# Estimating the Impact of Child Support and Welfare Policies on Fathers’ Involvement 

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#### Abstract

We use data from the Fragile Families and Child Wellbeing (FFCW) to investigate the impact of state-level child support enforcement and welfare policies on fathers' involvement with their young children controlling for fathers’ individual-level characteristics. Fathers' involvement is operationalized as accessibility, responsibility, and engagement. Using parents that are unmarried at the time of the focal child's birth, this paper analyzes two points in a child's life to examine the short- and long-run impact of public policies. This paper finds that although the role of policies in shaping fathers' involvement is muted by their individual characteristics and circumstances, public policies do influence fathers' involvement with their children. However, policies may be operating in conflicting ways to both increase and decrease fathers’ involvement with their children. For example, policies such as the child support collection rate, positively affects one type of fathers' involvement (responsibility), however, the same policy may also negatively affect another type of fathers' involvement (accessibility).


## INTRODUCTION

In recent years, policymakers in the United States have sought to increase the role of fathers, particularly unwed fathers, in the lives of their children. Strengthening child support enforcement, increasing paternity establishment, and marriage promotion policies all seek to increase fathers' involvement in their children's lives. Concurrent policy changes under welfare reform have resulted in reduced caseloads, time limited benefits, and increased work requirements for welfare recipients thereby inducing mothers, and presumably fathers, to meet the economic needs of their children. Despite sweeping policy changes in the past decade, little empirical evidence exists to measure whether and how these policy changes have altered fathers' involvement with their children. This paper disentangles the effects of state-level child support enforcement policies and welfare policies on fathers' involvement, controlling for fathers' individual characteristics. In particular, this paper finds that, although some public policies are having their intended effect of increasing fathers' involvement, other policies are decreasing fathers' involvement. Furthermore, policies that increase one aspect of fathers' involvement (i.e., financial responsibility) may also decrease another aspect of fathers’ involvement (e.g., accessibility).

Begun in 1975, federal Child Support Enforcement (CSE) provided states with federal matching funds to establish paternity and provide monetary support to custodial parents. Initially designed to benefit single parents and to off-set Aid to Families with Dependent Children (AFDC) costs, in 1980 CSE was broadened to all families regardless of family income or welfare status. Between 1979 and 1996, paternity establishment-a requirement for formal child support—increased from 19 to 52 percent of nonmarital births (McLanahan and Carlson, 2002). Between 1978 and 2006 child support collections increased from $\$ 3.2$ billion (U.S. House of Representatives, Committee on Ways and Means, 2004) to almost $\$ 24$ billion in 2006 dollars
(Office of Child Support Enforcement (OCSE), 2007). The majority of this increase was due to more CSE cases rather than higher payments per case—from 1978 to 2001 the proportion of child support collected through CSE programs increased from 23 to 87 percent (U.S. House of Representatives, Committee on Ways and Means, 2004). By fiscal year 2006, there were 15.8 million child support cases (OCSE, 2007). Given declining welfare caseloads in recent years, 15 percent of the total child support caseload consists of current assistance cases, ${ }^{1}$ and 46 percent are former assistance cases. The remaining 39 percent is comprised of families who never received public assistance (OCSE, 2007).

Concurrent to changes in federal CSE, the passage of welfare reform in 1996 eliminated the federally-funded welfare program AFDC and replaced it with the Temporary Assistance for Needy Families (TANF) block grants to states. The devolution of authority from the federal government to the states under welfare reform gives states the flexibility to determine benefit levels and benefit time limits within broad guidelines defined by the federal government. Under welfare reform, states must limit TANF benefits to 60 months in one's lifetime. However, many states opted for shorter time limits. Under welfare reform, TANF benefits have been reduced in real terms in most states. The erosion of TANF benefits, combined with time limits and increased work requirements, have resulted in an overall reduction in income from welfare and increased labor force participation among former welfare recipients.

The CSE and TANF programs are integrally related. The federal government may opt to retain any child support received by custodial parents that are receiving welfare. Under welfare reform, states can pass child support payments on to families on welfare; however, states must also pay the federal government for half of any child support payments received. Therefore,

[^0]although child support payments are state-determined and can be very complicated, in most states, families receiving cash welfare do not also receive child support payments. With the decline of cash welfare caseloads, more families are eligible to receive child support payments and will seek to do so. Despite the substitutability of CSE and welfare monies, the joint impact of these two programs on fathers' involvement has not been considered in prior literature.

This paper examines the relative impact of child support enforcement policies and welfare reform policies on fathers' involvement with children, controlling for the individual characteristics of the father, mother, and the focal child. The analysis is limited to parents that are unmarried at the time of the focal child's birth. By exploiting state-level differences in welfare and child support enforcement policies, this paper allows for the possibility that these policies may exert both a direct effect on fathers' behavior and an indirect effect either through altering father's decisions about marriage and cohabitation or by affecting mother's incentives to marry or cohabit with the fathers. That is, although some policies are explicitly intended to increase fathers' involvement, others may operate by changing parents' incentives to marry, cohabit, or to stay separate. Furthermore, it may be through the accessibility allowed by the parental relationship that fathers alter their engagement with and responsibility for their children.

This paper answers the following two research questions: (1) What is the importance of living arrangements (accessibility) as a mediating factor in predicting fathers’ involvement with their young children? (2) To what extent do state-level child support enforcement and state-level welfare reform policies affect fathers’ involvement (responsibility and engagement) with their children?

The paper is organized as follows. The next section reviews the theory and empirical literature regarding the effect of child support enforcement and welfare policies on fathers’ involvement. The third section explains the data and methods and variables employed. The
fourth section presents the empirical results, and fifth section summarizes the results and discusses the policy implications.

## REVIEW OF THEORY AND EMPIRICAL EVIDENCE

Day and Lamb (2004) describe the changing conceptualization of fatherhood as a dynamic process that is affected by shifts in family structure in recent decades. They identify three approaches used to examine the role of fathers in families. First, the binary approach, popular in the 1970s, compared children with and without fathers. Second, in the 1980s, research on the effects of separation and divorce on child well-being proliferated. Third, concurrent research examining the interactions among mothers, fathers, and children emerged in the late 1970s focusing on the extent and type of father's involvement, rather than the binary present-absent model of fathering.

The proliferation of research related to fathers' involvement has flourished under this third, more nuanced, approach and has splintered into finer and finer demographic categories. Father involvement is now measured distinctly for each racial and ethnic group, low-income fathers are considered separately, and unwed fathers are distinct from married fathers. This paper falls within Day and Lamb’s third vein, and considers fathers' involvement among parents unmarried at the time of the focal child's birth. In particular, this paper examines both living arrangements and fathers' material support and time engaged because the decision to be married or cohabit is not independent from the decision to be an involved father. This paper considers what role state-level public policies play in inducing fathers to marry or cohabit with their partners and, in turn, what induces them towards involvement in their children's lives.

This paper adapts Lamb’s (2000) three-pronged model of father involvement as originally conceptualized by Lamb, Pleck, Charnov, and Levine $(1985,1987)$ and described in Cabrera, Tamis-LeMonda, Lamb, and Boller (1999). Lamb (2000) distinguishes three types of
father involvement-engagement (i.e., one-on-one interaction), accessibility (i.e., a father's presence or accessibility to the child), and responsibility (e.g., whether a father arranges for resources to be available to the child). In this paper, engagement is operationalized as fathers’ frequency of involvement in eight age appropriate activities. Accessibility is operationalized using a categorical variable measuring married, cohabiting, and separate. Finally, responsibility is operationalized as financial support, both formal and informal. This is an adaptation of Lamb et al.'s $(1985,1987)$ definition of responsibility, which largely captures organizing and planning a child's life.

The expected effect of stronger child support enforcement on fathers' financial responsibility is increased formal support payments from fathers and a reduction in fathers providing either informal financial support or no support. Recent changes in welfare legislation have changed states child support pass-through and welfare benefit disregard policies. ${ }^{2}$ It is possible that states with more generous welfare benefits may have custodial parents more readily participating in child support enforcement efforts because welfare reform strengthened child support enforcement in several areas-income withholding, paternity establishment, enforcing orders, central registries, and interstate cases (Lerman and Sorensen, 2003). As custodial parents lose financial support from welfare - due to stricter welfare time limits, work requirements, and reductions in benefits- they may be more likely to actively seek formal and informal financial support from the noncustodial parents to replace lost welfare benefits. Noncustodial parents may

[^1]also be more likely to make support payments if they see these payments going to their children rather than to the state.

The theoretical effect of stronger child support enforcement policies on the frequency of father-child contact is ambiguous. we expect that fathers' engagement with children may be negatively associated with stronger child support enforcement policies to the extent that being forced to contribute financially may embitter father's relationship with the mother who may then restrict contact with the child. However, a father who is forced to contribute financially may also seek custodial or visitation rights, resulting in increased father-child contact.

The theoretical effect of child support enforcement and welfare policies on accessibility—operationalized as marriage, cohabitation, or staying separate—is also potentially ambiguous. Although the provisions of welfare reform promoted two-parent families and included provisions aimed at reducing nonmarital fertility, stronger child support enforcement has given mothers rights to father's financial support without the obligation to marry or cohabit. On the other hand, as time limits and work requirements cause mothers to leave welfare, they may elect to cohabit and/or marry the baby's father (under TANF, it is much more difficult to qualify for benefits if one is married or cohabiting).

Empirical research examining the impact of stronger child support enforcement and welfare policies on fathers' involvement is limited. In fact, there is only one other study that considers the impact of child support enforcement policies on fathers' involvement and no other studies that jointly consider the impact of child support and welfare policies on fathers' involvement (Seltzer, McLanahan, and Hanson, 1998). Rather, the majority of the literature considers the impact of individual-level child support payments and individual characteristics on fathers' involvement. A couple of recent studies consider the impact of welfare reform policies on fathers' involvement (Mincy, Grossbard, and Huang, 2005; Mincy and Dupree, 2001).

Lerman and Sorensen (2003) note three inherent problems in examining the impact of CSE policies on behavioral outcomes: (1) obtaining measures that accurately portray the policies; (2) possible endogeneity in examining policies and behavioral outcomes; and (3) disentangling the short-run and long-run policy effects. Given these inherent difficulties, we review the literature keeping these three hazards in mind and propose ways in which this study addresses each of these challenges.

Several studies examine characteristics of nonresident fathers that make them more likely to be involved with their children. In general, fathers’ involvement tends to decline over time (Lerman and Sorensen, 2000; Furstenberg and Harris, 1993; Lerman 1993; Seltzer, 1991; Mott, 1990). Factors that, on average, increase father-child contact are residential proximity to his child (Cooksey and Craig, 1998; Lerman, 1993; Seltzer, 1991), a positive relationship between the mother and father, involvement of the father's family, father's financial resources, father's work experience, father's education, and mother's education (as a proxy for father's education) (Cooksey and Craig, 1998; Seltzer, 199; Danziger and Radin, 1990). Factors that decrease father involvement include: geographic distance from the child, a new spouse or partner, mother-father relationship conflict, and insufficient financial resources (Rangarajan and Gleason, 1998; Furstenberg and Harris, 1993; Seltzer and Bianchi, 1988). It is not possible to determine in these studies whether father residency is causal or simply correlated with greater frequency of involvement because fathers who are less inclined to be involved are less likely to reside with or near their child.

The effect of child support enforcement on fathers' involvement is an understudied issue. Seltzer, McLanahan, and Hanson (1998) is the only study to examine the impact of state CSE policies on visitation and parental conflict, and they also use CSE variables as instruments to predict the effect of child support payments on outcomes. Using data on child support policies in

1985, Seltzer, McLanahan, and Hanson (1998) find that child support payments positively affect visitation and increase conflict between parents. However, they do not examine fathers' involvement for resident fathers nor do they have more detailed measures of fathers’ involvement such as those available in the Fragile Families and Child Wellbeing (FFCW) data that are utilized here.

Greene and Moore (2000) present a thorough review of the literature assessing the impact of child support payments on fathers' involvement, although they do not always distinguish between divorced and never married fathers. Several studies show a strong correlation between formal child support agreements and father-child contact. Therefore, fathers who pay formal child support are more likely to be involved with their children and vice versa (Rangarajan and Gleason, 1998; King 1994; Arditti and Keith, 1993; Furstenberg, Nord, Peterson, and Zill, 1983; Seltzer, Schaeffer, and Charing, 1989). It is important to note, however, that all but one of these studies (except King, 1994) examines father-child contact post-divorce, and it is possible that fathers with nonmarital children may behave differently. Furthermore, because these studies all examine actual child support payments rather than policies, they may suffer from the endogeneity problem that those fathers who wish to be involved are also those who are more likely to pay child support. Studies examining child support payments and father-child contact for never married fathers find significantly lower levels of involvement (Cooksey and Craig, 1998; King, 1994; Furstenberg and Harris, 1993; Seltzer, 1991; Seltzer and Bianchi, 1988).

The impact of welfare reform policies on fathers' involvement with their children is also an infrequently studied issue. Welfare reform both strengthened child support enforcement and promoted two-parent families by including provisions aimed at reducing nonmarital fertility. Mincy and Dupree (2001) use initial Fragile Families baseline data from seven cities to examine the impact of welfare grant amounts on father involvement. Father involvement is
operationalized as four categories: father absence, visitation, cohabitation, and marriage. Welfare grant generosity is measured as the maximum benefit for a family of three in the state in 1997, the year prior to baseline data collection. Mincy and Dupree (2001) find that more generous welfare grant amounts and aggressive child support enforcement increase the likelihood that mothers will elect three of the four categories where the father is involved (e.g., father involved, cohabitation, marriage). Mincy, Grossbard, and Huang (2005) confirm the above results using 1- year Fragile Families data and find that the larger the welfare grant amount in the state where the mother resides, the more likely it is that fathers will have contact with their young children and the more likely that fathers will cohabit with the mothers.

This study improves upon the current literature in several notable ways. First, by using state-level policy measures, this paper avoids possible endogeneity caused by examining the effect of individual-level child support payments on fathers' involvement. Indeed, Seltzer, McLanahan, and Hanson (1998) note that such "analyses assume that the direction of causation is from child support to visitation and influence" (p. 181). Although they note that this is a dynamic relationship with dual causation, the simultaneity of the child support variable and the outcome is inherently problematic.

Second, unlike prior studies in this area, this paper jointly considers the impact of child support and welfare policies. Given the integrated nature of these two programs and the substitutability of benefits, both child support and welfare policies may be working simultaneously to influence fathers’ involvement separately or jointly. Also, because these policies are likely to be correlated, examining one set of policies without the other would likely result in omitted variable bias.

Third, this paper exploits policy changes over time by linking policy data by the year of interview-interviews for the 1-year Fragile Families survey occurred during the years 1999-

2001, and interviews for the 5-year Fragile Families survey occurred during the years 20032006. The individual-level Fragile Families survey data is appended with annual, state-level policy data. Although the original Fragile Families data were collected in 15 states, the appended policy measures are merged according to the mother's current state of residence at the time of her interview and the year in which the interview was conducted. At the time of the 1year interview, this analysis includes policy data from 34 states; and, at the time of the 5-year interview, policy data from 42 states are included. This seven-year time span, coupled with analyses of individual-level data from up to ten years after welfare reform was passed, may alleviate concerns raised by Lerman and Sorensen (2003) about the inability of most studies in this area to untangle short- and long-run effects. It should be noted, however, that these data are cross-sectional with separate analyses for the 1-year and 5-year data.

Finally, in a departure from much of the recent literature, fathers' involvement is modeled for both married and unmarried fathers. Initially, the sample is limited to parents who are unmarried at the time of the focal child's birth, in order to assess the policy impacts on unmarried parents. However, marriages that occur after the birth are kept in the sample at 1-year and 5-year. It is beneficial to model the relationship between public policies and material support using fathers that are unmarried at the time of the birth because this approach allows for an examination of the extent to which public policies impact father's decisions about both living arrangements and fathers' involvement. In contrast, a subgroup analysis would only permit an examination of whether policies are affecting fathers' involvement when the father is a resident or a nonresident in the household.

## DATA AND METHODS

This paper uses data from the Fragile Families and Child Wellbeing (FFCW) study, a large-scale, nationally-representative, longitudinal survey. The study follows a birth cohort of

4,898 children living in urban areas with over 200,000 people. Baseline interviews (at the time of the child's birth) were conducted with 4,898 mothers and 3,830 fathers in 20 United States cities (15 states) between February 1998 and November 2000. Follow up interviews occurred at one year, three years, and five years after baseline. This paper uses cross-sectional father and mother interview data from the 1- and 5-year surveys. Annual, state-level policy variables are appended to the Fragile Families individual-level data to measure the affect of public policies on individual-level father involvement. Because these data are not panel data, fixed effects are not included in the models.

Baseline data of 4,898 births (3,712 nonmarital, 1,186 marital) were collected from 75 hospitals at the time of the child's birth, and both mothers and fathers (when possible) were surveyed. Hospitals were selected within each city to be representative of nonmarital births within that city, and married and unmarried births were sampled within hospitals until preset quotas were reached based on the percentage of nonmarital births in that city in 1996 and 1997 (Reichman, Teitler, Garfinkel, and McLanahan, 2001).

The sample was stratified according to state and local characteristics, including the strength of the child support enforcement system, welfare generosity, and the strength of the local labor market. This paper exploits the state-level variation in the strength of the child support enforcement system and welfare generosity when constructing policy variables used in the analyses. In particular, the following annual, state-level policy variables are appended to the Fragile Families individual-level data: child support enforcement collections, paternity establishment, family cap, ${ }^{3}$ TANF lifetime time limit, and maximum TANF grant for a family of

[^2]three. Detail about the sources of these variables, their measurement, and how they are linked to the FFCW data appears below.

Mother reports are used for mother's demographics and for two additional variables as noted in the tables. Whenever possible, we rely on father reports of father behavior. Recent research using the FFCW data has shown that there is a statistically significant gap in mother and father reports of fathers' involvement and that, when available, father reports should be used (Mikelson, forthcoming).

Because both fathers' and mothers' data are used, the 1-year and 5-year analytic samples include 1,565 mother-father pairs that were unmarried at the time of the child's birth. This paper limits the analysis to parents that were unmarried at the time of the focal child's birth as a way of isolating the affect of public policies on parents’ decisions to marry following a nonmarital birth. The analytic sample includes all mother-father pairs for which cases are not missing for the independent and dependent variables. The analytic samples for the 1-year and 5-year frequency of father's involvement (Tables 6 and 7) are 1,329 and 1,311, respectively. These latter samples are somewhat smaller because numerous variables are used in constructing the dependent variable, a composite measure of father's time spent, resulting in more missing cases.

The data are exceptionally rich in comparison to other data which have been used to study fathers. First, the data tie the father and mother to a focal biological child, thereby allowing analyses of mother and child characteristics, in addition to the characteristics of the father. Second, the data are both national and longitudinal with relatively low rates of missing fathers and attrition over time. Third, the data are racially and ethnically diverse.

## Variables

## Father Involvement

The three key dependent variables in the analysis include three measures of fathers’ involvement-accessibility, engagement, and responsibility. Father's accessibility and engagement are measured using father reports in both the 1- and 5-year FFCW study, however, data measuring father's responsibility is available only in the 1-year FFCW survey.

To answer the first research question, father's accessibility to his child was operationalized using the living arrangements of the father in relation to the focal child. Living arrangements are measured as (1) married, (2) cohabiting, and (3) separate, a category that includes parents that are separated, divorced, widowed, friends, or that have no relationship (the omitted category). By examining living arrangements, we estimate fathers' presence in the household and access to his child. Living arrangements is also a potentially important mediating variable through which individual behavior and the policy variables operate. That is, both individual behavior and policies affect marriage decisions and this decision, in turn, may affect fathers’ involvement.

The second research question is answered using fathers' material support (i.e., responsibility) and fathers' frequency of involvement (i.e., engagement) as the dependent variables. Father's responsibility to his child was operationalized by estimating whether father provided financial support for his child. In the FFCW survey, fathers residing with their child all or most of the time (includes married, cohabiting, and fathers with sole custody) are assumed to be providing financial support to their child and are not asked about whether they provide financial support. Fathers who do not have sole custody and who are not married or cohabiting are asked whether they have a formal child support agreement, an informal agreement, or no agreement to provide financial support. Responsibility is coded as 1 for resident fathers living with the focal child all or most of the time; 2 for nonresident fathers with a formal support
agreement; 3 for nonresident fathers with an informal agreement; and 4 for nonresident fathers with no agreement to provide support (the omitted category).

Fathers' engagement with his child is operationalized as frequency of involvement. The questions from the FFCW ask fathers how many days per week he spends with his child engaged in various activities. ${ }^{4}$ Frequency of involvement was operationalized using questions about eight activities that fathers may engage in with his biological child. In year one of the survey, all fathers were asked—How many days in a typical week does [father] (1) play games like "peek-aboo" or "gotcha" with [child]; (2) sing songs or nursery rhymes to [child]; (3) read stories to [child]; (4) tell stories to [child]; (5) play inside with toys such as blocks or legos with [child]; (6) take [child] to visit relatives; (7) hug or show physical affection to [child]; and (8) put [child] to bed? In year five of the survey, all fathers were asked four of the same questions and four new questions-How many days in a typical week does [father] (1) sing songs or nursery rhymes to [child]; (2) read stories to [child]; (3) tell stories to [child]; (4) play inside with toys such as blocks or legos with [child]; (5) tell [child] you appreciate something he/she did; (6) play outside in the yard, park, or a playground with [child]; (7) take [child] on an outing, such as shopping, or to a restaurant, church, museum, or special activity or event; and (8) watch TV or a video together? The scale reliability coefficient for these items in year-1 and year-5 is 0.84 .

The dependent variable for fathers' frequency of involvement was created by averaging fathers' reported frequency of involvement in eight activities separately for the 1-year and 5-year data. Fathers' frequency of involvement ranges from 0 to 7 days per week. A value of zero indicates that father does not engage in a given activity with his child. A value of seven indicates that father engages in a given activity daily with his child.

[^3]
## Child Support Enforcement Policies

This paper uses two state-level child support measures to estimate the strength of states’ child support enforcement efforts-one measuring child support collection rates and one measuring paternity establishment rates. The child support collection rate is the total amount of child support collected and distributed as current support as a proportion of the total amount of current child support due in a state in a given year. ${ }^{5}$ The paternity establishment rate is the number of children in the caseload in the fiscal year that were born out-of-wedlock with paternity established or acknowledged as a proportion of the number of children in the caseload as of the end of the preceding fiscal year who were born out-of-wedlock. The state-level child support enforcement and welfare policy variables are each linked to individuals in the FFCW data using the year of interview and mother's state of residence at the time of the interview. ${ }^{6}$ The child support collection rate and the paternity establishment rate were purposively selected as variables to accurately represent changes in state-level child support enforcement. Lerman and Sorensen (2003) note the importance of selecting measures which represent the implementation of policies, and the support collection rate and paternity establishment rate both accurately represent child support enforcement strictness. Paternity establishment is a necessary, but not sufficient, first step towards strict child support enforcement. Gains in paternity establishment increased from less than one-third of cases in the mid-1980s (Lerman and Sorensen, 2003) to over 80 percent in our sample states in recent years and may exceed 100 percent. ${ }^{7}$ Likewise, the proportion of CSE collections has increased dramatically in recent

[^4]decades-from 23 percent in 1978 to 87 percent in 1997-however, the per case collections have not changed significantly (U.S. House of Representatives, Committee on Ways and Means, 2004). Although examining different outcomes, other literature has used these same measures as proxies for the strength of states’ child support enforcement (Acs and Nelson, 2004; Plotnick, Garfinkel, McLanahan, and Ku, 2004; Garfinkel, Huang, McLanahan, and Gaylin, 2003;).

## Welfare Policies

This paper uses three state-level welfare policy measures—maximum monthly TANF benefits, time limits, and family cap implementation-to estimate the generosity of the state's welfare program. ${ }^{8}$ Maximum monthly TANF benefits (in 2006 inflation-adjusted dollars) ${ }^{9}$ are estimated for a 3-person family in each state for each year that respondents were interviewed. The TANF lifetime time limit is measured as a dichotomous variable with a value of 1 if the time limit is 60 months and a 0 if the time limit is less than 60 months. The TANF family cap variable measures the year of implementation as a dichotomous variable with a value of 1 if a state has implemented a family cap provision and a 0 if there is no family cap on welfare benefits in the state. Although other welfare policy measures could have been chosen-work requirements, diversion policies-the selected policies most accurately represent welfare generosity in a numerically measurable way that varies both over time and from one state to another.

## Father, Mother, and Child Characteristics

Fathers and mothers each reported on their own demographic characteristics in the 1-year and the 5-year data. For fathers these characteristics included age, race and ethnicity, nativity, and education. Race and ethnicity was coded as four dichotomous variables for non-Hispanic

[^5]African American, Mexican American, Other Hispanic, and non-Hispanic other; a non-Hispanic white category is omitted. Education was dichotomized as a high school education or greater and less than a high school education. Mothers' reports of whether father had ever been incarcerated were used because fathers were not asked about their own incarceration. Father reports of the number of other children father has (including the focal child) was used. Father reports of whether his father was involved in raising him was dichotomized as very involved versus somewhat involved, never involved, or never knew his father. Father reports of whether there was another man who was like a father to him when he was growing up was dichotomized as yes or no.

Mother characteristics included education, nativity, and whether the mother had received financial help or money from anyone other than the father since the child was born. Mother's age and race and ethnicity were excluded from the multivariate analyses because of collinearity with father's race and ethnicity and age. Child's age in months was included, however, child's gender was not significant in any of the models and was excluded from the final models. In general, to reduce the likelihood of omitted variable bias, independent variables were included that may vary by state and that could potentially be correlated with the policy variables. Inclusion of a variable measuring whether the father lives in a different state from the mother was considered but ultimately excluded because this variable is a close proxy for the dependent variables.

Because this paper uses both state- and individual-level data, one must consider the extent to which there is intraclass correlation-that is, that observations within the same state are correlated. If intraclass correlation is not accounted for, the standard errors of the estimates will be underestimated and the significance tests will be invalid. The sampling framework for the FFCW study is explicitly designed to account for the correlational nature of the data, therefore,
the intraclass correlation in this study is accounted for using the survey commands in Stata. ${ }^{10}$ This paper uses the survey data commands in Stata for multinomial logistic regression analysis examining fathers' accessibility (living arrangements) and fathers' responsibility (material support) and ordinary least squares (OLS) for examining the impact of public policies on fathers’ engagement (frequency of involvement).

## RESULTS

## Descriptive Findings

Table 1 presents descriptive statistics for the 1-year and 5-year dependent variables used in the analysis. All the mother-father pairs in the analytical sample were unmarried at baseline, and, by one year later, 13 percent of the sample were married, 54 percent were cohabiting, and 33 percent were separated, divorced, friends, or had no relationship one year after the birth of their child. By four years later, 22 percent were married, the percentage cohabiting had halved (25 percent), and 53 percent were separated, divorced, friends, or had no relationship. Nearly two-thirds (63 percent) of fathers in the analytic sample were residing with their focal child (i.e., sole custody, married, or cohabiting), 14 percent had a formal support agreement, 16 percent had an informal support agreement, and 7 percent had no agreement to provide child support. Fathers spent 4.3 days per week, on average, engaged in eight activities with their one year old, however, this had decreased to 3.7 days per week by the time their child was five years old.

Table 2 presents descriptive statistics for the 5-year state-level public policy variables and the other independent variables used in this study. The overall current child support enforcement collection rate was 0.61 for the set of states in the sample as a whole and ranged from a low of

[^6]0.44 in Arizona in 2004 to a high of 0.75 in Pennsylvania in 2005 and 2006. The average paternity establishment rate for individuals in the study sample was 0.82 in the 5 -year FFCW data and ranged from a low of 0.51 in Oklahoma in 2003 to a high of 0.99 in Pennsylvania in 2006. Higher collection rates and paternity establishment rates are generally associated with stricter child support enforcement.

Table 2 also shows the mean values for the welfare policy variables in the study sample. Between 2003 and 2006, 60 percent of individuals in the study sample lived in states with a family cap. Generally speaking, states with family caps are considered less generous with their welfare benefits than states without a family cap. By 2003, ten of the 15 FFCW states had implemented a family cap policy. Additional policy data shows that 21 of the 42 states used in the policy analysis for year five had implemented a family cap by the end of 2006.

As Table 2 shows, at the time of the 5-year survey 90 percent of the study sample lived in states that had implemented a 60-month lifetime time limit on TANF benefits. Only seven states out of 42 had not implemented a 60-month lifetime time limit, and two out of 15 of the original FFCW study states—Indiana and Florida—did not have a 60-month lifetime time limit on TANF benefits by 2003. The maximum inflation-adjusted TANF benefits for a family of three averaged about $\$ 646$ (in 2006 dollars) but ranged from a low of $\$ 222$ per month in Alabama in 2005 to a high of $\$ 1,671$ per month in Washington in 2005 for the families in the study sample.

Table 2 also presents descriptive statistics for the individual-level independent variables used in the analysis. Sixty-four percent of fathers and 63 percent of mothers had a high school education or greater. About half (51 percent) of fathers had ever been incarcerated, as reported by the mothers. The sample is racially and ethnically diverse with 12 percent non-Hispanic whites, 58 percent non-Hispanic African Americans, 16 percent Mexican Americans, 11 percent other Hispanics, and 3 percent non-Hispanic others. Fathers’ average age was 29.4 years old,
with 2.8 children, including the focal child in the FFCW survey. Only 36 percent of fathers said their own biological fathers had been very involved in raising them, and 45 percent said there was another man who was like a father to him as he was growing up. One-third of mothers received financial help or money from someone other than the father since the birth of the child. The children were an average of 62.9 months old at the time of the father's survey.

## Multivariate Analyses

Tables 3 through 7 show the multivariate regression results estimating the impact of state-level child support enforcement and welfare policy variables on fathers' accessibility, responsibility, and engagement with his child. In addition to the policy variables, the predictor variables include father, mother, and child characteristics. Each table shows three models with the first model showing the impact of the public policies alone, the second model showing only the impact of the individual-level variables, and the third model showing the combined impact of the policy variables and the individual-level variables. For brevity, this paper focuses on the effect of the public policy variables with brief references to the impacts of the individual characteristics. Entering the variables stepwise in the order shown generally did not result in significant changes in the coefficients of prior variables; therefore, the three grouped models are the only ones shown.

Tables 3 through 5 present relative risk ratios calculated from the multinomial logistic regressions; relative risk ratios are interpreted similarly to odds ratios. Tables 3 and 4 show that four of the five policy variables significantly affect marriage and, in year five, the family cap also significantly affects cohabitation compared to staying separate when individual-level controls are included in the model. In particular, the odds of being married over staying separate are 9.9 percent lower for a 10 percentage point increase in child support enforcement (e.g., from
.44 , the minimum value in the data, to .54 ) in year one. ${ }^{11}$ As model 3 in Table 4 shows, in year five the odds of being married over staying separate is 9.5 percent lower for a 10 percentage point increase in child support enforcement holding all else constant. For example, in 2006, because the child support enforcement variable is .64 in Maryland and .54 in Florida, the odds of a couple being married as opposed to living separately are 9.5 percent lower in Maryland than in Florida, holding all else constant.

The paternity establishment rate has a significant impact on living arrangements, specifically marriage, when the child is one and five, holding all else constant. Model 3 in Table 3 indicates that the odds of being married over staying separate is about 60.1 percent higher for a 10 percentage point increase in the paternity establishment rate. It is plausible that knowledge of paternity may increase a father's willingness to marry the mother because with certain paternity he may feel pride, a sense of responsibility, or love for the mother and child. In any case, he may also realize that with paternity established he will likely have to pay child support if he elects not to marry the mother. Somewhat surprisingly, by the time the child is five, the odds of marriage over staying separate has reversed, as shown in Table 4. The odds of marriage rather than staying separate are 8.8 percent lower for a 10 percentage point increase in the paternity establishment rate. Although it is plausible that one would expect that marriages would drop off by the time the child is five, it is not clear why paternity establishment would actually decrease the rate of marriage. It is possible that by the time the child is five years old, the purpose of paternity establishment is for the mother to obtain child support from an absent father and that it is not an action that engenders pride, responsibility, or love.

[^7]As with child support enforcement, the family cap results for the 5-year data are similar to the 1-year results. The family cap policy had a significant and negative impact on marriage and cohabitation (in year five) compared to staying separate even after controlling for individuallevel characteristics. As model 3 in Table 4 indicates, the odds of marriage or cohabitation when the child is five years old is 23 percent lower in states with a family cap. And, although the family cap does not significantly affect cohabitation when the child is one, the odds of being married are 47 percent less likely than staying separate in states with a family cap. One explicit goal of the family cap policy was to reduce nonmarital births, however, a reduction in marriages following a nonmarital birth may be an unintended consequence.

Model 3 in Table 3 indicates that the odds of being married over staying separate when the child is one is 13 percent lower in states with an additional $\$ 100$ in maximum monthly TANF benefits. Model 3 in Table 4 shows that the relationship reverses when the child is five-that is, the odds of being married is 6 percent higher in states with $\$ 100$ more in monthly TANF benefits. It is possible that mothers who are unmarried when the child is born may stay separate from the father and receive TANF benefits. By the time the child is five, however, it is possible that mothers are running low on financial resources from TANF and other sources and, therefore, that marrying the father becomes more likely.

Table 3 indicates that father's incarceration, the mother receiving support from someone other than the father, father's race and ethnicity, mothers' nativity, and the child's age in months reduce the odds of marriage and cohabitation compared with staying separate. Only mother's education increases the likelihood of marriage over staying separate. When the child is five years old, individual characteristics that reduce the likelihood of marriage or cohabitation include father's incarceration, mother's and father's nativity, the mother receiving support from someone other than the father, and father’s race and ethnicity. More educated fathers with more children
are more likely to marry than stay separate, and a father having more children also increases the likelihood of cohabitation over staying separate.

Table 5 shows results that are largely opposite in effect from Tables 3 and 4. That is, the maximum TANF grant has a significant negative impact on all categories of material supportfather residency, formal support agreements, and informal support agreements compared to fathers with no material support agreement when the focal child is one year old. Therefore, a $\$ 100$ increase in the maximum TANF grant results in a 12 percent ( 20 percent once the individual controls are added) reduction in the odds of being a resident father, a 23 percent (27 percent after adding controls) reduction in the odds of having a formal support agreement, and a 16 percent (19 percent after adding controls) reduction in the odds of having an informal support agreement all compared to having no support agreement. The greater the maximum TANF grant, the less likely fathers are to live with or provide monetary support for their children.

Table 5 also shows that a state's child support collection rate is significantly and positively associated with formal agreements for child support, even controlling for individual characteristics. Specifically, the odds of having a formal support agreement rather than no agreement is about 5.25 times higher for a 10 percentage point increase in child support enforcement. This effect increases to about 11.1 times higher when individual characteristics are added to the model. This is not a surprising result, given that the express purpose of child support enforcement collections is to increase the formal financial responsibility of nonresident fathers. On average, more educated fathers are more likely to provide material support by residing with their children. On the other hand, incarceration, fathers who are African American, the mother receiving financial support from someone else, and child's age all result in fathers being less likely to reside with their children compared to having no agreement for material support.

Tables 6 and 7 show the OLS results for the impact of policies on fathers' daily engagement with his child at one year and five years, respectively. In general, the impact of policies is more pronounced in the 1-year results, however, the impact of individual-level characteristics is more pronounced in the 5-year results. The child support enforcement rate and family cap policy both had a significant and negative impact on fathers' frequency of involvement in year-1 holding all else constant. In states with a family cap policy, fathers spend approximately one-third (0.37) of a day less engaged in various activities with their one year old child than in states without a family cap policy. Fathers spend about one-eighth (0.13) of a day less with their one year old and about one-tenth (0.11) of a day less with their five year old for each 10 percentage points increase in the child support enforcement rate. For example, fathers living in Arizona (.44) instead of Pennsylvania (.75) are spending three-eights of a day more with their one year olds because of the difference in the child support enforcement rates holding all else constant.

Although this may not seem like a large amount of time, it depends on the base. For example, a 0.37 days per week decrease for all eight activities is an 8.6 percent decrease in frequency of involvement in year-1 when father spends an average of 4.3 days per week engaged in activities with his child. Clearly, if fathers are spending 8.6 percent less time with their children as a result of a welfare policy that was never intended to reduce fathers' involvement, this could have a large impact on the lives of these children

Finally, fathers having a very involved biological father or other father figure in their lives increased fathers' engagement with his one year old child, however, prior incarceration reduced his involvement, holding all else constant. When the child was five, prior incarceration, being a non-Hispanic African American or other Hispanic, and the child's age are correlated with, on average, less engaged fathers, controlling for other characteristics. Native-born fathers,
the number of father's children, and if there was another man who was like a father all increased father-child frequency of involvement, as shown in Table 7.

## DISCUSSION AND POLICY IMPLICATIONS

This study examines the interrelationship between child support and welfare policies to analyze their joint impact on fathers’ involvement. By considering policy changes over time, exploiting state-level variations in policies, and considering two time points in a child's life, this paper examines the short-run and long-run impact of public policies. Finally, this study modeled fathers' involvement for couples who were unmarried at the time of the child's birth to permit an examination of the impact of policies on father's joint decisions about living arrangements and involvement.

The results show that stronger child support collection rates may negatively affect marriage compared to being separated and fathers' frequency of engagement when the child is both one and five years old. If mothers are able to receive the financial support they need through legal avenues, it is possible that they will not seek additional in-kind and emotional support through contact with the father. Strong child support enforcement may also embitter fathers to the mothers and, in turn, to their child because it is associated with less time spent engaged with the child. On the other hand, stronger support collection rates likely have a positive impact on material support. In particular, stronger collection rates increase the likelihood that parents have a formal child support agreement compared to having no agreement to pay child support. This is not surprising because the express purpose of increasing child support enforcement collection rates is to increase the child support paid to custodial parents.

Family cap policies have a negative impact on father's involvement in terms of both living arrangements and frequency of involvement. Clearly, the financial incentives that family cap policies impose on families with a nonmarital birth affect couple's decisions to marry and
cohabit. This is not surprising because the policy's explicit goal is to reduce nonmarital births, and keeping the parents separate would reduce the likelihood of future nonmarital births. An unintended consequence of the family cap policy, however, is the reduction in marriages for the children already born out-of-wedlock and the reduced time spent by fathers with their infants.

It is interesting that the family cap and the child support enforcement policies are the only policy variables to affect the frequency of fathers' involvement, given that other public policies affect marriage (e.g., paternity establishment rates, maximum TANF benefits), and one would expect that marriage affects fathers' frequency of involvement. ${ }^{12}$ It may be that the marriages these other policies affect are ones in which the father is much less involved than in the average marriage. This would mean that it is possible that the purported marriage-effect on frequency of involvement is due mostly to selection; the act of getting married may have little direct influence on the frequency of a father's involvement with his children.

This finding may call into question some of the value of policies designed to promote marriage. It may appear that federal marriage promotion policies may be the best way of increasing marriage and cohabitation, thereby, increasing fathers' involvement. These results indicate that one should not come to such a conclusion too quickly, however, because the marriages that occur absent federal incentives may be quite different from the marriages that occur because of federal marriage promotion policies.

The results also show that greater generosity in welfare benefits has a negative effect on all types of material child support (i.e., father residency, formal support, and informal support) compared to not having a child support agreement. There is some evidence in prior literature that suggests that it is possible that TANF is a substitute for child support payments (Huang, Garfinkel, and Waldfogel, 2004), despite 1996 welfare reform legislation that provides paternity

[^8]acknowledgement forms in hospitals and requires states to achieve paternity establishment for 90 percent of all nonmarital births (Garfinkel, Meyer, and McLanahan, 1998). With recent steep declines in cash welfare caseloads in most states, it is quite possible that low-income families may seek child support payments from noncustodial parents as welfare cash grants end due to time limits and increased work requirements (Lerman and Sorensen, 2003). Further evidence of this theory may be found in the negative impact of TANF on marriage when the child is one but positive impact on marriage when the child is five years old.

There is one important limitation of the paper. This paper does not estimate the impact of every aspect of child support enforcement policies or of welfare policies. The policy measures selected for this analysis do account for states' strictness of child support enforcement and welfare reform policies, however, there are numerous other aspects of these policies-such as work requirements for welfare and pass-through and disregard policies for both welfare and child support-that may affect fathers' involvement with their children. There are two additional minor limitations related to the FFCW data. First, the FFCW data are an urban sample that is predominantly low-income; it is unclear if these results would generalize to nonurban populations, however, these data are appropriate for estimating the impacts of child support and welfare policies because these policies are more likely to affect custodial families who are also often low-income (Lerman and Sorensen, 2003). Second, fathers' material support is only available in the 1-year FFCW survey. Therefore, although results for the accessibility and engagement outcomes were checked for robustness in the 5-year FFCW data, this was not possible for the material support outcome.

Despite these limitations, this paper clearly shows that stronger child support enforcement is having its intended effect by holding fathers financially accountable for their children. Larger welfare benefits, however, may act as a substitute for formal child support.

However, it also appears likely that stronger child support enforcement is reducing marriages and fathers' frequency of involvement. Furthermore, both child support and welfare policies, with some minor exceptions, are having unintended negative consequences of reducing fathers’ involvement with their young children, through living arrangements, material support, and frequency of involvement.

Therefore, three important conclusions can be drawn from this paper. First, although the role of public policies in shaping fathers' involvement is muted by their individual characteristics and circumstances, public policies do influence fathers’ involvement with their children.

Second, public policies may be operating in conflicting ways to both increase and decrease fathers' involvement with their children. This paper finds that some policies, such as the child support enforcement collection rate, positively impact one type of fathers’ involvement (i.e., responsibility), although the same policy negatively affects another type of fathers' involvement (i.e., accessibility). Third, some policies that negatively affect fathers' involvement when the child is an infant may later positively affect involvement when the child is five years old and vice versa (i.e., maximum TANF benefits and paternity establishment, respectively).

These results are novel given the dearth of research examining the impact of child support and welfare policies on fathers' involvement and must be replicated in future studies to confirm or deny their veracity. That said, one policy implication of these results is to continue to promote those federal policies that increase father involvement. But this may require tradeoffs between different aspects of fathers' involvement-for example, encouraging material involvement at the cost of encouraging fathers' accessibility through marriage or cohabitation and fathers' engagement through frequency of involvement. Unfortunately, these results also indicate that there may be negative unintended consequences of policies that are designed to increase the well-being of families in other ways. Although a higher maximum TANF grant is
beneficial to families, these results indicate that it may lead fathers to provide less material support for their children. Clearly the costs and benefits—both intended and unintended-of policies must be carefully weighed before an argument can be made for eliminating or reducing those policies. Finally, individual characteristics of fathers also have potential policy implications for increasing fathers' involvement. For example, because the involvement of one's biological father affects fathers' involvement, it is plausible to assume that increases in fathers' involvement today may bring the benefit of increased father involvement to future generations.

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Table 1: Descriptive Statistics for the Dependent Variables at Year-1 and Year-5

| Variables | Mean | $S D$ | $N$ |
| :---: | :---: | :---: | :---: |
| Marital Status |  |  |  |
| Married at year-1 | 0.13 | 0.33 | 199 |
| Cohabiting at year-1 | 0.54 | 0.50 | 849 |
| Separate at year-1 (i.e., separated, divorced, friends, no relationship) | 0.33 | 0.47 | 517 |
| Total |  |  | 1,565 |
| Married at year-5 | 0.22 | 0.42 | 350 |
| Cohabiting at year-5 | 0.25 | 0.43 | 390 |
| Separate at year-5 (i.e., separated, divorced, friends, no relationship) | 0.53 | 0.50 | 825 |
| Total |  |  | 1,565 |
| Material Support |  |  |  |
| Resident father | 0.63 | 0.48 | 984 |
| Formal support agreement | 0.14 | 0.35 | 216 |
| Informal support agreement | 0.16 | 0.37 | 248 |
| No support agreement | 0.07 | 0.26 | 117 |
| Total |  |  | 1,565 |
| Frequency of Father Involvement in 8 Activities (days per week) |  |  |  |
| 8 activities in year-1 | 4.3 | 1.6 | 1,329 |
| 8 activities in year-5 | 3.7 | 1.5 | 1,311 |

Table 2: Descriptive Statistics for the Independent Variables at Year-5 ( $N=1,565$ )

| Variables | Mean | SD | Min | Max |
| :--- | :--- | :--- | :--- | :--- | :--- |

State-level Public Policy Variables
Child Support Enforcement Variables

| Child Support Enforcement collection rate | 0.61 | 0.08 | 0.44 | 0.75 |
| :--- | ---: | ---: | ---: | ---: |
| Paternity establishment rate | 0.82 | 0.08 | 0.51 | 0.99 |
| Welfare Reform Variables |  |  |  |  |
| Family cap implementation: 1=state has a family cap | 0.60 | 0.49 | 0.00 | 1.00 |
| TANF lifetime time limit: 1=60-month time limit | 0.90 | 0.31 | 0.00 | 1.00 |
| Maximum TANF benefits (\$100s) | $\$ 6.46$ | $\$ 2.40$ | $\$ 2.22$ | $\$ 16.71$ |

## Individual-level Variables

Father characteristics

| Age | 29.41 | 7.02 | 18.00 | 71.00 |
| :---: | :---: | :---: | :---: | :---: |
| Education: 1 = High school education or greater | 0.64 | 0.48 | 0.00 | 1.00 |
| Incarceration: 1 = Ever incarcerated ${ }^{1}$ | 0.51 | 0.50 | 0.00 | 1.00 |
| Nativity: 1 = Native-born | 0.88 | 0.32 | 0.00 | 1.00 |
| Number of children father has including this focal child | 2.75 | 1.62 | 1.00 | 10.00 |
| How involved in raising you was your biological father?: 1 = very involved ${ }^{2 \mathrm{a}}$ | 0.36 | 0.48 | 0.00 | 1.00 |
| Was there another man who was like a father to you growing up?: $1=$ yes $^{2 \mathrm{~b}}$ | 0.45 | 0.50 | 0.00 | 1.00 |
| Non-Hispanic White: 1 = Non-Hispanic White | 0.12 | 0.32 | 0.00 | 1.00 |
| Non-Hispanic African American: 1 = Non-Hispanic African American | 0.58 | 0.49 | 0.00 | 1.00 |
| Mexican American: 1 = Mexican American | 0.16 | 0.37 | 0.00 | 1.00 |
| Other Hispanic: 1 = Other Hispanic | 0.11 | 0.31 | 0.00 | 1.00 |
| Non-Hispanic Other: 1 = Non-Hispanic Other | 0.03 | 0.17 | 0.00 | 1.00 |
| Mother and child characteristics |  |  |  |  |
| Education: 1 = High school education or greater | 0.63 | 0.48 | 0.00 | 1.00 |
| Nativity: 1 = Native-born | 0.89 | 0.31 | 0.00 | 1.00 |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ | 0.33 | 0.47 | 0.00 | 1.00 |
| Child's age in months (at time of father's survey) | 62.86 | 3.01 | 58.03 | 77.43 |

Notes:
${ }^{1}$ Mother reported.
${ }^{2 \mathrm{a}, \mathrm{b}}$ Because these variables only appear in model 3 (Tables 5 and 6), the N for these variables is smaller: $2 \mathrm{a}=1,559$ and $2 \mathrm{~b}=1,561$

Table 3: Predicting the Impact of State-level Policies on the Relative Risk of Various Living Arrangements (e.g., Married, Cohabiting, and Staying Separate) at Year-1 ( $N=1,565$ )

|  | (1) |  | (2) |  | (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Married | Cohabiting | Married | Cohabiting | Married | Cohabiting |
| State-level Child Support Enforcement Variables |  |  |  |  |  |  |
| Child Support Enforcement collection rate | $\begin{gathered} 0.01 \\ (0.00)^{* *} \end{gathered}$ | $\begin{gathered} 0.32 \\ (0.24) \end{gathered}$ |  |  | $\begin{aligned} & 0.01 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.49 \\ (0.28) \end{gathered}$ |
| Paternity establishment rate | 3.60 | 0.46 |  |  | 7.01 | 0.86 |
|  | (0.20) | (0.42) |  |  | (0.05)* | (0.82) |
| State-level Welfare Reform Variables |  |  |  |  |  |  |
| Family cap: 1=state has a family cap | 0.38 | 0.73 |  |  | 0.53 | 0.87 |
|  | (0.01)* | (0.26) |  |  | (0.04)* | (0.39) |
| TANF lifetime time limit: 1-60-month time |  |  |  |  |  |  |
| limit | 1.99 | 1.10 |  |  | 1.45 | 0.93 |
|  | (0.04)* | (0.66) |  |  | (0.19) | (0.50) |
| Maximum TANF benefits (\$100s) | 0.97 | 1.05 |  |  | 0.87 | 0.99 |
|  | (0.41) | (0.36) |  |  | $(0.01)^{* *}$ | (0.76) |
| Father characteristics |  |  |  |  |  |  |
| Age |  |  | 1.02 | 1.00 | 1.02 | 1.00 |
|  |  |  | (0.11) | (0.78) | (0.11) | (0.81) |
| Education: 1 = High school education or |  |  |  |  |  |  |
| greater |  |  | 1.19 | 1.05 | 1.16 | 1.03 |
|  |  |  | (0.14) | (0.71) | (0.18) | (0.82) |
| Incarceration: $1=$ Ever incarcerated ${ }^{1}$ |  |  | 0.57 | 0.73 | 0.56 | 0.73 |
|  |  |  | (0.00)** | (0.09)+ | (0.00)** | (0.09)+ |
| Nativity: 1 = Native-born |  |  | 0.83 | 0.75 | 0.69 | 0.74 |
|  |  |  | (0.65) | (0.43) | (0.34) | (0.42) |
| Number of father's children (including focal child) |  |  |  |  |  |  |
|  |  |  | 1.08 | 1.02 | 1.08 | 1.02 |
|  |  |  | (0.14) | (0.57) | (0.15) | (0.56) |
| Non-Hispanic African American |  |  | $0.27$ | $0.56$ | $0.31$ | 0.58 |
|  |  |  | $(0.00)^{* *}$ | $(0.03)^{*}$ | $(0.00)^{* *}$ | (0.05)* |
| Mexican American |  |  | 1.02 | 1.14 | 0.78 | 1.06 |
|  |  |  | (0.96) | (0.65) | (0.44) | (0.83) |
| Other Hispanic |  |  | 0.65 | 0.77 | 0.72 | 0.78 |
|  |  |  | (0.09)+ | (0.23) | (0.23) | (0.42) |
| Non-Hispanic Other |  |  | $0.29$ | $0.37$ | $0.29$ | 0.38 |
|  |  |  | $(0.00)^{* *}$ | $(0.00)^{* *}$ | $(0.00)^{* *}$ | $(0.00)^{* *}$ |
| Mother and child characteristics |  |  |  |  |  |  |
| Mother's educ: 1 = High school educ or greater |  |  |  |  |  |  |
|  |  |  | 1.45 | 1.16 | 1.45 | 1.14 |
|  |  |  | (0.03)* | (0.27) | (0.04)* | (0.33) |
| Mother's nativity: 1 = Native-born |  |  | $0.46$ | $0.64$ | 0.42 | 0.62 |
|  |  |  | $(0.03)^{*}$ | $(0.07)^{+}$ | (0.03)* | (0.06)+ |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ |  |  |  |  |  |  |
|  |  |  | $\begin{gathered} 0.62 \\ (0.01)^{*} \end{gathered}$ | $\begin{aligned} & 0.69 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{aligned} & 0.61 \\ & (0.01)^{* *} \end{aligned}$ | $\begin{aligned} & 0.68 \\ & (0.00)^{* *} \end{aligned}$ |
| Child's age in months (at time of father's survey) |  |  |  |  |  |  |
|  |  |  | $\begin{gathered} 0.95 \\ (0.02)^{*} \end{gathered}$ | $\begin{aligned} & 0.95 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.95 \\ (0.04)^{*} \end{gathered}$ | $\begin{aligned} & 0.95 \\ & (0.00)^{* *} \end{aligned}$ |

[^9]${ }^{1}$ Mother reported.

Table 4: Predicting the Impact of State-level Policies on the Relative Risk of Various Living Arrangements (e.g., Married, Cohabiting, and Staying Separate) at Year-5 ( $N=1,565$ )

|  | (1) |  | (2) |  | (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Married | Cohabiting | Married | Cohabiting | Married | Cohabiting |
| State-level Child Support Enforcement Variables |  |  |  |  |  |  |
| Child Support Enforcement collection rate | $\begin{aligned} & 0.01 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.06 \\ (0.07)+ \end{gathered}$ |  |  | $\begin{aligned} & 0.05 \\ & (0.01)^{* *} \end{aligned}$ | $\begin{gathered} 0.32 \\ (0.22) \end{gathered}$ |
| Paternity establishment rate | 0.10 | 0.70 |  |  | 0.12 | 0.63 |
|  | (0.05)* | (0.77) |  |  | (0.03)* | (0.55) |
| State-level Welfare Reform Variables |  |  |  |  |  |  |
| Family cap: 1=state has a family cap | 0.70 | 0.73 |  |  | 0.77 | 0.77 |
|  | (0.09)* | (0.19) |  |  | (0.09)+ | (0.04)* |
| TANF lifetime time limit: $1=60$-month time |  |  |  |  |  |  |
| limit | 1.06 | 1.41 |  |  | 0.92 | 1.20 |
|  | (0.68) | (0.23) |  |  | (0.60) | (0.33) |
| Maximum TANF benefits (\$100s) | 1.11 | 1.03 |  |  | 1.06 | 0.98 |
|  | (0.00)** | (0.56) |  |  | (0.01)* | (0.43) |
| Father characteristics |  |  |  |  |  |  |
| Age |  |  | 1.00 | 1.00 | 0.99 | 1.00 |
|  |  |  | (0.63) | (0.99) | (0.38) | (0.92) |
| Education: 1 = High school education or greater |  |  | 1.28 | 1.00 | 1.28 | 0.99 |
|  |  |  | (0.06)+ | (0.99) | (0.06)+ | (0.96) |
| Incarceration: $1=$ Ever incarcerated ${ }^{1}$ |  |  | 0.43 | 0.57 | 0.42 | 0.59 |
|  |  |  | (0.00)** | (0.00)** | (0.00)** | (0.00)** |
| Nativity: 1 = Native-born |  |  |  |  | $0.49$ | 0.48 |
|  |  |  | $(0.03)^{*}$ | $(0.08)^{+}$ | $(0.01)^{*}$ | (0.05)+ |
| Number of father's children (including focal |  |  |  |  |  |  |
| child) |  |  | 1.18 | 1.11 | 1.19 | 1.11 |
|  |  |  | (0.00)** | (0.02)* | (0.00)** | (0.01)* |
| Non-Hispanic African American |  |  | 0.25 | 0.52 | 0.27 | 0.52 |
|  |  |  | (0.00)** | $(0.00)^{* *}$ | (0.00)** | $(0.00)^{* *}$ |
| Mexican American |  |  | 0.74 | 1.03 | 0.56 | 0.90 |
|  |  |  | (0.20) | (0.86) | (0.04)* | (0.58) |
| Other Hispanic |  |  | 0.51 | 0.84 | 0.49 | 0.78 |
|  |  |  | (0.02)* | (0.48) | (0.02)* | (0.24) |
| Non-Hispanic Other |  |  | $0.18$ | 0.34 | $0.17$ | 0.33 |
|  |  |  | (0.00)** | $(0.00)^{* *}$ | (0.00)** | $(0.00)^{* *}$ |
| Mother and child characteristics |  |  |  |  |  |  |
| Mother's educ: 1 = High school educ or greater |  |  | 1.47 | 1.10 | 1.44 | 1.08 |
|  |  |  | (0.02)* | (0.34) | (0.02)* | (0.42) |
| Mother's nativity: 1 = Native-born |  |  | $0.33$ | $0.34$ |  | 0.33 |
|  |  |  | $(0.00)^{* *}$ | $(0.00)^{* *}$ | $(0.00)^{* *}$ | $(0.00)^{* *}$ |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ |  |  | $\begin{gathered} 0.63 \\ (0.05)^{*} \end{gathered}$ | $\begin{aligned} & 0.75 \\ & (0.09)+ \end{aligned}$ | $\begin{gathered} 0.62 \\ (0.04)^{*} \end{gathered}$ | $\begin{gathered} 0.75 \\ (0.09)+ \end{gathered}$ |
| Child's age in months (at time of father's |  |  |  |  |  |  |
| survey) |  |  | $\begin{gathered} 1.01 \\ (0.59) \end{gathered}$ | $\begin{gathered} 0.97 \\ (0.09)+ \end{gathered}$ | $\begin{gathered} 1.00 \\ (0.95) \end{gathered}$ | $\begin{gathered} 0.96 \\ (0.04)^{*} \end{gathered}$ |

Notes: P-values in parentheses. $+p<.10 ;{ }^{*} p<.05 ;{ }^{* *} p<.01$
${ }^{1}$ Mother reported.

Table 5: Predicting the Impact of State-level Policies on the Relative Risk of Fathers' Material Support (e.g., Resident Father, Formal Support Agreement, Informal Support Agreement, No Support Agreement) at Year-1 ( $N=1,565$ )

|  | (1) |  |  | (2) |  |  | (3) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Resident Father | Formal Support | Informal Support | Resident Father | Formal Support | Informal Support | Resident Father | Formal Support | Informal Support |
| State-level Child Support Enforcement Variables |  |  |  |  |  |  |  |  |  |
| Child Support Enforcement collection rate | $\begin{gathered} 0.37 \\ (0.32) \end{gathered}$ | $\begin{aligned} & 52.51 \\ & (0.02)^{*} \end{aligned}$ | $\begin{gathered} 2.07 \\ (0.38) \end{gathered}$ |  |  |  | $\begin{gathered} 1.00 \\ (1.00) \end{gathered}$ | $\begin{gathered} 110.51 \\ (0.02)^{*} \end{gathered}$ | $\begin{gathered} 2.91 \\ (0.36) \end{gathered}$ |
| Paternity establishment rate | $\begin{gathered} 0.88 \\ (0.89) \end{gathered}$ | $\begin{gathered} 5.54 \\ (0.21) \end{gathered}$ | $\begin{gathered} 1.65 \\ (0.60) \end{gathered}$ |  |  |  | $\begin{gathered} 1.61 \\ (0.58) \end{gathered}$ | $\begin{gathered} 5.09 \\ (0.24) \end{gathered}$ | $\begin{gathered} 1.68 \\ (0.59) \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |
| Family cap: 1=state has a family cap | $\begin{aligned} & 0.62 \\ & (0.09)+ \end{aligned}$ | $\begin{gathered} 0.94 \\ (0.89) \end{gathered}$ | $\begin{gathered} 0.83 \\ (0.20) \end{gathered}$ |  |  |  | $\begin{gathered} 0.87 \\ (0.58) \end{gathered}$ | $\begin{gathered} 1.04 \\ (0.94) \end{gathered}$ | $\begin{gathered} 0.84 \\ (0.28) \end{gathered}$ |
| TANF lifetime time limit: 1=60-month time limit | $\begin{gathered} 1.47 \\ (0.11) \end{gathered}$ | $\begin{gathered} 0.90 \\ (0.78) \end{gathered}$ | $\begin{gathered} 1.25 \\ (0.44) \end{gathered}$ |  |  |  | $\begin{gathered} 1.05 \\ (0.87) \end{gathered}$ | $\begin{gathered} 0.79 \\ (0.63) \end{gathered}$ | $\begin{gathered} 1.21 \\ (0.60) \end{gathered}$ |
| Maximum TANF benefits (\$100s) | $\begin{gathered} 0.88 \\ (0.03)^{*} \end{gathered}$ | $\begin{aligned} & 0.77 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{aligned} & 0.84 \\ & (0.00)^{* *} \end{aligned}$ |  |  |  | $\begin{aligned} & 0.80 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{aligned} & 0.73 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{aligned} & 0.81 \\ & (0.00)^{* *} \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  | $\begin{gathered} 1.03 \\ (0.18) \end{gathered}$ | $\begin{gathered} 1.02 \\ (0.43) \end{gathered}$ | $\begin{gathered} 1.01 \\ (0.52) \end{gathered}$ | $\begin{gathered} 1.03 \\ (0.15) \end{gathered}$ | $\begin{gathered} 1.02 \\ (0.33) \end{gathered}$ | $\begin{gathered} 1.01 \\ (0.45) \end{gathered}$ |
| Education: 1 = High school education or greater |  |  |  | $\begin{aligned} & 1.51 \\ & (0.06)+ \end{aligned}$ | $\begin{gathered} 1.23 \\ (0.42) \end{gathered}$ | $\begin{aligned} & 1.52 \\ & (0.03)^{*} \end{aligned}$ | $\begin{gathered} 1.54 \\ (0.07)+ \end{gathered}$ | $\begin{gathered} 1.27 \\ (0.38) \end{gathered}$ | $\begin{aligned} & 1.55 \\ & (0.03)^{*} \end{aligned}$ |
| Incarceration: $1=$ Ever incarcerated $^{1}$ |  |  |  | $\begin{aligned} & 0.68 \\ & (0.08)+ \end{aligned}$ | $\begin{gathered} 0.94 \\ (0.85) \end{gathered}$ | $\begin{gathered} 0.76 \\ (0.29) \end{gathered}$ | $\begin{aligned} & 0.72 \\ & (0.09)+ \end{aligned}$ | $\begin{gathered} 1.07 \\ (0.80) \end{gathered}$ | $\begin{gathered} 0.81 \\ (0.40) \end{gathered}$ |
| Nativity: 1 = Native-born |  |  |  | $\begin{gathered} 1.54 \\ (0.29) \end{gathered}$ | $\begin{gathered} 1.88 \\ (0.21) \end{gathered}$ | $\begin{gathered} 2.34 \\ (0.05)^{*} \end{gathered}$ | $\begin{gathered} 1.28 \\ (0.56) \end{gathered}$ | $\begin{gathered} 1.49 \\ (0.47) \end{gathered}$ | $\begin{gathered} 1.96 \\ (0.12) \end{gathered}$ |
| Number of father's children (including focal child) |  |  |  | $\begin{gathered} 0.97 \\ (0.50) \end{gathered}$ | $\begin{gathered} 0.97 \\ (0.67) \end{gathered}$ | $\begin{gathered} 1.03 \\ (0.60) \end{gathered}$ | $\begin{gathered} 0.96 \\ (0.50) \end{gathered}$ | $\begin{gathered} 0.95 \\ (0.50) \end{gathered}$ | $\begin{gathered} 1.03 \\ (0.66) \end{gathered}$ |
| Non-Hispanic African American |  |  |  | $\begin{aligned} & 0.34 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.67 \\ (0.35) \end{gathered}$ | $\begin{gathered} 0.69 \\ (0.48) \end{gathered}$ | $\begin{aligned} & 0.40 \\ & (0.01)^{* *} \end{aligned}$ | $\begin{gathered} 0.75 \\ (0.51) \end{gathered}$ | $\begin{gathered} 0.78 \\ (0.65) \end{gathered}$ |
| Mexican American |  |  |  | $\begin{gathered} 0.93 \\ (0.84) \end{gathered}$ | $\begin{gathered} 0.58 \\ (0.49) \end{gathered}$ | $\begin{gathered} 0.76 \\ (0.51) \end{gathered}$ | $\begin{gathered} 0.88 \\ (0.74) \end{gathered}$ | $\begin{gathered} 0.69 \\ (0.51) \end{gathered}$ | $\begin{gathered} 0.72 \\ (0.49) \end{gathered}$ |
| Other Hispanic |  |  |  | $\begin{gathered} 0.97 \\ (0.93) \end{gathered}$ | $\begin{gathered} 1.20 \\ (0.79) \end{gathered}$ | $\begin{gathered} 1.04 \\ (0.94) \end{gathered}$ | $\begin{gathered} 1.02 \\ (0.97) \end{gathered}$ | $\begin{gathered} 1.12 \\ (0.87) \end{gathered}$ | $\begin{gathered} 0.99 \\ (0.98) \end{gathered}$ |
| Non-Hispanic Other |  |  |  | $\begin{gathered} 0.49 \\ (0.24) \end{gathered}$ | $\begin{gathered} 1.30 \\ (0.75) \end{gathered}$ | $\begin{gathered} 1.48 \\ (0.61) \end{gathered}$ | $\begin{gathered} 0.68 \\ (0.55) \end{gathered}$ | $\begin{gathered} 2.20 \\ (0.40) \end{gathered}$ | $\begin{gathered} 2.10 \\ (0.37) \end{gathered}$ |
| Mother and child characteristics |  |  |  |  |  |  |  |  |  |
| Mother's educ: 1 = High school educ or greater |  |  |  | $\begin{gathered} 1.09 \\ (0.66) \end{gathered}$ | $\begin{gathered} 1.12 \\ (0.68) \end{gathered}$ | $\begin{gathered} 0.93 \\ (0.73) \end{gathered}$ | $\begin{gathered} 1.08 \\ (0.71) \end{gathered}$ | $\begin{gathered} 1.17 \\ (0.56) \end{gathered}$ | $\begin{gathered} 0.93 \\ (0.75) \end{gathered}$ |
| Mother's nativity: 1 = Native-born |  |  |  | $\begin{gathered} 0.64 \\ (0.40) \end{gathered}$ | $\begin{gathered} 1.78 \\ (0.42) \end{gathered}$ | $\begin{gathered} 0.78 \\ (0.71) \end{gathered}$ | $\begin{gathered} 0.48 \\ (0.16) \end{gathered}$ | $\begin{gathered} 1.13 \\ (0.86) \end{gathered}$ | $\begin{gathered} 0.57 \\ (0.42) \end{gathered}$ |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ |  |  |  | $\begin{gathered} 0.60 \\ (0.05)^{*} \end{gathered}$ | $\begin{gathered} 0.91 \\ (0.72) \end{gathered}$ | $\begin{gathered} 1.08 \\ (0.78) \end{gathered}$ | $\begin{gathered} 0.61 \\ (0.05)+ \end{gathered}$ | $\begin{gathered} 0.96 \\ (0.87) \end{gathered}$ | $\begin{gathered} 1.11 \\ (0.73) \end{gathered}$ |
| Child's age in months (at time of father's survey) |  |  |  | $\begin{aligned} & 0.92 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.97 \\ (0.32) \\ \hline \end{gathered}$ | $\begin{gathered} 0.98 \\ (0.27) \end{gathered}$ | $\begin{aligned} & 0.91 \\ & (0.00)^{* *} \end{aligned}$ | $\begin{gathered} 0.94 \\ (0.11) \end{gathered}$ | $\begin{gathered} 0.96 \\ (0.15) \end{gathered}$ |

[^10]Table 6: Predicting the Impact of State-level Policies on Fathers' Frequency of Involvement at Year-1 ( $N=1,329$ )

| Variable | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
| State-level Child Support Enforcement Variables |  |  |  |
| Child Support Enforcement collection rate | -1.40 |  | -1.28 |
|  | (0.02)* |  | (0.04)* |
| Paternity establishment rate | 0.28 |  | 0.29 |
|  | (0.63) |  | (0.60) |
| State-level Welfare Reform Variables |  |  |  |
| Family cap: 1=state has a family cap | -0.37 |  | -0.37 |
|  | (0.02)* |  | (0.02)* |
| TANF lifetime time limit: 1=60-month time limit | 0.06 |  | 0.11 |
|  | (0.69) |  | (0.44) |
| Maximum TANF benefits (\$100s) | 0.01 |  | 0.02 |
|  | (0.72) |  | (0.19) |
| Father characteristics |  |  |  |
| Age |  | 0.00 | 0.00 |
|  |  | (0.72) | (0.59) |
| Education: 1 = High school education or greater |  | 0.08 | 0.06 |
|  |  | (0.40) | (0.46) |
| Incarceration: $1=$ Ever incarcerated ${ }^{1}$ |  | -0.27 | -0.27 |
|  |  | (0.02)* | (0.03)* |
| Nativity: 1 = Native-born |  | 0.30 | 0.27 |
|  |  | (0.10)+ | (0.12) |
| How involved in raising you was your biological father?: 1 = very involved |  | 0.23 | 0.23 |
|  |  | (0.01)** | (0.01)** |
| Was there another man who was like a father to you growing up?: $1=$ yes |  | 0.05 | 0.06 |
|  |  | (0.55) | (0.51) |
| Number of father's children (including focal child) |  | -0.05 | -0.05 |
|  |  | (0.14) | (0.18) |
| Non-Hispanic African American |  | -0.15 | -0.11 |
|  |  | (0.20) | (0.38) |
| Mexican American |  | 0.06 | -0.06 |
|  |  | (0.67) | (0.69) |
| Other Hispanic |  | -0.14 | -0.17 |
|  |  | (0.33) | (0.22) |
| Non-Hispanic Other |  | 0.06 | 0.02 |
|  |  | (0.83) | (0.93) |
| Mother and child characteristics |  |  |  |
| Mother's educ: 1 = High school educ or greater |  | 0.00 | 0.00 |
|  |  | (0.97) | (0.99) |
| Mother's nativity: 1 = Native-born |  | 0.04 | 0.05 |
|  |  | (0.82) | (0.80) |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ |  |  |  |
|  |  | $-0.06$ | $-0.06$ |
|  |  | (0.49) | (0.49) |
| Child's age in months (at time of father's survey) |  | -0.01 | -0.01 |
|  |  | (0.46) | (0.31) |
| Constant | 5.13 | 4.41 | 5.08 |
|  | (0.00)** | (0.00)** | (0.00)** |
| $\mathrm{R}^{2}$ | 0.01 | 0.02 | 0.03 |

[^11]${ }^{1}$ Mother reported.

Table 7: Predicting the Impact of State-level Policies on Fathers' Frequency of Involvement at Year-5 ( $N=1,311$ )

| Variable | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
| State-level Child Support Enforcement Variables |  |  |  |
| Child Support Enforcement collection rate | -1.05 |  | -1.13 |
|  | (0.02)* |  | (0.06)+ |
| Paternity establishment rate | -0.56 |  | -0.66 |
|  | (0.20) |  | (0.13) |
| State-level Welfare Reform Variables |  |  |  |
| Family cap: 1=state has a family cap | -0.17 |  | -0.12 |
|  | (0.04)* |  | (0.13) |
| TANF lifetime time limit: 1=60-month time limit | -0.17 |  | 0.00 |
|  | (0.01)** |  | (0.99) |
| Maximum TANF benefits (\$100s) | 0.02 |  | 0.02 |
|  | (0.31) |  | (0.41) |
| Father characteristics |  |  |  |
| Age |  | -0.01 | -0.01 |
|  |  | (0.06)* | (0.05)* |
| Education: 1 = High school education or greater |  | 0.03 | 0.03 |
|  |  | (0.73) | (0.70) |
| Incarceration: $1=$ Ever incarcerated ${ }^{1}$ |  | -0.29 | -0.28 |
|  |  | (0.00)** | (0.00)** |
| Nativity: 1 = Native-born |  | 0.31 | 0.29 |
|  |  | (0.04)* | (0.08)+ |
| How involved in raising you was your biological father?: 1 = very involved |  | 0.12 | 0.12 |
|  |  | (0.22) | (0.23) |
| Was there another man who was like a father to you growing up?: $1=$ yes |  | 0.21 | 0.21 |
|  |  | (0.01)** | (0.00)** |
| Number of father's children (including focal child) |  | 0.05 | 0.05 |
|  |  | (0.06)+ | (0.04)* |
| Non-Hispanic African American |  | -0.44 | -0.40 |
|  |  | (0.01)** | (0.01)* |
| Mexican American |  | -0.18 | -0.28 |
|  |  | (0.23) | (0.12) |
| Other Hispanic |  | -0.33 | -0.35 |
|  |  | (0.02)* | (0.02)* |
| Non-Hispanic Other |  | -0.27 | -0.28 |
|  |  | (0.59) | (0.56) |
| Mother and child characteristics |  |  |  |
| Mother's educ: 1 = High school educ or greater |  | -0.02 | -0.04 |
|  |  | (0.84) | (0.77) |
| Mother's nativity: 1 = Native-born |  | -0.13 | -0.14 |
|  |  | (0.55) | (0.50) |
| Mother received financial help or money from anyone other than father since child was born ${ }^{1}$ |  |  |  |
|  |  | $\begin{aligned} & -0.13 \\ & (0.12) \end{aligned}$ | $\begin{aligned} & -0.13 \\ & (0.13) \end{aligned}$ |
|  |  | -0.03 | (0.13) |
| Child's age in months (at time of father's survey) |  | (0.04)* | $(0.01)^{*}$ |
| Constant | 4.92 | 5.95 | 7.57 |
|  | (0.00)** | $(0.00)^{* *}$ | $(0.00)^{* *}$ |
| $\mathrm{R}^{2}$ | 0.01 | 0.03 | 0.04 |

[^12]${ }^{1}$ Mother reported.


[^0]:    ${ }^{1}$ Defined by the Office of Child Support Enforcement as children who are currently: (1) recipients of TANF, or (2) entitled to foster care maintenance payments.

[^1]:    ${ }^{2}$ Prior to welfare reform, states were required to pass-through the first $\$ 50$ per month of child support and disregard this amount from income calculations when figuring cash welfare benefits. Under welfare reform, however, states may elect to pass-through any portion of child support received on behalf of a welfare-receiving family and disregard it as income in determining the amount of the cash assistance grant. Although states have discretion to determine their own pass-through and disregard policy, states are required to pay the federal government half of any of the child support collected. Given this financial burden on states, most states opted to eliminate the pass-through and disregard policies (Lerman and Sorensen, 2003).

[^2]:    ${ }^{3}$ A family cap policy is a provision of welfare programs that limits the increase in benefits a recipient unit can receive after the birth of another child.

[^3]:    ${ }^{4}$ The frequency of involvement measures in the FFCW study are similar to measures in the Early Head Start Study's Fatherhood Component parental survey.

[^4]:    ${ }^{5}$ The child support enforcement collection rate and the paternity establishment rate data is published by the Office of Child Support Enforcement.
    ${ }^{6}$ In cases where it is known in which state the child support agreement was signed, this state is used instead of mother's state of residence.
    ${ }^{7}$ Paternity establishment may exceed 100 percent because hospitals and child support offices may double-count but are not required to eliminate overlap in reporting to the state child support agency and because paternity may be established for nonmarital children born in past years.

[^5]:    ${ }^{8}$ The welfare policies data was obtained from The Urban Institute’s Welfare Rules Database.
    ${ }^{9}$ In the 1-year analysis the maximum monthly TANF benefits are in 2002 inflation-adjusted dollars.

[^6]:    ${ }^{10}$ We estimated the regression results for fathers' engagement in year- 5 using five methods in Stata: standard OLS regression, OLS survey data commands, clustered robust standard errors, and two variations of multilevel models using XTREG with CLUSTER and the XTMIXED commands. There was not a substantive difference in the results produced by each of these methods.

[^7]:    ${ }^{11}$ The coefficient .01 in model 3 in Table 3 suggests that the odds are 99 percent lower for a 1 point increase, which is a 100 percentage point increase, in the child support enforcement variable.

[^8]:    ${ }^{12}$ Unreported models show that marriage and cohabitation increase fathers' frequency of involvement.

[^9]:    Notes: P-values in parentheses. $+p<.10 ;{ }^{*} p<.05 ;{ }^{* *} p<.01$

[^10]:    Notes: P-values in parentheses. ${ }^{+} p<.10 ;{ }^{*} p<.05 ;{ }^{* *} p<.01$
    ${ }^{1}$ Mother reported.

[^11]:    Notes: P-values in parentheses. $+p<.10 ;{ }^{*} p<.05 ;{ }^{* *} p<.01$

[^12]:    Notes: P-values in parentheses. $+p<.10 ;{ }^{*} p<.05 ;{ }^{* *} p<.01$

