the former are more likely to live with single mothers. Previous research shows that a minority single mother is less likely to have a child support award or a payment, even after controlling for characteristics that reflect her need for child support payments and proxy the father's ability to pay. Therefore, one strategy to further reduce minority status gaps in child poverty is to reduce minority status gaps in child support outcomes.

This paper uses data from the three-year wave of the Fragile Families and Child Wellbeing Survey to examine minority status gaps in child support outcomes for children born to unmarried parents at least two years after PRWORA. These children are of special interest because the expansion of paternity establishment and other improvements in the child support enforcement system included in PRWORA could have exposed these children generally to the

child support enforcement system, and thereby, reduced minority status differentials in child support outcomes. In addition, our data allow us to control for factors that are correlated with child support outcomes and minority status. As a result, our estimates of minority status differentials in child support outcomes are less likely to suffer from biases, which were likely to have affected previous studies.

Like Beller and Graham (1986a), but unlike most studies since, we find no statistically significant difference between the award probabilities of black and white unmarried parents, however, among those with awards blacks are far less likely to comply than whites. Introduction of controls for variables that could bias estimates of minority status gaps in child support outcomes explains 22% of the white-black difference in the probability of compliance, but this difference remains substantial and significant. Before adding these controls we find lower award probabilities among Hispanic fathers, but no white-Hispanic difference in compliance rates. Controls account for approximately half of the white-Hispanic difference in award rates and the difference becomes statistically insignificant.

These findings are consistent with our hypotheses that the expansion of in-hospital paternity establishment and other measures included in PRWORA to strengthen the child support enforcement system so increased the exposure of children born to unmarried parents that it reduced differentials in the probability that black and white children born to unmarried parents have awards. However, according to our data, Hispanic children are still less likely to have awards than white children, and black children are still less likely to receive any of the child support payments due.

Most previous studies use minority status variables to represent the father's ability to pay, but our study includes better controls for the father's employment status and earnings than most

previous studies. It is unlikely that the our minority status coefficients reflect race/ethnic differences in ability to pay, but instead reflect differences in the treatment of minorities by the child support enforcement system or differences in the attitudes of minorities and whites about paying child support or about the formal child support system. The five-year wave of the Fragile Families and Child Wellbeing Survey will include data on attitudes about the formal child support system held by minority and majority parents. In future research, we plan to use these data to see if such attitudes allow us to explain more of the minority status gaps in child support outcomes.

Meanwhile, these findings provide some clues about future efforts to reduce minority status gaps in child poverty by reducing minority status gaps in child support outcomes. First, such efforts will have to become more nuanced, increasing orders among Hispanic fathers and compliance among black fathers. Reducing cultural barriers that may discourage Hispanic (or foreign born) mothers from utilizing child support services may be key to the first objective. Increasing employment may be key to increasing compliance among black fathers, but that key remains hidden after decades of experimentation with employment-training services for disadvantaged men.

Under these circumstances, states have been slow to expand employment programs for non-custodial parents who cannot or will not comply, despite unfunded mandates for such work activities in PRWORA. Though a few states began to offer such programs, after PRWORA, with funding from the federal Welfare-to-Work (WtW) program, most of these programs ended when WtW was not authorized in 2001. Although, both the House and Senate welfare reauthorization bills include funding for responsible fatherhood programs, such programs hold little promise unless they include more intensive, better managed, and more effective employment services.

Also, given the effects of the Earned Income Tax Credit (EITC) on employment gains of less-educated women, work supports and incentives targeting less-educated men may also be helpful. These could come in the form of earnings supplements, conditional on child support compliance, and increases in the child support pass-through.

REFERENCES

- Argys, L.M., H.E. Peters, and D.M. Waldman. 2001. "Can the Family Support Act Put Some Life Back into Deadbeat Dads?: An Analysis of Child-Support Guidelines, Award Rates, and Levels." *Journal of Human Resources* 36(2):226-252.
- Bartfeld, J. and D.R. Meyer. 2001. "The Changing Role of Child Support among Never-Married Mothers." in *Out of Wedlock: Causes and Consequences of Nonmarital Fertility*, edited by L.L. Wu and B. Wolfe. New York, NY: Russell Sage Foundation.
- Beller, A.H. and J.W. Graham. 1986a. "Child Support Awards: Differentials and Trends by Race and Marital Status." *Demography* 23(2):231-245.
- . 1986b. "The Determinants of Child Support Income." *Social Science Quarterly* 67:353-364.
- . 1993. *Small Change: The Economics of Child Support*. New Haven, CT: Yale University Press.
- Bumpass, L. and H.-H. Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies* 54:29-41.
- Case, A., I.-F. Lin, and S. McLanahan. 2003. "Explaining Trends in Child Support: Economic, Demographic and Policy Effects." *Demography* 40(1):171-189.

Freeman, R.B. and J. Waldfogel. 2001. "Dunning Delinquent Dads: The Effect of Child Support Enforcement Policy on Child Support Receipt by Never-Married Women." *Journal of Human Resources* 36(2):207-225.

Garfinkel, I. 1992. *Assuring Child Support*. New York: Russell Sage Press.

—. 2001. "Child Support in the New World of Welfare." in *The New World of Welfare*, edited by R. Blank and R. Haskins. Washington, DC: Brookings Institution Press.

Garfinkel, I., C. Miller, S. McLanahan, and T.L. Hanson. 1998. "Deadbeat Dads or Inept States? A Comparison of Child Support Enforcement Systems." *Evaluation Review* 22(6):717-750.

Garfinkel, I. and D. Oellerich. 1989. "Noncustodial Fathers' Ability to Pay Child Support." *Demography* 26:219-233.

Garfinkel, I. and P.K. Robins. 1994. "The Relationship between Child Support Enforcement Tools and Child Support Outcomes." in *Child Support and Child Well-Being*, edited by I. Garfinkel, S. McLanahan, and P. Robins. Washington, DC: Urban Institute Press.

Graham, J.W. 1995. "A Comment on 'Why Did Child Support Award Levels Decline from 1978 to 1985?' by Philip K. Robins." *Journal of Human Resources* 30(622-32).

- Hanson, T.L., I. Garfinkel, S.S. McLanahan, and C.K. Miller. 1996. "Trends in Child Support Outcomes." *Demography* 33(4):483-496.
- Holzer, H. and P. Offner. Forthcoming. "Trends in Employment Outcomes of Young Black Men, 1979-2001." in *Left Behind: Young Less-Educated Black Men in the Economic Boom of the 1990's.*, edited by R.B. Mincy. Washington, DC: The Urban Institute Press.
- Huang, C.-C. 2004. "Comprehensive Research on the Attitudes and Perceptions of Minority Non-Custodial Fathers and Their Child Support Compliance Behaviors: Report on the Perceptions from the Pooled Cps-Css Data." Washington, DC: Spectrum Consultants.
- Legler, P.K. 1996. "The Coming Revolution in Child Support Policy." *Family Law Quarterly* 30(3):519-563.
- Miller, C. and I. Garfinkel. 1999. "The Determinants of Paternity Establishment and Child Support Award Rates among Unmarried Women." *Population Research and Policy* 18(3):237-260.
- Mincy, R. 2001. "Who Should Marry Whom? Multiple Partner Fertility among New Parents." Presented at The Association for Public Policy Analysis and Management Annual Meeting.

- Mincy, R., I. Garfinkel, and L. Nepomnyaschy. Forthcoming. "In-Hospital Paternity Establishment and Father Involvement in Fragile Families." *Journal of Marriage and Family*.
- Nichols-Casebolt, A. and I. Garfinkel. 1991. "Trends in Paternity Adjudications and Child Support Awards." *Social Science Quarterly* 72(1):83-97.
- Primus, W. and J. Beeson. 2000. "Safety Net Programs, Marriage, and Cohabitation." Presented at paper presented at "Just Living Together: Implications for Children, Families, and Social Policy", October 30-31., Pennsylvania State University.
- Robins, P.K. 1992. "Why Did Child Support Award Levels Decline from 1978 to 1985?" *Journal of Human Resources* 27:362-379.
- Sorensen, E. and A. Hill. 2004. "Single Mothers and Their Child-Support Receipt: How Well Is Child-Support Enforcement Doing?" *The Journal of Human Resources* 39(1):135.
- StataCorp. 2003. "Stata Statistical Software: Release 8." College Station, TX: StataCorp LP.
- Teachman, J.D. 1990. "Socioeconomic Resources of Parents and Award of Child Support in the United States: Some Exploratory Models." *Journal of Marriage and Family* 52(3):689-699.

—. 1991. "Who Pays? Receipt of Child Support in the United States." *Journal of Marriage and the Family* 53:759-772.

U.S. Census Bureau. 2004. "Current Population Survey, Table Pov03." Washington, D.C: U.S. Government Printing Office.

Waller, M.R.and R. Plotnick. 2001. "Effective Child Support Policy for Low-Income Families: Evidence from Street Level Research." *Journal of Policy Analysis and Management* 20(1):89-110.

Weiss, Y.and R.J. Willis. 1985. "Children as Collective Goods and Divorce Settlements." *Journal of Labor Economics* 3(3):268-292.

Wu, L.L., L. Bumpass, and K. Musick. 2001. "Historical and Life Course Trajectories of Nonmarital Childbearing." in *Out of Wedlock: Causes and Consequences of Nonmarital Fertility*, edited by L.L. Wu and B. Wolfe. New York: Russell Sage Foundation.

Wu, L.L.and B. Wolfe. 2001. "Out of Wedlock: Causes and Consequences of Nonmarital Fertility." New York, NY: Russell Sage Foundation.

Table 1: Sample Description for All Mothers with Nonmarital Births who Were Nonresident at Some Time and By Race/Ethnicity

Variables of Interest	All	Non-Hispanic White	Non-Hispanic Black	Hispanic
<i>N</i>	<i>1985</i>	<i>188</i>	<i>1345</i>	<i>452</i>
<u>Economic Variables</u>				
Father less than high school	38	33	34	51*
Father has high school diploma	42	38	45	35
Father has more than high school	20	29	21*	14*
Father is less than 21	20	18	20	19
Father 21-29	58	60	56	61
Father is 30+	23	22	24	20
Dad was working at baseline	70	84	66*	76*
Dad spent time in jail	43	44	45	39
Dad has kids w/other mothers	48	34	51*	45*
Dad is disabled	6	9	6	5
Dad has alcohol drug problem	8	15	6*	10*
Mother worked year prior to birth	67	84	65*	64*
Mother in exc/v.good health at birth	64	71	65	59*
Mother received TANF/FS prior to birth	49	43	51*	47
Mother is US-born	93	96	98	76*
<u>Non-Economic Variables</u>				
Parents are same race	88	84	91	79

Difference in parents' education	-0.04	-0.15	-0.01*	-0.08
Difference in parents ages	2.6	2.6	2.7	2.1
Parents cohabited at birth	31	45	27	36*
Parents romantically involved at birth	46	26	52*	37*
Parents in other relationship at birth	23	29	21*	27
Yrs. parents knew each other before preg	3.7	3.8	3.8	3.2
Male child	53	54	53	52
Father visited in hospital	70	76	70	69
Dad contributed cash during preg	77	74	79	70
Dad contributed other during preg	73	71	75	69
Dad intends to contribute	88	88	90	83
Father supportiveness index	1.53	1.52	1.53	1.52
Mom wanted dad involved at birth	93	90	94*	89
Mom has other kids w/this dad	28	17	29*	31*
Mom has kids w/other dads	41	30	46*	32
Mother has alcohol/drug problem	4	8	3*	3*
Mother received help from CS agency	18	18	18	15
<u>City/State Level Variables</u>				
Maximum TANF benefit (\$)	421	370	433*	406*
MSA unemployment rate	4.9	4.9	4.6	5.5*
Standardized CSE index	0.11	0.06	0.17*	-0.06*

* Tests of significance indicate statistically significant differences between minority and white fathers at the 10% level.

Table 2: Child Support Outcomes for Mothers with Nonmarital Births who were Nonresident at Some Time at the 3-Year Survey, by Race/Ethnicity, N = 1985

Sample	Order	Compliance ^a	Proportion of Sample
All	0.37	0.62	100%
<u>By Race/Ethnicity</u>			
Non-Hispanic White	0.44	0.75	9%
Non-Hispanic Black	0.38	0.58**	68%
Hispanic	0.32**	0.72	23%

^a Compliance is measured only for those with orders and indicates the proportion of mothers with orders who receive a payment, N = 694.

Tests of significance indicate statistically significant differences between minority and white parents ** p < .01

Table 3: Determinants of Having a Child Support Order, N =1985

Variables of Interest	Model 1		Model 2		Model 3		Model 4	
	Marg		Marg		Marg		Marg	
	Eff	Z	Eff	Z	Eff	Z	Eff	Z
<u>Race/Ethnicity (white=omitted)</u>								
Non-Hispanic Black	-0.06	(1.58)	-0.06	(1.54)	-0.06	(1.50)	-0.07	(1.62)
Hispanic	-0.12**	(2.99)	-0.06	(1.52)	-0.08†	(1.71)	-0.06	(1.32)
<u>SES Variables</u>								
Father has high school diploma			0.04	(1.62)	0.03	(1.12)	0.04	(1.41)
Father has more than high school			0.08*	(2.32)	0.08†	(1.83)	0.08*	(1.97)
Father 21-29			-0.07*	(2.44)	-0.06†	(1.91)	-0.07*	(2.04)
Father is 30+			-0.09*	(2.39)	-0.07	(1.60)	-0.07	(1.59)
Dad was working at baseline			0.03	(1.02)	0.02	(0.86)	0.03	(0.92)
Dad spent time in jail			0.01	(0.21)	-0.02	(0.68)	-0.01	(0.54)
Dad has kids w/other mothers			0.05*	(2.00)	0.05†	(1.88)	0.04†	(1.66)
Dad is disabled			0.02	(0.37)	0.06	(1.22)	0.06	(1.28)
Dad has alcohol drug problem			0.06	(1.42)	0.05	(1.01)	0.05	(1.14)
Mother worked year prior to birth			0.01	(0.53)	0.00	(0.07)	0.00	(0.13)
Mother in exc/v.good health at birth			-0.01	(0.35)	0.00	(0.14)	0.00	(0.09)
Mother received TANF/FS prior to birth			0.06*	(2.56)	0.05*	(2.04)	0.05†	(1.93)
Mother is US-born			0.23***	(5.07)	0.23***	(4.81)	0.22***	(4.35)
<u>Non-Economic Variables</u>								
Parents are same race					-0.03	(0.91)	-0.02	(0.67)

Difference in parents' education	-0.01	(0.52)	-0.01	(0.75)
Difference in parents ages	0.00	(0.07)	0.00	(0.05)
Parents cohabited at birth	-0.02	(0.56)	-0.02	(0.44)
Parents romantically involved at birth	-0.05	(1.46)	-0.06	(1.51)
Yrs. parents knew each other before preg	0.00	(0.43)	0.00	(0.40)
Male child	0.02	(1.05)	0.02	(1.00)
Father visited in hospital	0.01	(0.31)	0.01	(0.31)
Dad contributed cash during preg	0.02	(0.62)	0.03	(0.81)
Dad contributed other during preg	-0.02	(0.44)	-0.02	(0.49)
Dad intends to contribute	-0.01	(0.25)	-0.04	(0.78)
Father supportiveness index	-0.01	(0.31)	0.00	(0.10)
Mom wanted dad involved at birth	0.15**	(2.67)	0.14*	(2.46)
Mom has other kids w/this dad	0.02	(0.65)	0.01	(0.27)
Mom has kids w/other dads	-0.05*	(2.08)	-0.06*	(2.13)
Mother has alcohol/drug problem	-0.04	(0.63)	-0.05	(0.76)
Mother received help from CS agency	0.39***	(12.49)	0.39***	(12.34)
<u>City/State Level Variables</u>				
State max TANF benefit			-0.02†	(1.74)
MSA unemployment			0.02*	(2.42)
Child support enforcement index			0.23***	(6.22)

† p<.1; * p < .05; ** p<.01 *** p<.001

Table 4: Determinants of Compliance with Orders, N = 694

Variables of Interest	Model 1		Model 2		Model 3		Model 4	
	Marg				Marg		Marg	
	Eff	Z	Marg Eff	Z	Eff	Z	Eff	Z
<u>Race/Ethnicity (white=omitted)</u>								
Non-Hispanic Black	-0.18**	(3.03)	-0.15*	(2.32)	-0.14*	(2.07)	-0.14*	(2.06)
Hispanic	-0.04	(0.59)	-0.04	(0.56)	-0.05	(0.56)	-0.04	(0.48)
<u>SES Variables</u>								
Father has high school diploma			0.03	(0.58)	0.05	(0.96)	0.05	(0.95)
Father has more than high school			0.08	(1.46)	0.11	(1.63)	0.12	(1.63)
Father 21-29			0.01	(0.20)	-0.01	(0.14)	-0.01	(0.13)
Father is 30+			0.14*	(2.13)	0.13	(1.63)	0.14†	(1.65)
Dad was working at baseline			0.14**	(2.90)	0.13*	(2.53)	0.13**	(2.51)
Dad spent time in jail			-0.16***	(3.87)	-0.13**	(3.02)	-0.13**	(3.03)
Dad has kids w/other mothers			-0.09*	(2.08)	-0.05	(1.14)	-0.05	(1.13)
Dad is disabled			-0.04	(0.47)	-0.03	(0.32)	-0.02	(0.28)
Dad has alcohol drug problem			-0.07	(0.92)	-0.04	(0.51)	-0.04	(0.49)
Mother worked year prior to birth			0.03	(0.72)	0.02	(0.33)	0.02	(0.33)
Mother in exc/v.good health at birth			0.09*	(2.25)	0.09*	(2.05)	0.09*	(2.00)
Mother received TANF/FS prior to birth			-0.02	(0.49)	-0.01	(0.23)	-0.01	(0.26)
Mother is US-born #								
<u>Non-Economic Variables</u>								

Parents are same race	-0.04	(0.71)	-0.04	(0.66)
Difference in parents' education	-0.04	(1.33)	-0.04	(1.32)
Difference in parents ages	0.00	(0.14)	0.00	(0.19)
Parents cohabited at birth	-0.08	(1.07)	-0.08	(1.09)
Parents romantically involved at birth	-0.11†	(1.78)	-0.11†	(1.76)
Yrs. parents knew each other before preg	0.00	(0.52)	0.00	(0.57)
Male child	-0.04	(0.96)	-0.04	(0.93)
Father visited in hospital	0.18***	(3.34)	0.18***	(3.34)
Dad contributed cash during preg	-0.02	(0.31)	-0.02	(0.29)
Dad contributed other during preg	-0.02	(0.37)	-0.02	(0.33)
Dad intends to contribute	0.00	(0.02)	0.00	(0.04)
Father supportiveness index	0.09	(1.53)	0.09	(1.49)
Mom wanted dad involved at birth	0.06	(0.53)	0.06	(0.55)
Mom has other kids w/this dad	0.00	(0.03)	0.00	(0.04)
Mom has kids w/other dads	0.00	(0.07)	0.00	(0.07)
Mother has alcohol/drug problem	-0.07	(0.64)	-0.07	(0.66)
Mother received help from CS agency	-0.04	(0.88)	-0.04	(0.88)

City/State Level Variables

State max TANF benefit			-0.01	(0.46)
MSA unemployment			0.00	(0.22)
Child support enforcement index			0.02	(0.32)

The US-born variable drops out of the equation for compliance because there are no non-US-born mothers in this subsample. † p<.1; * p < .05; ** p<.01 *** p<.001.

Figure 1: Number of Paternities Established

