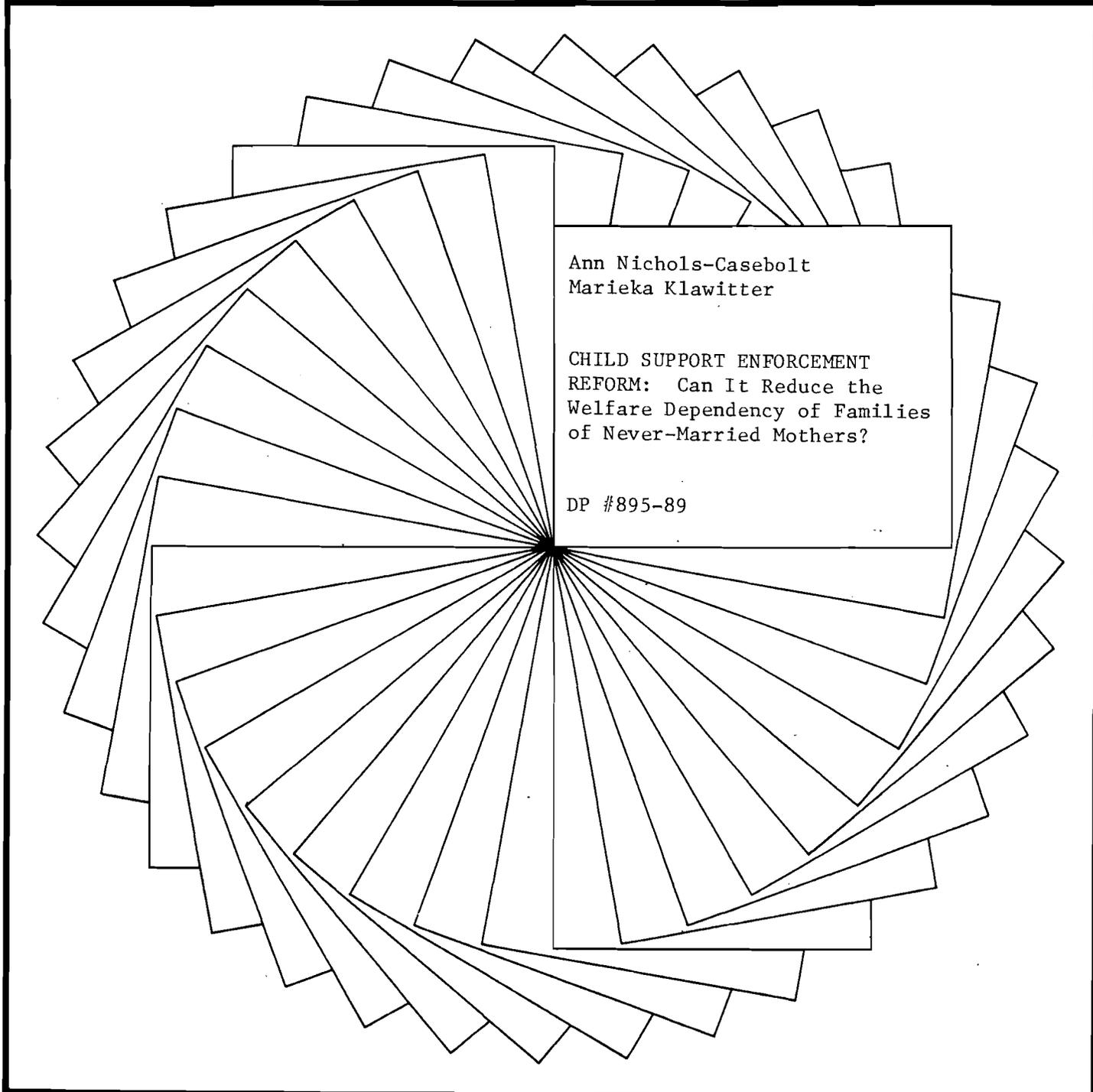


---

# IRP Discussion Papers

---



Ann Nichols-Casebolt  
Marieka Klawitter

CHILD SUPPORT ENFORCEMENT  
REFORM: Can It Reduce the  
Welfare Dependency of Families  
of Never-Married Mothers?

DP #895-89

Institute for Research on Poverty  
Discussion Paper No. 895-89

**Child Support Enforcement Reform:  
Can It Reduce the Welfare Dependency of Families  
of Never-Married Mothers?**

Ann Nichols-Casebolt  
School of Social Work  
Arizona State University  
Tempe, Arizona 85287

Marieka Klawitter  
Institute for Research on Poverty  
University of Wisconsin  
Madison, Wisconsin 53706

September 1989

This research was supported in part by the Wisconsin Department of Health and Social Services, the U.S. Department of Health and Human Services, the Ford Foundation, and the Institute for Research on Poverty, University of Wisconsin-Madison.

The Institute's Discussion Paper series is designed to describe, and to elicit comments on, work in progress. Its papers should be considered working drafts.

## Abstract

Among all groups of single-parent families, those created by a birth to an unmarried woman have the least likelihood of receiving child support and the greatest risk of becoming dependent on welfare. The child support enforcement programs have not pursued fathers of never-married mothers on the grounds that efforts to establish paternity and collect child support will not prove cost effective.

Data from Wisconsin suggest that the recent focus on improving the child support system is having some effect in increasing paternity adjudications and bringing a greater percentage of nonmarital children into the child support system. The Wisconsin data also indicate that child support reform--specifically the immediate income assignment--is improving child support payment performance. But the modest increases in payments to nonmarital children will have little effect on their welfare reciprocity. The fathers of these children lack the economic resources to aid their families much in the short term. However, cost effectiveness should not be the only criterion used in enforcing child support. It is important to send the message to all parents that they are expected to assume responsibility for the children they bear.

**Child Support Enforcement Reform:  
Can It Reduce the Welfare Dependency of Families  
of Never-Married Mothers?**

**INTRODUCTION**

Establishing and enforcing paternal child support obligations has become a major strategy in alleviating the welfare dependency of single mothers and their children. Both policymakers and researchers agree that the lack of financial support from the absent father forces a significant number of single mother families to rely on the public sector for support.

Among all groups of single-parent families, the ones created by a birth to an unmarried woman have the least likelihood of receiving child support, and, not surprisingly, these families are at the greatest risk of being welfare dependent. In 1985, less than 12 percent of the never-married mothers potentially eligible for child support received a child support payment, compared to approximately 54 percent of divorced mothers. In that same year, 22 percent of all single-mother families were headed by never-married women, but they comprised over 45 percent of the families on AFDC.<sup>1</sup>

These data suggest that current efforts to enforce child support in order to reduce welfare dependency will be successful only if they reach families of never-married mothers. Although previous research has suggested that attempts to establish and enforce child support obligations are less successful for never-married mothers than for ever-married mothers,<sup>2</sup> we know very little about the outcomes or potential of recent reforms for the population of never-married mothers.

This paper describes trends in policies toward children born outside of marriage, examines changes across time in one state's paternity adjudication rates for nonmarital children and their families, and assesses the effects of one recent child support enforcement strategy on this state's paternity caseload. This enforcement strategy, referred to as immediate income assignment, requires that the child support obligation be withheld from the income of the obligor immediately upon the issuance of the child support order. Immediate assignment is currently being implemented in several states, and under the Family Support Act of 1988 must be implemented in all states no later than 1994. It is assumed that immediate assignment will increase both the timeliness and size of child support payments and thereby reduce the reliance of single-parent families on the welfare system.

The paper looks first at policies and practices in the United States toward the nonmarital child. Because public policy has condoned, and often legalized, the notion that nonmarital children have less right to financial assistance from their fathers than children born within a marriage, this information is critical for understanding what must be done to obtain child support for this population. Of particular importance is the issue of paternity adjudication. Without a legally identified father, nonmarital children are not eligible for child support. Next we describe the various data sources used for examining paternity adjudication trends and for analyzing the effects of immediate income assignment on paternity cases. Then we present and discuss our results. Using both published data and court record data collected as part of the evaluation of the Wisconsin Child Support Reform Demonstration, we examine changes in paternity adjudication rates, child

support payment levels, and welfare reciprocity rates before and after the introduction of immediate income assignment in Wisconsin. In the final section we discuss the policy implications of our findings.

#### **NONMARITAL CHILDREN AND PUBLIC POLICY**

Most contemporary observers believe that policies designed to establish and enforce the child support obligation apply equally to all children. This is not the case. Unlike children born within a marriage, nonmarital children are not eligible for child support until their paternity has been established by law. And, historically, establishing paternity has been a significant obstacle for children born out of wedlock. In common law, "illegitimate" children were considered to have no father--they were viewed as the mother's children only. Although this view has gradually changed, until the United States Supreme Court intervened in a series of cases in 1968, many states denied the nonmarital child rights of paternal support, inheritance, custody, name, and claims under such programs as Worker's Compensation. On the basis of the Equal Protection Clause, the U.S. Supreme Court ruled in 1968 that nonmarital children are entitled to legal equality with marital children in most areas of the law.<sup>3</sup>

The determination of paternity establishes the legal basis for claiming a variety of rights for the nonmarital child, but it has been used almost exclusively to obtain financial support from the father. As early as 1922, with the passage of the Uniform Illegitimacy Act, it was established that paternity actions could be brought either by the mother or, if the child was likely to be a public charge, by the authority

charged with its support.<sup>4</sup> This right turned into a mandate in 1967 when the federal government enacted legislation requiring state welfare agencies to initiate proceedings to establish paternity for AFDC children who were born out of wedlock. In 1975 the federal government strengthened its role in this area through the passage of Title IV-D of the Social Security Act, which created the Child Support Enforcement program. The states are responsible for running this program, but they are reimbursed by the federal government for about 70 percent of the cost of establishing paternity, locating nonresident parents, and collecting child support. The 1975 legislation also required that program services be available to families not on welfare as well as those dependent on AFDC. The 1984 amendments to Title IV-D further reinforced federal commitment to child support enforcement by requiring states to extend statutes of limitations on paternity adjudications until the child reached the age of 18, to institute mandatory income assignment when payments were in arrears, to establish guidelines for child support awards, and to implement a variety of other provisions aimed at improving the effectiveness of the system.

Prior to national mandates, however, several states had already enacted legislation to improve the performance of their child support systems. Wisconsin, for example, has, since 1978, required that income assignments be used when support payments are delinquent, and in 1983 the state legislated a uniform standard that could be used in setting award levels. Several states have recently established timelines to expedite paternity determination, and some allow voluntary acknowledgment of paternity, in lieu of a court proceeding, as a legal basis for establishing child support orders. The improved accuracy of

blood tests has also prompted a few states to allow blood results to be used as a presumption of parentage.<sup>5</sup>

These efforts appear to have significantly increased child support recipiency among families of never-married mothers. From 1981 to 1985, paternity adjudications increased by over 40 percent,<sup>6</sup> and the percentage of families of never-married mothers who received a child support award increased by almost 30 percent.<sup>7</sup> Even with these impressive increases, however, less than 30 percent of nonmarital children have their paternity established,<sup>8</sup> and only 18.4 percent of all never-married mothers potentially eligible for child support received an award in 1985. This compares to almost 82 percent of divorced mothers with a child support award in 1985.<sup>9</sup>

One can only speculate on the reasons for the dismal performance of the child support system in serving families of never-married mothers. There is some indication that the child support enforcement system does not view these cases as cost effective. The burden of first having to establish paternity usually makes these cases more costly to process than divorce cases. In addition, fathers in paternity cases are generally assumed to be young, financially unstable, and unwilling to pay child support, and therefore likely to result in lower awards and increased enforcement costs. As a further deterrent to focusing on nonmarital cases, state IV-D programs receive federal incentive payments based on their total child support collections. This incentive plan effectively encourages states to target those cases they believe to have the greatest potential for payments.

It is unclear to what extent recent reforms have influenced attitudes and practices toward fathers who have not been married to the

mothers of their children. It is apparent, however, that success in collecting child support depends on bringing these cases into the system via the establishment of paternity, as well as the ability to implement adequate and enforceable child support awards.

#### **DATA**

The data for determining trends in paternity adjudication rates were obtained from three sources: (1) the number of nonmarital births compiled by the Wisconsin Division of Health; (2) the number of paternity adjudications reported by counties to the Wisconsin Office of Child Support; and (3) the number of never-married families on AFDC from the Wisconsin Department of Health and Social Services.

The data for the analysis of the effects of immediate income assignments were collected as part of an evaluation of the Wisconsin Child Support Reform Demonstration. The demonstration was authorized in July 1983, when the Wisconsin legislature enacted a budget bill that directed the Department of Health and Social Services (DHSS) to contract with ten of Wisconsin's 72 counties to withhold child support payments from the income of all new obligors. The budget bill also required DHSS to publish a child support standard based on a percentage of the nonresident parent's income for use by judges and family court commissioners in establishing child support award levels. The standard was published by DHSS in December 1983. It provides for a child support obligation equal to 17 percent of the obligor's gross income for one child, and 25, 29, 31, and 34 percent respectively for two, three, four, and five or more children.

The evaluation was designed to enable both a cross-county and a before/after comparison of the effects of immediate income assignment on child support orders, payments, and welfare reciprocity. In addition, it allowed a before and after comparison of the effects of the publication of the standard on award levels. Data were obtained from a random sample of family court divorce and paternity cases within the ten counties piloting automatic income assignment and ten similar (control) counties. The predemonstration sample included support-eligible cases that commenced with a first petition for paternity adjudication or court appearance at some point from July 1, 1980, through June 30, 1983. The demonstration sample extended from January 1, 1984, through September 30, 1986.<sup>10</sup> We used a sample of 1,765 paternity cases, representing over 5,733 paternities established in the twenty counties during the sampling period.

From the paternity court records we attempted to obtain basic demographic information--age, employment, income amounts and sources, age of child, and the amount of the child support order. Unfortunately, in a substantial number of the cases, data on employment and income were not furnished in the court record. In addition, dates and amounts of payments were obtained from the county office of the Clerk of Courts. (Wisconsin law mandates that child support payments be made through the Clerk's office.)

To determine welfare reciprocity rates, the paternity sample was matched with Wisconsin AFDC records. The AFDC data included the amount of the AFDC payment and the number of months of reciprocity (if any) for each case in the sample.

## RESULTS

### Trends in Paternity Adjudication

Current efforts to obtain more child support for the population of never-married mothers depend upon increasing the number of paternity adjudications. Enhancing award levels and collections will have no effect on these families unless their eligibility for child support is first established. We assumed that adjudications would increase as a result of the Wisconsin Child Support Demonstration for three reasons. First, the attention focused on collecting child support within the experimental programs would spill over to other problems related to child support. Second, if immediate income assignments improve collections within the experimental counties, these counties would have more resources available to devote to paternity adjudication. Finally, we assumed that when never-married mothers realize that if they obtain a paternity adjudication they are likely to receive a child support payment, they will be motivated to establish the paternity of their children. Thus, income assignments, which help assure payments, should increase the probability that individuals will pursue the establishment of paternity.

Unfortunately, our data do not provide us with an estimate of changes in the paternity adjudication rate across time. To accurately determine any increase in the adjudication rate we would need to compare the number of paternity adjudications in each year with the total number of nonmarital children for whom paternity establishment was needed.<sup>11</sup> Such a count is not available, so we compare instead the yearly number of adjudications to the numbers of nonmarital births. Although the

adjudications could be for babies born in previous years, the comparison does give us an indication of trends over time. These data are presented in Table 1 for our experimental and control counties. It should be noted that we have used the numbers of adjudications reported by each of the counties rather than the counts from our court record data. Because several of our court record cohorts do not cover an entire calendar year, using reported adjudications is a better measure for comparison with the yearly number of nonmarital births. However, counties were not required to report the number of adjudications prior to 1982.

Table 1 also includes data on the average monthly number of families of never-married mothers in the AFDC caseload. The majority of adjudications are initiated by the AFDC program. Thus, a change in the adjudication rate might be an artifact of a change in the number of nonmarital children in the AFDC caseload. For example, if the ratio of adjudications to nonmarital births increases over time while the ratio of paternity adjudications to the never-married AFDC population is relatively unchanged, we might conclude that the increase in paternity adjudication is a function of increased AFDC reciprocity rather than an increased focus on child support issues.

We can see from Table 1 that both the ratio of paternity adjudications to nonmarital births and the ratio of adjudications to the number of never-married AFDC families increased between 1982 and 1986. The paternity adjudication rate is therefore independent of the AFDC reciprocity rate.

Although it was expected that after the introduction of the demonstration in 1984, experimental counties would have higher ratios of

Table 1

Trends in Nonmarital Births, Nonmarital Children on AFDC,  
and Numbers of Paternity Adjudications  
across Years and by Experimental and Control Counties

Year	Number of Paternity Adjudications	Number of Nonmarital Births	Ratio of Paternity Adjudications to Nonmarital Births	Number of Never-Married AFDC Families	Ratio of Paternity Adjudications to Never-Married AFDC Families
<u>Control counties</u>					
1981	NA	1,510	NA	3,050	NA
1982	734	1,439	.51	3,295	.22
1983	889	1,455	.61	3,417	.26
1984	959	1,584	.61	3,648	.26
1985	1,058	1,754	.60	3,991	.27
1986	1,104	1,754	.63	4,142	.27
<u>Experimental counties</u>					
1981	NA	1,118	NA	2,332	NA
1982	594	1,247	.48	2,491	.24
1983	720	1,193	.60	2,560	.28
1984	746	1,291	.58	2,796	.27
1985	835	1,457	.57	3,075	.27
1986	1,004	1,519	.66	3,242	.31

Sources: Maternal and Child Health Statistics, Wisconsin Department of Health and Social Services, Division of Health, Madison, Wis. County Adjudication Reports, Wisconsin Department of Health and Social Services, Office of Child Support, Madison, Wis. AFDC Caseload Data, Wisconsin Department of Health and Social Services, Division of Economic Assistance, Madison, Wis.

paternity adjudication to nonmarital births than control counties, we do not see a substantial difference until 1986. Two explanations for the delayed effect are likely. First, to the detriment of paternity establishment, the experimental counties may well have initially focused their resources on the implementation of the immediate income assignment. Second, the number of nonmarital births increased substantially during both 1984 and 1985, and it is likely that the paternity adjudication system was unprepared to accommodate these additional cases.

The 1986 ratios do suggest, however, that Wisconsin's efforts to improve its child support system have resulted in an increase in establishing paternity for nonmarital children, so that they can obtain child support payments. But it is unclear to what extent the establishment of paternity will result in child support awards, increased payments, or a reduction in welfare dependency. If the increase in adjudications brings into the system fathers with less ability to pay child support, we may actually see a decrease in the percentage of paternity cases with child support awards. And among those with awards, average award levels and payments may be smaller, even with recent improvements in the child support system. Once paternity is adjudicated, however, a legal right has been established for awarding and collecting child support, at least until the child reaches the age of 18. If, as seems likely, the economic situation of the absent fathers improves in the future, we would expect the reform to significantly improve child support award levels and payments.

### Changes in Child Support Awards and Payments over Time

An examination of paternity case characteristics over time provides some indication that the ability of fathers to pay child support has not decreased as the number of paternity adjudications has increased. Table 2 presents case characteristics at the time of adjudication, by cohort and by experimental and control county. The cohorts correspond to yearly case-selection sample periods, with the first cohort extending from July 1, 1980, through June 30, 1981, and the sixth cohort extending from October 1, 1985, through September 30, 1986.<sup>12</sup> The sample includes cases potentially eligible for child support from the father during the sample period.<sup>13</sup> All the descriptive data has been weighted to reflect population estimates.<sup>14</sup>

The average age of the mothers, and to a lesser extent the average age of the fathers, has been increasing over time, and these somewhat older fathers seem to be doing better economically. Given the percentage of cases with missing information on parental employment status, it is difficult to draw firm conclusions, but the available data do suggest that, on average, fathers were more likely to be employed during the demonstration years. Average monthly income fluctuates considerably across years, but it appears that the fathers in the control counties have greater monthly income in the last year (the income figures are in constant 1986 dollars). It is unclear whether this increase is a function of the "aging" of the sample, an improved economic climate in the state, or merely a bias in the data. Also, as expected, the mothers' incomes and employment rates are significantly lower than those of the fathers.

**Table 2**  
**Characteristics of Wisconsin Paternity Cases**

Characteristics	Cohort	Predemonstration			Demonstration		
		1	2	3	4	5	6
		1980-81	1981-82	1982-83	1984	1984-85	1985-86
<u>Control counties</u>							
Number of sample cases		126	139	133	96	141	152
Age of father		24.8	26.6	26.3	26.3	24.9	26.4
Age of mother		21.6	22.7	22.6	23.4	22.7	24.1
Age of child		1.4	1.3	1.0	1.3	1.3	1.5
Employment status							
Father							
Employed		45%	43%	36%	50%	49%	55%
Unemployed		32	19	40	35	37	29
Missing info.		23	38	24	15	13	16
Mother							
Employed		1	8	11	4	6	11
Unemployed		29	40	53	63	75	63
Missing info.		71	52	35	33	20	26
Average monthly income							
Father		\$766	\$814	\$548	\$739	\$697	\$1161
% with missing info.		84%	74%	77%	59%	76%	87%
Mother		458	496	509	518	527	569
% with missing info.		88%	86%	95%	51%	76%	91%
<u>Experimental counties</u>							
Number of cases		109	151	153	80	136	140
Age of father		24.9	25.0	25.7	26.2	26.8	28.4
Age of mother		21.7	22.3	23.1	24.4	23.8	25.6
Age of child		1.1	1.3	1.4	1.6	1.5	1.6

Table 2, continued

Characteristics	Cohort	Predemonstration			Demonstration		
		1	2	3	4	5	6
		1980-81	1981-82	1982-83	1984	1984-85	1985-86
<u>Experimental counties, cont.</u>							
Employment status							
Father							
Employed		43%	38%	40%	53%	56%	63%
Unemployed		17	34	35	41	23	24
Missing info.		41	29	25	6	21	13
Mother							
Employed		5	5	9	16	8	11
Unemployed		55	66	69	73	57	65
Missing info.		41	29	22	12	36	24
Average Monthly Income							
Father							
\$		\$752	\$1154	\$530	\$517	\$790	\$782
% with missing info.		65%	55%	56%	21%	54%	53%
Mother							
\$		538	487	533	449	688	479
% with missing info.		72%	58%	54%	58%	89%	58%

Notes: Includes only those cases in which mother has legal custody during sample period. All descriptive data are weighted to reflect population estimates.

Table 3 presents information on child support orders and payments. No clear trend is evident across cohorts in the percentage of cases with a child support order, and in the experimental counties the average percentage of cases with awards actually decreased from the predemonstration to the demonstration period. It must be remembered, however, that during the demonstration period relatively more paternities were established. Thus, even with a decrease in the average percentage of paternity cases with orders, there may have been an increase in the percentage of all nonmarital children with awards. We can develop a crude estimate of the potential change in the percentage of awards for nonmarital children by using the data in Table 1. If we assume that the ratio of paternities to nonmarital births is a proxy for trends in the adjudication rate,<sup>15</sup> multiplying the percentage of cases with orders times the adjudication ratio will give us an approximation of the change in the percentage of nonmarital children with awards. For example, in the experimental counties, the average ratio of paternity adjudications to nonmarital births increased by 6.7 percentage points from the predemonstration (1982 and 1983) to the demonstration (1984-86) period (from 53.9 to 60.6), whereas during that same period the average percentage of paternity cases with awards in the experimental counties decreased from 84 to 83 percent.<sup>16</sup> Therefore, even though the percentage of paternity cases with awards decreased during the demonstration period, the percentage of all nonmarital children with orders has potentially increased from 45.5 percent in the predemonstration period (84 percent of the 53.9 percent with paternity adjudicated) to 50.3 percent in the demonstration period (83 percent of the 60.6 percent with paternity adjudicated).<sup>17</sup>

Table 3

## Child Support Orders and Payments for Wisconsin Paternity Cases

Cohort	Predemonstration			Demonstration		
	1	2	3	4	5	6
	1980-81	1982-83	1983-84	1984	1984-85	1985-86
<u>Control counties</u>						
Percentage of paternity cases <sup>a</sup> with child support order	81%	88%	59%	75%	77%	87%
Average monthly amount of order	\$113	\$115	\$113	\$104	\$102	\$107
Ratio of order to father's income <sup>b</sup>	.21	.18	.23	.16	.20	.14
Percentage of cases with immediate income assignment	24%	9%	14%	28%	24%	47%
Percentage of cases making some payment	89%	77%	67%	89%	86%	72%
Ratio of payments made to owed	.41	.39	.45	.46	.52	.45
Ratio of months paid to owed	.42	.41	.45	.43	.50	.45
<u>Experimental counties</u>						
Percentage of paternity cases <sup>a</sup> with child support order	89%	90%	72%	86%	82%	80%
Average monthly amount of order	\$92	\$105	\$85	\$98	\$113	\$115
Ratio of order to father's income <sup>b</sup>	.24	.19	.18	.16	.14	.15

Table 3, continued

Cohort	Predemonstration			Demonstration		
	1	2	3	4	5	6
	1980-81	1982-83	1983-84	1984	1984-85	1985-86
<u>Experimental counties, cont.</u>						
Percentage of cases with immediate income assignment	2%	7%	4%	42%	41%	62%
Percentage of cases making some payment	71%	76%	60%	85%	94%	79%
Ratio of payments made to owed	.36	.41	.35	.50	.58	.54
Ratio of months paid to owed	.30	.39	.35	.44	.53	.55

Notes: Includes only those cases in which mother has legal custody during sample period.

<sup>a</sup>Weighted to reflect population estimates.

<sup>b</sup>For fathers with reported income.

The increase in the rate of paternity adjudication is also a likely explanation of why there is no clear trend in the average order amount (in constant dollars) in the experimental counties, and why the average order actually decreased in the control counties during the demonstration cohorts (see Table 3). If, as was previously discussed, more cases in which the father has lower ability to pay have entered the system, we would expect lower orders. Interestingly, in the control counties, where the average income of the fathers is somewhat higher in the later years (Table 2), the average amount of the child support orders is lower. An explanation for this seeming inconsistency may be that in the control counties, a greater number of fathers with missing income information have minimal income. This assumption is confirmed somewhat by the relatively comparable ratio of orders to income in the demonstration years between the groups (Table 3). The ratio of orders to income on those cases with available income information also suggests that the publication of the percentage-of-income standard in 1983 may be having a negative effect on the order amount. Prior to the publication, the average award was above the 17 percent stipulated for one child, whereas, postpublication, the order was more likely to be under 17 percent.

The most obvious trend evident in Table 3 is the increase in immediate income assignments and the indicators of child support payments in the experimental counties during the demonstration period. There was considerable growth in the percentage of cases making some payment, in the ratio of child support payments made to payments owed, and in the ratio of months paid to owed after the introduction of immediate income assignment. In addition, the experimental counties

appear to do better on each of these measures than the control counties during the demonstration period.

Use of mandatory income assignment is far from universal in the experimental counties. Previous research on the Wisconsin reform suggests that the lack of assignments is partly due to the payer not having assignable income and partly to the unwillingness of judges to use assignments in all cases.<sup>18</sup>

Two points of information will clarify the numbers of income assignments in the predemonstration period and the rise in assignments in the last cohort for the control counties. First, prior to the implementation of the experiment, individuals could voluntarily agree to an immediate income assignment. One large control county, in particular, encouraged fathers to use this type of "easy payment plan," thus accounting for the higher rates of income assignments in the control counties during the predemonstration period. Second, in anticipation of statewide implementation of immediate income assignment by January 1987, the Wisconsin legislature permitted additional counties to begin applying immediate assignments in 1986. Several of the control counties began using assignments in that year. There is one apparent anomaly in the increased use of immediate assignments by control counties just prior to mandatory implementation in 1987. Between the fifth and sixth cohorts, there was a 23 percentage point increase in the use of immediate income assignments in the control counties, yet, during that same period, the ratio of payments made to owed dropped from .52 to .45. This appears to suggest that the increased use of income assignments has a negative effect on payments. However, information gathered in the first few months during which income assignments were

used in the experimental counties suggests that a decrease in payment performance for counties beginning to use immediate assignment would likely be a result of implementation lag.

#### Determinants of Child Support Payment Performance

These data seem to indicate that automatic income assignment does have a significant effect on the payment of child support in paternity cases. However, the descriptive data do not give us a clear picture of how much of the effect is attributable to the use of assignments and how much might be attributable to county or case differences. To make this assessment, regression analysis was utilized. The sample includes only those cases with a child support order during the sample period, and the dependent variable is either the ratio of child support paid to child support owed or the months of child support paid to the months owed. The first dependent variable measures the amount of payment and the second measures the consistency of those payments. These measures are used because changes in either will potentially affect the welfare dependency of the mothers and children. (For further discussion of this point, see section on effects on welfare dependency, below.) A tobit model was used because of the relatively large number of cases with zero dollars and months paid.<sup>19</sup>

In the first set of regressions (Table 4) the effect of the use of immediate income assignment is assessed by assigning those cases with assignments a 1 and those without assignments a 0. Other independent variables include the cohort in which the case entered the sample (to control for potential changes over time); the total number of months that child support payments were owed (to control for the effects of

Table 4

Tobit Analysis of Effects of Immediate Income Assignment  
on Child Support Payment Measures for Paternity Caseload

Independent Variables	Dollars Paid/ Dollars Owed		Months Paid/ Months Owed	
	Coef.	S.E.	Coef.	S.E.
Income assignment	18.67***	4.92	18.99***	4.31
Cohort 2	- .52	6.68	- 4.26	5.76
Cohort 3	- 8.98	8.24	-12.82	6.84
Cohort 4	7.77	6.74	4.39	6.21
Cohort 5	12.41	6.91	6.83	6.00
Cohort 6	-10.41	8.69	-15.01*	7.18
Months CS owed	- .44	.29	- .86***	.23
Father's empl. status				
Employed	21.8***	4.25	20.94***	3.65
Missing info.	3.34	5.12	5.91	4.42
Father's age				
20-29	1.26	4.89	3.41	4.36
30-39	2.64	6.05	2.76	5.35
40+	14.05	8.01	11.76	6.79
Missing info.	19.57	12.42	18.60	10.65
County				
Calumet	29.06**	11.41	24.84**	9.71
Clark	29.49**	10.38	15.15	10.17
Dane	8.10	6.77	8.46	5.67
Dodge	2.21	8.89	3.15	7.57
Dunn	- 8.89	10.74	-14.05	9.82
Green	- 5.55	9.10	1.85	7.10
Jefferson	12.00	9.42	12.70	8.11
Juneau	8.65	10.93	5.92	9.05
Kewaunee	2.87	13.10	2.34	11.97
Marathon	25.35**	8.67	14.90*	7.76
Monroe	12.10	9.67	- 4.44	9.51
Oneida	- 4.33	8.74	- 7.49	7.81
Ozaukee	3.21	8.13	- .37	7.20
Price	15.89	11.29	9.91	10.05
Racine	.17	7.33	6.90	5.86
Richland	-25.88**	10.40	-25.68**	8.83
Sheboygan	12.87	7.67	9.92	6.67
St. Croix	7.68	9.07	- .06	8.16
Winnebago	- 3.41	6.61	- 5.84	5.93

Table 4, continued

Independent Variables	<u>Dollars Paid/ Dollars Owed</u>		<u>Months Paid/ Months Owed</u>	
	Coef.	S.E.	Coef.	S.E.
Constant	25.91*	10.96	34.65***	9.06
Sigma	51.27***	1.56	44.86***	1.27
Mean of dep. var.	45.32		42.74	
N = 1191				
Log Likelihood	-4589.0		-4722.7	

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

erosion in payment over time); the father's employment status and age at the time of the initial court order (our best available proxies for the father's ability to pay child support); and the county from which the case was selected (to control for county differences). The results indicate that an immediate income assignment increases both the relative amount of child support paid and the consistency of the payment. The tobit coefficients cannot be directly interpreted as percentages but they can be used to calculate the expected change in the observed dependent variable.<sup>20</sup> From the calculated percentages we find that, all else being equal, the use of an immediate income assignment is expected to raise the average ratio of payments made to owed by 21.2 percentage points and the months paid to owed by 17.8 percentage points.

One cannot assume from these results, however, that if all paternity cases with child support orders were given an immediate income assignment the average payment ratios would increase by this amount. If there are unmeasured characteristics of the case and/or payer that increase the likelihood of an income assignment being ordered and are correlated with payment performance, these results will overestimate the effects of income assignments. To control for this potential bias, the income assignment variable was replaced by an experimental county variable. Cases were given a 1 if they were in an experimental county during the demonstration period and a 0 if not. This variable measures the average effect on payment performance of being in an experimental county during the demonstration years, regardless of each individual case's likelihood of having an immediate assignment. Table 5 presents the results of this analysis.

Table 5

Tobit Analysis of Effects of Experimental County Status  
on Child Support Payment Measures

Independent Variables	Dollars Paid/ Dollars Owed		Months Paid/ Months Owed	
	Coef.	S.E.	Coef.	S.E.
Experimental county	12.83*	6.45	12.98*	5.65
Cohort 2	.40	6.73	- 3.34	5.81
Cohort 3	- 7.93	8.28	-11.62	6.91
Cohort 4	5.20	7.43	2.19	6.72
Cohort 5	11.19	7.53	5.83	6.44
Cohort 6	- 7.10	8.92	-11.33	7.43
Months CS owed	- .37	.29	-.79***	.23
Father's empl. status				
Employed	26.34***	4.10	25.52***	3.53
Missing info.	3.93	5.17	6.78	4.47
Father's age				
20-29	1.17	4.93	3.39	4.45
30-39	2.98	6.08	3.23	5.43
40+	13.00	7.92	11.10	6.83
Missing info.	18.31	12.61	17.85	10.94
County				
Calumet	29.89**	11.49	25.62**	9.77
Clark	27.78**	10.62	13.88	10.28
Dane	2.75	7.54	2.98	6.35
Dodge	1.95	8.91	2.83	7.69
Dunn	-12.58	11.41	-18.28	10.48
Green	- 5.02	9.22	2.44	7.25
Jefferson	12.17	9.37	12.80	8.09
Juneau	12.50	10.89	9.73	9.10
Kewaunee	1.64	13.91	.83	13.10
Marathon	25.08**	8.58	14.48	7.70
Monroe	13.37	10.37	- 3.47	9.96
Oneida	- 8.76	9.27	-12.11	8.23
Ozaukee	- .86	8.57	- 4.51	7.58
Price	14.94	11.42	8.80	10.24
Racine	3.37	7.28	9.99	5.87
Richland	-28.44**	10.82	-28.38**	9.20
Sheboygan	10.02	8.25	7.08	7.11
St. Croix	5.21	9.13	- 2.86	8.26
Winnebago	- 6.83	7.39	- 9.33	6.56

Table 5, continued

Independent Variables	<u>Dollars Paid/ Dollars Owed</u>		<u>Months Paid/ Months Owed</u>	
	Coef.	S.E.	Coef.	S.E.
Constant	24.55*	11.11	32.96***	9.21
Sigma	51.58***	1.58	45.28***	1.28
Mean of dep. var.	45.32		42.74	
N = 1191				
Log likelihood	-4595.5		-4731.7	

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

We can see that being in an experimental county increases both dependent variables. These coefficients, however, are neither as large nor as statistically significant as the income assignment coefficient presented in Table 4. Again, estimating the percentage change from the tobit coefficients indicates that being in an experimental county increases the ratio of dollars paid to owed by 14.3 percentage points and the months paid to owed by 15.5 percentage points. It must be remembered, however, that some of the control counties also increased their use of immediate income assignments during the later years. Thus the experimental county coefficients are likely to be an underestimate of the effects of the implementation of income assignments. Therefore, the true effect of immediate income assignments on payment performance in paternity cases probably lies somewhere between the two estimates of 21 and 14 percent for dollars paid to owed, and 18 and 15 percent for months paid to owed. That is, the use of immediate income assignment raises the average of payments paid to owed from .45 to between .59 and .66, and months paid to owed from .43 to between .58 and .61.

In both sets of equations, these effects are estimated after controlling for a variety of other variables. An examination of the other coefficients indicates that fathers who are employed have significantly higher payment ratios. In fact, employment has a greater effect on payment performance than the use of immediate income assignments. Given that in our sample of paternity cases less than 50 percent were employed, it is not surprising that average payment performance is relatively poor.

### Effects on Welfare Dependency

The major impetus for public policy intervention within the private child support system is to reduce the welfare dependency of single-mother families. Although our data suggest that income assignments in Wisconsin have increased the payment of child support and the consistency of payments for those who have had the paternity of their children established, we do not know if this translates into decreased welfare dependency for these families. To assess the effects of immediate income assignments on welfare dependency, each paternity case with a child support order was matched, using social security numbers, to Wisconsin AFDC records.<sup>21</sup> With the AFDC record match we were able to determine the number of months of reciprocity (if any) for each case in the sample and the amount of the AFDC payment.

Table 6 presents descriptive data on trends in AFDC reciprocity for our sample of paternity cases with orders. The percentage of cases on AFDC at the time of the initial petition to establish paternity, and the percentage on AFDC after the receipt of a child support award do not show any clear trends over time. The data do indicate that, on average, between 75 and 80 percent of all paternity cases with child support orders are AFDC recipients when the process of paternity adjudication is started. This suggests that the welfare system is instrumental in the establishment of paternity for nonmarital children. The noticeable exception to these high percentages is during cohort 1, and to some extent during cohort 2. Unfortunately, our data do not provide us with any explanation for the lower percentages in these cohorts. In addition, it is clear from these data that being on AFDC when

Table 6

AFDC Reciprocity among Wisconsin Paternity Cases  
with Child Support Orders

Cohort	<u>Predemonstration</u>			<u>Demonstration</u>		
	1	2	3	4	5	6
<u>Control counties</u>						
Number of cases with orders	80	112	73	65	108	118
Percentage on AFDC at time of petition to establish paternity	53%	62%	79%	88%	78%	76%
Percentage with immediate income assignment						
Cases on AFDC at petition	16%	13%	13%	31%	21%	50%
Cases not on AFDC at petition	31%	1%	23%	14%	32%	38%
Percentage ever on AFDC after child support award	86%	78%	73%	87%	88%	82%
Ratio of months on AFDC to months owed child support	.66	.64	.70	.64	.71	.77
Average net monthly AFDC benefit	\$287	\$318	\$328	\$321	\$362	\$410
<u>Experimental counties</u>						
Number of cases with orders	71	126	116	69	104	97
Percentage on AFDC at time of petition to establish paternity	57%	72%	80%	78%	70%	72%
Percentage with immediate income assignment						
Cases on AFDC at petition	2%	8%	2%	46%	45%	63%
Cases not on AFDC at petition	0%	1%	12%	25%	33%	61%

Table 6, continued

Cohort	<u>Predemonstration</u>			<u>Demonstration</u>		
	1	2	3	4	5	6
Percentage ever on AFDC after child support award	61%	87%	86%	90%	86%	80%
Ratio of months on AFDC to months owed child support	.44	.77	.77	.71	.74	.72
Average net monthly AFDC benefit	\$218	\$372	\$354	\$358	\$355	\$333

Note: Sample sizes vary because of missing data on social security numbers or AFDC benefit amounts.

petitioning for a paternity adjudication increases the likelihood that the case will receive an immediate income assignment if it is in an experimental county during the demonstration period. This implies that the welfare system may not only be instrumental in the adjudication of paternity, but also in assuring that the income assignment reform is implemented for individuals receiving welfare.

In most instances the percentage of cases ever on AFDC after a child support award has been established exceeds the percentage on at the time of the petition for adjudication. Obviously the greater length of time increases the likelihood of reciprocity. When the percentage is lower, for example in the control counties during cohort 3, it indicates that some of the cases which were on AFDC at the time they petitioned for an adjudication exited before they received child support orders. While there is not a clear trend in the percentage ever on AFDC after the receipt of an award, the data do indicate that (excluding cohort 1) mothers were less likely to be dependent on AFDC in the experimental counties after the demonstration started. This may be an indication that the income assignment reform, and its concomitant increase in child support payments, is reducing the need for AFDC.

More accurate measures of AFDC dependency, however, are the ratio of months on AFDC to months eligible for a child support payment (i.e., after an award), and the average net monthly AFDC benefit received during the months the case was eligible for a child support payment. The first measure captures the changes in the percentage of cases with awards that are ever on AFDC as well as changes in the average number of months on AFDC. The second measure is an average of the monthly AFDC benefit minus any child support received that month. Cases not on AFDC

in a given month are assigned a \$0 net benefit. From these two measures we can determine if, on average, nonmarital children with child support orders in our sample are spending proportionately more or less time on AFDC, and if, on average, more or less dollars are being expended each month on benefits to these children and their families.

Although it is anticipated that assignments will lead to reductions in AFDC benefits and months receiving benefits during the demonstration period, this may not be the case. If, as in Table 3 may indicate, the average award amount decreases during the demonstration period, an increase in the percentage of child support paid may not result in an increase in the average dollars of child support received, and thus the net AFDC benefit will not decrease. Furthermore, an increase in consistency of the child support payment may not decrease the number of months an individual receives AFDC. For example, if the average gross AFDC benefit is \$100 per month, the average child support payment is \$50 a month, and the ratio of months paid to owed is 100 percent, the case will continue to receive AFDC each month.

From the descriptive data in Table 6, it appears that in the control counties the average paternity case spends more time on AFDC and receives more in net benefits during the demonstration period than in the predemonstration period. However, in the experimental counties (if we exclude cohort 1) both time on AFDC and average monthly benefits decreased somewhat after the demonstration began. The income assignment may, therefore, be having an effect on welfare dependency.

We used regression analysis to determine if income assignments, rather than other factors, are influencing our measures of welfare dependency. Tobit estimation was again used to take into account the

percentage of cases that receive no AFDC. The dependent variable is either the ratio of months on AFDC to months eligible for a child support payment, or the average net monthly AFDC benefit during the months eligible for a child support payment.<sup>22</sup> As in the previous regressions, separate models were run using experimental county and income assignment as the independent variables of interest. Also included in the model are variables to control for case and county characteristics that may affect either AFDC reciprocity or child support payment. These variables are the cohort, the number of months child support payments are owed, the county, the father's and the mother's employment status at the time of the initial court order, the age of the child,<sup>23</sup> and the age of the mother.<sup>24</sup> To control for the possible confounding effects of changes in the amount of the child support award over time, and the strong correlation between being an AFDC recipient at the time of the paternity petition and having an income assignment, the order amount and whether or not a case was on AFDC at the time of petition were also included as independent variables.

Table 7 presents the coefficients and standard errors on the experimental county and income assignment variables. (An example of the full regression is included in the Appendix.) The only significant coefficient is the effect of living in an experimental county on the percentage of time on AFDC. Interestingly, the coefficient is positive, which suggests that being in an experimental county during the demonstration period increases, rather than decreases, the percentage of time on AFDC. The size and strength of this coefficient makes our result suspect. It is likely that this model is not adequately controlling for the fact that being on AFDC at the time of the petition

Table 7

Effects of Living in Experimental County and Having  
 Immediate Income Assignment on AFDC Dependency Measures,  
 for All Cases with Child Support Orders

Independent Variables N = 1,191	Percentage of Sample Time on AFDC		Average Monthly AFDC Payment	
	Coef.	S.E.	Coef.	S.E.
Experimental county	20.77*	10.25	- 8.65	37.18
Income assignment	4.04	7.08	- 1.28	25.80

increases the likelihood that a case will be given an income assignment--particularly in the experimental counties. The data presented in Table 6 suggest that not only does having an income assignment affect AFDC reciprocity, but that AFDC recipients are more likely than others to have an income assignment. Unfortunately, assessing the effect of income assignments on our measures of AFDC dependency, net of the effect of AFDC on income assignment, is beyond the scope of this paper. We can, however, examine the effects of income assignments for all cases on AFDC at the time they petition for a paternity adjudication. These results are presented in Table 8.

Although the coefficient for experimental county is still positive, it and all of the other coefficients are not statistically significant. Evidently neither being in an experimental county nor having an income assignment has any effect on our measures of the welfare dependency of individuals who were on AFDC at the time of their petition for a paternity judgment.

## CONCLUSIONS

Our conclusions paint a relatively pessimistic picture about the ability of current reforms in the enforcement of the child support obligation to reduce welfare dependency among the paternity caseload. Although our analyses confirm that a reform such as automatic income assignment can increase child support payments for this group, the results indicate that the average percentage of child support paid is still only two-thirds of what is owed. And given the fact that the average child support award for our sample was less than \$115 per month,

Table 8

Effects of Living in Experimental County and Having  
 Immediate Income Assignment on AFDC Dependency Measures,  
 for Cases on AFDC at Petition Date

Independent Variables N=806	Percentage of Sample Time on AFDC		Average Monthly AFDC Payment	
	Coef.	S.E.	Coef.	S.E.
Experimental county	7.01	10.23	-50.24	41.16
Income assignment	-.69	7.17	-11.59	28.31

it is not surprising that there were no significant effects of income assignment on our measures of welfare dependency.

On the other hand, our data suggest that we are having some success in increasing paternity adjudication and bringing a greater percentage of nonmarital children into the child support system. Thus, while income assignments are related to rather modest increases in payment levels, proportionately more nonmarital children are receiving those payments. And although our data do not allow us to measure changes in welfare dependency among all nonmarital children, it is likely that a proportionately greater number are less dependent upon the welfare system because they receive some child support.

These results support the position that we must focus our attention on adjudicating paternity as well as enforcing child support obligations for this population. However, if the current paternity caseload is at all representative of nonmarital children who have not had paternity established, expecting the child support system to solve the problem of welfare dependency and poverty among families of never-married mothers is unrealistic. Because the fathers of these children lack economic resources, it is unlikely that they will pay sufficient amounts of child support to adequately support their children, at least in the short term.

These findings argue for additional strategies to improve the economic well-being of nonmarital children and their mothers. Unfortunately, they may also reinforce the attitude of many in the child support system that directing attention to the nonmarital child is not cost effective. What is often forgotten, however, is that enforcing the child support obligation is more than a mechanism for obtaining adequate

financial support for children and reducing welfare caseloads. It is a message to parents that, as a society, we expect both parents to assume responsibility for their children. To allow a father to abrogate that responsibility because his child was born outside of a marriage is not only inequitable, it is poor public policy.

Appendix Table A.1

Tobit Regression of Effects of Living in Experimental County  
on AFDC Dependency Measures

Independent Variables	Percentage of Sample Time on AFDC		Average Monthly AFDC Payment	
	Coef.	S.E.	Coef.	S.E.
Experimental county	20.77	10.25	- 8.65	37.18
Cohort 2	17.88	10.40	16.16	38.85
Cohort 3	11.13	13.46	-72.74	49.22
Cohort 4	- 4.75	11.23	42.93	42.37
Cohort 5	12.29	11.25	36.03	41.67
Cohort 6	15.56	13.72	-10.15	49.23
Months CS owed	- 1.04*	.45	- 5.99***	1.62
CS order amount	- .15***	.04	- .38**	.12
On AFDC at time of petition to establish paternity	113.55***	6.06	346.89***	19.70
Father's employment status				
Employed	-.55	6.56	-55.82*	22.64
Missing info.	- 1.07	8.35	-46.70	30.24
Mother's employment status				
Employed	-16.90**	6.30	-21.63	21.96
Missing info.	-14.33	13.13	-34.54	46.13
Mother's age				
20-29	- 2.27	5.77	5.89	21.73
30-39	2.63	11.06	103.54***	28.57
40+	44.01	32.57	117.03	137.00
Missing info.	-53.75***	9.16	-198.64***	36.90
Age of child	- 4.53**	1.54	- 16.50**	5.59
County				
Calumet	11.72	12.83	-50.84	51.05
Clark	-11.23	18.29	-64.05	66.65
Dane	2.24	12.02	-17.07	44.01
Dodge	- .16	13.10	-32.06	48.87
Dunn	-25.79	17.67	-42.70	68.26
Green	9.61	14.53	-20.22	52.72
Jefferson	-16.44	13.52	-88.91	50.88

Appendix Table A.1, continued

Independent Variables	Percentage of Sample Time on AFDC		Average Monthly AFDC Payment	
	Coef.	S.E.	Coef.	S.E.
County, cont.				
Juneau	-16.62	18.22	-76.37	62.59
Kewaunee	-35.69	21.70	-91.44	68.21
Marathon	7.24	11.87	-59.26	46.77
Monroe	-13.50	15.29	-73.48	60.10
Oneida	-19.99	18.28	-23.64	56.69
Ozaukee	-14.19	12.79	-65.42	49.91
Price	25.40	18.44	-82.54	85.61
Racine	20.53*	10.83	36.00	35.15
Richland	- 5.54	17.05	18.78	54.48
Sheboygan	- 1.87	12.84	-57.55	46.48
St. Croix	- 5.92	17.12	11.74	48.01
Winnebago	-10.52	13.26	-32.67	42.63
Constant	43.35**	16.71	268.34***	61.22
Sigma	70.02***	2.93	251.02***	3.66
Mean of Dep. Var.	64.52		289.27	
N = 1191				
Log Likelihood	-2888.7		-6685.0	

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

## Notes

<sup>1</sup>U.S. Bureau of the Census, Statistical Abstract the United States, 1988, 108th ed. (Washington, D.C.: U.S. Government Printing Office, 1988).

<sup>2</sup>Philip K. Robins, "Child Support Enforcement as a Means of Reducing Welfare Dependency and Poverty," Institute for Research on Poverty Discussion Paper No. 758-84, University of Wisconsin-Madison, 1984.

<sup>3</sup>Harry D. Krause, Child Support in America: The Legal Perspective (Charlottesville, Va.: The Michie Company, 1981).

<sup>4</sup>Marygold Melli, Child Support: A Survey of the Statutes, Institute for Research on Poverty Special Report No. 33, University of Wisconsin-Madison, 1984.

<sup>5</sup>Laura L. Loyacono, OCSE News, 12 (1988, no. 3): 1, 4-5.

<sup>6</sup>U.S. Department of Health and Human Services, Office of Child Support Enforcement, Child Support Enforcement, OCSE Tenth Annual Report to Congress (Washington, D.C.: U.S. Government Printing Office, 1985).

<sup>7</sup>U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 124. Child Support and Alimony: 1981 (Washington, D.C.: U.S. Government Printing Office, 1983). U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 154, Child Support and Alimony: 1985 (Washington, D.C.: U.S. Government Printing Office, 1989).

<sup>8</sup>Sandra K. Danziger and Ann Nichols-Casebolt, "Child Support for Children Born Outside of Marriage: An Analysis of Paternity Cases."

Paper presented at the Association for Public Policy Analysis and Management Eighth Annual Research Conference, Austin, Texas, October 1986.

<sup>9</sup>U.S. Bureau of the Census, Child Support and Alimony: 1985.

<sup>10</sup>Data from the baseline sample were followed until June 30, 1984. Thus, each case has a minimum of 12 months of data, and a maximum of 36 months. The demonstration cases were followed until January 31, 1987, again giving us a minimum of 12 months and a maximum of 36 months of data.

<sup>11</sup>Paternity establishment is only needed for those children who are not adopted or whose parents do not marry. Although we refer throughout this paper to "never-married" mothers as requiring a paternity adjudication, married mothers may also require an adjudication if the person they marry is not the father of their children and does not choose to adopt them.

<sup>12</sup>Cohort 1 contains a sample of all cases that entered the court system from July 1, 1980, through June 30, 1981. The time frame for the other cohorts is as follows: Cohort 2, July 1, 1981, through June 30, 1982; Cohort 3, July 1, 1982, through June 30, 1983; Cohort 4, January 1, 1984, through October 1, 1984; Cohort 5, October 2, 1984, through September 30, 1985; and Cohort 6, October 1, 1985, through September 30, 1986.

<sup>13</sup>Cases in which the mother was not the legal custodian of the child were excluded. Also excluded were cases in which the petition date fell within our sampling period but the date of paternity adjudication, and

thus eligibility for a child support order, occurred after the end of the sampling period. The exclusion of these cases reduced the sample from 1,765 cases to 1,556 cases.

<sup>14</sup>Weighting is done to obtain population estimates from the sample. Each case is assigned a weighting factor. This weighting factor is a ratio of the total number of paternity adjudications filed in the county from which the case was selected during the year the case entered the sample, to the number of paternities in our sample in that county and year. For example, a sample case weight of 3 means that each case in our sample represents 3 cases in the population of paternity cases for that county and sample year.

<sup>15</sup>As noted previously, these ratios are not an accurate measure of the adjudication rate. They are only to be used as an approximation of the trends over time.

<sup>16</sup>The average adjudication ratios were calculated by dividing the total number of paternities adjudicated in the period by the total number of nonmarital births during the same period. For example, in the experimental counties during the predemonstration period (1982-83) there were 1,314 adjudications (594 + 720) and 2,440 births (1,247 + 1,193), giving a ratio of .539 or 53.9 percent. Thus, 53.9 percent of all nonmarital children have paternity adjudicated and are potentially eligible for a child support award. During the demonstration period, 60.6 percent of all nonmarital children had paternity adjudicated--an increase of 6.7 percentage points from the predemonstration period. The percentage of paternity cases with awards during the period is just the

average of the yearly percentages. For example, in the experimental counties during the predemonstration period the average percentage is  $((.89 + .90 + .72)/3)$ , or 84 percent. The comparable percentage during the demonstration period was 83 percent.

<sup>17</sup>The same holds true in the control counties, where the percentage of nonmarital children with predemonstration orders was 42.6 and with demonstration orders, was 49.

<sup>18</sup>See Irwin Garfinkel, "Utilization and Effects of Immediate Income Withholding and the Percentage-of-Income Standard: An Interim Report on the Child Support Assurance Demonstration," (revised), Institute for Research on Poverty Special Report No. 42, University of Wisconsin-Madison, 1986.

<sup>19</sup>For this analysis a two-limit tobit was used because the pay-to-owe ratios (multiplied by 100) were restricted to between 0 and 100. The two-limit tobit takes into account that the observed variable cannot be less than 0 or greater than 100, by simultaneously estimating the probability of observing a value of 0 or 100 and the expected value of the variable between 0 and 100. The coefficients measure how the unrestricted (latent) dependent variable would change with changes in the explanatory variables.

<sup>20</sup>The expected change in the dependent variable includes the change in the probability of observing values at the endpoints of 0 and 100. The percentage impact of the experimental variables is the difference between the expected values in the experimental and nonexperimental states, evaluated at the overall mean of the other independent

variables. For further discussion see G. S. Madala, Limited-Dependent and Qualitative Variables in Econometrics (New York: Cambridge University Press, 1983).

<sup>21</sup>Approximately 4 percent of the court record sample (51 cases) were missing social security numbers and thus had to be omitted from this analysis.

<sup>22</sup>Two-limit tobits are used for the proportion of time on AFDC because this variable is observed only between 0 and 100. However, the net AFDC benefit does not have a fixed upper limit, so the regressions are run using a tobit with a single limit at 0.

<sup>23</sup>The child for whom paternity has been established. Although the ages and number of other children in the family would be an appropriate variable to include in our regressions, we do not have this information in our court record data.

<sup>24</sup>Father's age was not used because it was not a significant predictor in the payment regressions and because of the strong correlation between mother's and father's age.