Voluntary Paternity Acknowledgment

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Summary

Since the mid-1990s the state of Wisconsin has operated a voluntary paternity acknowledgment process, which allows the fathers of non-marital children born in the state to voluntarily acknowledge their paternity by signing a notarized form, instead of going through a judicial hearing. The premise behind this program is that by reducing obstacles to establishing paternity the state can encourage unmarried fathers to increase their financial and non-financial participation in their children's lives. This report examines the relationship between the use of paternity acknowledgment by fathers and two measures of their subsequent participation in the responsibilities of child-rearing: paying child support and having the children live with them (as shown by placement decisions).

Examining differences in child support and placement outcomes between cases where paternity was voluntarily acknowledged and cases where paternity was adjudicated is complicated by the fact that the two groups of fathers are different in other relevant ways. Without controlling for other differences we found that adjudicated fathers actually paid $150 more per year in child support than did voluntarily acknowledged fathers, but this finding did not take into account that a much lower percentage of voluntary paternity cases have a child support order (due in part to the higher likelihood of voluntary paternity fathers living with the mother). When we limit our analysis to just fathers who have orders, the voluntary paternity fathers are 10 percentage points more likely to pay and they pay about $250 more per year than do adjudicated fathers.

Differences in the likelihood of having an order are not the only distinctions between voluntary and adjudicated cases that require consideration. Children with voluntary paternity acknowledgments are more likely to be an only child and to live outside Milwaukee than are children who have adjudicated paternity. Acknowledged children are younger at the time when paternity is established and younger at the time the child support petition is filed. They have parents with higher earnings, and their parents are less likely to have spent time on public assistance. Adjudicated paternity children appear more often to have black parents and parents who were not living together at the birth of the child, whereas children

with voluntary paternity acknowledgment are more likely to have white parents and parents who have lived together at birth or at the time of paternity establishment.

We used multivariate models to control for differences in these background characteristics. With the controls, voluntary paternity acknowledgment cases, as compared to adjudicated cases, are associated with a lower incidence of child support orders, higher likelihood of payment when an order exists, no significant difference in the level of payment when any is paid, and a greater likelihood of shared child placement. Cases at the average in all other characteristics have a 77 percent probability of paying child support if paternity was adjudicated and an 82 percent probability of paying child support if paternity was voluntary.

PROJECT OVERVIEW

This report investigates the effect of voluntarily acknowledged paternity on child support payments and the physical placement arrangements of children born outside marriage (here termed "nonmarital children") in Wisconsin. Rises in nonmarital childbearing, along with research showing the benefits of paternity establishment for nonmarital children, have led to an emphasis by policy makers on increasing the rates of paternity establishment. Efforts to increase paternity establishment have involved insisting on the cooperation of the children's mothers, ordering genetic testing, and escalating judicial actions against recalcitrant fathers. More important for the present report, policy makers have also tried to improve paternity establishment by simplifying the procedures for establishing paternity and establishing in-hospital and other voluntary paternity mechanisms for fathers to acknowledge their paternity. While paternity establishment in general and voluntary paternity acknowledgment in particular have increased in the last decade, unresolved is the question of how child support and child placement outcomes differ between paternities established through voluntary acknowledgment and those established through a court adjudication process. In this paper we examine these differences.

BACKGROUND

The use of voluntary paternity acknowledgment in Wisconsin has resulted from a series of actions by the federal and state governments. The 1984 Section IV-D amendments to the federal Social Security Act required states to allow paternities to be established through nonjudicial procedures; the 1993 Omnibus Budget Reconciliation Act required states to establish an in-hospital paternity acknowledgment program; and the 1996 Personal Responsibility and Work Opportunity Reconciliation Act expanded both programs. The state of Wisconsin began a trial in-hospital paternity establishment program in 1993 in three hospitals; this program was subsequently named the Paternity Acknowledgment Through Hospitals (PATH) program. In May 1998 the state enacted legislation to implement the federal requirements. The new legislation included incentives to hospitals for their cooperation and for training hospital staff. The

Voluntary Paternity Establishment program is now mandatory for hospitals and is also available to other groups, such as county child support agencies,[1] vital records offices, midwives, and tribal enforcement agencies. Agencies participating in the program receive staff training in how to approach new parents and in explaining the rights and responsibilities associated with signing a Voluntary Paternity Acknowledgment (VPA) form[2] and submitting the notarized form to the Wisconsin Vital Records Office. If the PATH in-hospital process is not completed, the parents may still have the paternity of their child voluntarily established at a later date by obtaining and filing a VPA form with Vital Records or the county child support agency.

Once filed, this form has the same effect as a court proceeding and results in a paternity judgment. The VPA form is considered "conclusive" as soon as it is filed, although it can be rescinded within 60 days by one or both parents without a court appearance.[3] After 60 days has elapsed after the filing date, voluntary paternity acknowledgment can no longer be rescinded. The child's paternity can be "vacated" only through an action by the court. The VPA form can be used at any point during the child's life.

Table 1 shows information provided by the Vital Records Office on the numbers of nonmarital births in the years 2000 and 2001 and the numbers of those children who had paternity voluntarily acknowledged within 4–6 months after birth. The table shows that a high proportion, 47 percent, of Wisconsin nonmarital births in the two years had paternity acknowledged. The table also shows that the rate of paternity acknowledgment grew modestly from 2000 to 2001, a notable trend when one considers that the children born in 2001 had less time to have a VPA form filed on their behalf.

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[1]County child support agencies offer voluntary acknowledgment assistance free-of-charge to parents of children in IV-D cases (those receiving public assistance), and to non-IV-D parents for a $20 service fee.

[2]Prior to 1994 parents could sign the VPA form, which allowed the father's name to be added to the birth certificate and which provided a presumption of paternity for some purposes, but the form was not legally binding for purposes of setting child support without an accompanying court decision on paternity.

[3]There are some exceptions to the 60-day rule: (1) if the parent seeking a recession is a minor, the 60 days are counted as beginning after the parent's eighteenth birthday; (2) if a court order for child support or physical placement is dated prior to the conclusion of the 60-day grace period, the grace period ends on the date of the court order.

Table 1
Paternity Acknowledgment among Nonmarital Children in Wisconsin

	Births in 2000		Births in 2001		Total	
	N	%	N	%	N	%
Voluntary paternity acknowledgment	9,010	45.7%	9,701	48.3%	18,711	47.0%
No voluntary acknowledgment[a]	10,697	54.3	10,396	51.7	21,093	53.0
Total	19,707	100.0	20,097	100.0	39,804	100.0

Source: Data provided by Veronica Harper, Bureau of Child Support, January 16, 2004, using information from the Bureau of Vital Statistics on children in IV-D child support cases.

[a]Includes children with adjudicated paternity and those with no paternity.

National statistics are less current, but Turner (2000) reports that from 1994 to 1998 in-hospital voluntary paternities grew from 6.6 percent to 42 percent among nonmarital children. It is apparent from these figures that voluntary paternity acknowledgment has become a commonly used method for paternity establishment, and it is important to understand the consequences that this type of paternity establishment may have for subsequent child support and child placement outcomes.

There are good reasons to believe that fathers who acknowledge paternity may be more likely to provide support and take parental responsibility for their children than those for whom paternity is established through court procedures. First, a father who is willing to claim responsibility for parenting a child is likely to be also more willing to support that child. To fill out an acknowledgment form in the hospital requires that the father be there, and such a father is likely to be more committed to the relationship with the mother and the newborn child. Second, voluntary acknowledgment itself may foster more cooperative behavior from the father. It involves the cooperation and consent of both parents and is usually, though not necessarily, done soon after the child's birth. Voluntary paternity establishment may be viewed by the parents as a more friendly process, in contrast with a court proceeding, which may be more adversarial. A more amicable process can further cooperation between the parents regarding issues involving the child's health and general welfare.

On the other hand, it is possible that voluntary paternity acknowledgment may be associated with less formal child support payment. If fathers who acknowledge paternity are more likely to be already living with the mother, or if they are more likely to marry the mother soon after the child's birth, then it is possible that they will never be subject to a court order for child support or a court-ordered child placement arrangement. While this may be a positive outcome from the state's point of view, it could analytically be regarded as a negative relationship between voluntary paternity acknowledgment and child support outcomes.

PREVIOUS LITERATURE

The immediate goal of the federal mandates for state voluntary paternity establishment programs was to increase paternity establishment rates. As such, the focus of most research on these programs has been on how well states have implemented them and how successful they have been in increasing the proportion of children with paternity established. Holcomb, Seefeldt, and Sonenstein (1992), McLanahan, Monson and Brown (1992), and Adams, Landsbergen, and Hecht (1994) all provided early information on the process and success of early voluntary paternity establishment procedures.

In the mid-1990s, with the creation of more formal state voluntary paternity programs, program evaluations became available. Two programs that received formal evaluations were those of Colorado (Pearson and Thoeness, 1995, 1996) and Massachusetts (Williams, 1995). These evaluations did not specifically analyze the relationship between voluntary paternity acknowledgment and child support payments, but they provide important information on the organizational, demographic, and socioeconomic factors associated with the use of voluntary paternity acknowledgment. The studies found various bureaucratic efficiencies that increased the rate of voluntary acknowledgment: limiting fees and necessary signatures, having hospital staff approach unwed parents to explain the acknowledgment procedure, and assisting parents with their required forms. Pearson and Thoeness also found reluctance on the part of some mothers to sign paternity affidavits because they wanted to restrict the father's physical placement rights.

As for demographic and socioeconomic associations, both of these studies, along with a later survey by Turner (2000), found that voluntary paternity establishment (in fact, all paternity establishment) is greater among whites, those with higher educational attainment and income, those cohabiting, those with fewer children, and those with less reliance on government assistance programs.

Some more recent research has examined the specific relationship between voluntary paternity establishment and child support payment. Using state-based information on when voluntary paternity programs were instituted, Sorenson and Halpern (1999) found that voluntary paternity programs increased the likelihood of child support payments to mothers who were not on welfare by 2.2 percentage points after controlling for the background state-level and personal characteristics. Unfortunately their data did not allow them to know whether each mother had had paternity voluntarily acknowledged, so this finding only relates to the presence of a voluntary paternity program in the state at the time of the child's birth. Garfinkel, Mincy, and Nepomnyaschy (2003) used data from the Fragile Families and Child Well-Being Study, which indicated each family's use of in-hospital establishment procedures. They found that in-hospital paternity cases were more likely to have child support paid than those with out-of-hospital paternity; voluntary fathers were also more likely to have visits or other contact with the child. These findings remained even when background characteristics were controlled.

DATA AND METHODS

The analyses reported in this paper use data from two Wisconsin sources. The first is KIDS (Kids Information Data System), the administrative database used to manage the state's child support system. The second is Cohort 21 of the Wisconsin Court Record Database (WCRD), a random selection of paternity and child support cases filed in the courts of 21 Wisconsin counties between July 2000 and June 2001. WCRD data are collected by the Institute for Research on Poverty.

With each of the two datasets we examine the relationship between the type of paternity establishment and various demographic and socioeconomic characteristics of the children and the parents. These analyses allow us to assess whether the use of voluntary paternity acknowledgment is more

common among certain types of cases than others. We next examine the relationship between different types of paternity and child support and child placement outcomes. We use models to predict the relationship between paternity type and outcomes, while controlling for any demographic or socioeconomic factors we found to be related to the paternity type.

It is important to note that neither of our datasets allows us to observe all cases of voluntary paternity acknowledgment. Records of the births of all nonmarital children and records of voluntary paternity acknowledgment are filed with the Bureau of Vital Statistics, but we do not have access to those data. If a child's mother is not in a IV-D case or if there is no subsequent court activity concerning that child, there will be no record in the KIDS data system or in the court records. The analyses reported here thus apply only to those children who are brought into contact with the state's child support enforcement system or the court system. The impacts of these limitations are discussed below.

KIDS

This analysis began with an extract from the KIDS database of all children born in the calendar years 2000 and 2001, a total of 45,691 marital and nonmarital children.

The process of determining which children in KIDS are born to married or unmarried mothers is complicated by the fact that no single variable provides that information. Likewise, no single variable allows us to determine in all cases whether or not a child has had paternity established by the filing of a VPA form. And when the form is filed, there is no code in any of the variables indicating which cases completed the hospital-based PATH process and which had the form filed with the county child support agency. We used a strategy, described in Appendix A, to categorize the children first as marital or nonmarital and then to establish four nonmarital subcategories.

We identified 38,867 children as nonmarital. This is close to the figure of 39,804 shown in Table 1. The nonmarital births registered in Wisconsin vital statistics and the records of nonmarital children in

KIDS can differ in several respects.[4] Despite this, the high number of nonmarital children in the KIDS extract does suggest that our sample contains a large proportion of Wisconsin's nonmarital children born during this time period.[5] The small percentage of nonmarital children not identified in KIDS would primarily be children of unmarried parents who filed a VPA form within six months of the child's birth, but then had no reason to request child support or public assistance services—a process which would have entered them into the KIDS system. These may be children of nonmarital parents who are living together, or whose mothers have sufficient financial resources of their own and do not require either formally ordered child support or any type of public assistance from the state.

The KIDS extract was drawn in January 2003. This date is three years after the birth of the oldest children in the extract (January 1, 2000), and one year after the birth of the youngest children in the extract (December 31, 2001). The date of the extract is important, since the percentage of children found in any category of fatherhood depends upon the timing of the extract. An extract drawn later would include a higher percentage of nonmarital children with paternity established, but it probably would not include many *additional* nonmarital children. A later extract would, however, include additional marital children whose parents had divorced.

The following categories were defined for the children born in 2000–2001 and identified in the KIDS database as of January 2003.

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[4]Some nonmarital births registered in Wisconsin could be children of parents who were living in a bordering state but gave birth in Wisconsin, or parents who moved out of Wisconsin soon after the birth of the child. Alternatively, some nonmarital children identified in KIDS could be children of Wisconsin parents who were born in neighboring states, or children of parents who moved to Wisconsin soon after the birth of the child. A child may be recorded as nonmarital in KIDS, but not in vital records, because the child is born to a married mother but the child's father is later established as someone other than the husband in the marriage.

[5]It is possible that some children are represented twice in our final KIDS extract due to the problem of multiple personal identification numbers (PINS), and we therefore overestimate the number of children in KIDS. We believe, however, that this problem is small, as we have combed through the data with various combinations of names, sex, dates of birth, SSNs, county codes, and parent and child PIN/case numbers in order to eliminate duplicate child records.

1. Nonmarital Child, Paternity Not Established. These children have not had paternity established by any method. They could have paternity established in the future, and so later extracts of KIDS data would show some percentage of them in one of the nonmarital, paternity established categories.[6]

2. Nonmarital Child, Paternity Established through Court Adjudication. These children have had paternity determined through the Wisconsin court system, the primary method of paternity establishment, both historically and currently. This category can include paternity established "by default," i.e., in the absence of the father at the court hearing,[7] and can also include children whose parents have filed a VPA form but who live in a county that routinely processes all nonmarital cases through the court system (or had a child support case worker who has failed to use codes in KIDS that would identify the child as a VPA case).

3. Nonmarital Child, Paternity Established through Voluntary Acknowledgment. These children have had paternity established through the VPA program that began in Wisconsin in 1998. This process requires the notarized signatures of both parents. The form could have been filed through the PATH process or later by a county child support agency or other agency.[8] In some counties voluntary paternity cases are automatically processed through the court system, even when the intent of the parents is to acknowledge the paternity of the child and avoid the court system. Despite our efforts to identify these cases and define them as voluntary acknowledgment, many end up being classified as either "adjudicated" or "method unclear."

4. Nonmarital Child, Paternity Established through Legitimization. Paternity is established for these children through their parents' marriage after the birth of the child. This process involves filling out a legitimization form, which allows the name of the father to be added to the birth certificate. The

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[6]These children could include those children whose parents filed a VPA form, but who later rescinded that acknowledgment, or whose paternity was vacated in a court proceeding, or whose paternity was not yet legally determined.

[7]This category can also include cases that began as voluntary paternity acknowledgment cases, but which were rescinded or vacated, and then later adjudicated as children of the same or a different father.

[8]Other sources include filing the form through the services of a midwife or directly with a county registrar.

methods for handling and coding these cases in KIDS are relatively new, and therefore not all legitimization cases are clearly coded as such. The number of this type of case appears to be quite small. By reading individual case notes in KIDS, we believe this situation is more common than appears in our extract and that these cases are put into the Paternity Established, Method Unclear category described below, or in some instances with the adjudicated cases described above. It appears that this group of cases is a mix of children whose parents are still together and married and some children whose parents were married but are now separated or divorcing.

5. Nonmarital Child, Paternity Established, Method Unclear. These are children who have had paternity established, but the method of establishment is unclear from the codes given in KIDS. Several variables in KIDS may indicate voluntary paternity establishment but are coded unclearly or conflict with each other or are missing. By reading individual case notes we can determine in some cases that paternity was or was not established by voluntary acknowledgment. However, we can find no definitive pattern of coded variables that allows us to accurately categorize these children. We therefore keep these children in the unclear category rather than introduce error into our more definitive categories of paternity establishment. We believe that some may be nonmarital children who have been legitimized through the marriage of their parents. Some may be children who have had paternity established in another state, and so the type of paternity establishment is unknown. Others may be children who have primary physical placement with their fathers and for whom some paternity establishment information is missing.

6. Marital Child. These are children whose parents were married at the time of the child's birth and appear in KIDS because their parents separated or divorced. These children are included in the following analyses as a point of comparison for the nonmarital children.

Table 2 shows the number and percentage of children in each of the categories as of January 2003.

Table 2
Marital and Nonmarital Categories of Children

	N	% of All Children	% of Nonmarital Children
Nonmarital Children			
Total nonmarital children	38,867		100.0%
Paternity not established[9]	11,979	26.2%	30.8%
Paternity adjudicated	14,558	31.9	37.5
Paternity voluntarily acknowledged	9,961	21.8	25.6
Paternity established by legitimization	201	.5	.5
Paternity established, method unclear	2,168	4.7	5.6
Marital Children	6,824	14.9	
Total Children	45,691	100.0	

Source: KIDS data system.

The table indicates that 30.8 percent of nonmarital children born in 2000 and 2001 did not have paternity established by January 2003. This is a higher percentage than shown in other published statistics for nonmarital children of all ages in Wisconsin.[10] We believe that this figure is accurate for our sample, given the very young age of these children. Some of these children will have paternity established in future years. The table also shows that 9,961 children—25.6 percent of nonmarital children—have had paternity established by voluntary acknowledgment. To this number might be added a large portion of the 5.6 percent in the method unclear category, and some unknown percentage of children classified as adjudicated.

[9]The number of children without paternity established by Jan. 2003 reported here differs from the numbers reported by BCS in other forums. Consultation with BCS staff indicates that these differences are largely due to the fact that BCS reports are for children in open IV-D cases. The figures in the table here are for children regardless of IV-D status or whether the KIDS case is open or closed.

[10]The percentage of paternities established in open IV-D cases in Wisconsin for fiscal year 2001 is given as 86.6 percent in Table 73: Performance Indicator Scores and Incentives, by the Office of Child Support Enforcement, Administration for Children and Families, in:
http:/www.acf.hhs.gov/programs/cse/pubs/2003/reports/statistical_report/table_73.html.

We note that the percentage of children whose paternity was voluntarily acknowledged does not match the figures in Table 1, based on vital statistics, showing a total of 18,711 nonmarital children born in the years 2000 and 2001 with paternity voluntarily acknowledged. The discrepancy between those figures and ours from KIDS data suggests that some children do not appear in KIDS, and that many more are identified in KIDS as belonging in some other category, owing to the lack of accurate VPA information.[11] In the following section we compare these categories of children in terms of a number of variables.

Wisconsin Court Record Database

The cases in Cohort 21 of the WCRD are a random sampling of adjudicated and voluntary acknowledgment paternity cases filed in 21 counties in the state. These cases were selected from court cases with petition dates from July 2000 through June 2001. The selection criterion limits them to cases with at least 12 months of eligibility for child support, which eliminates cases in which the parents lived together in the year after the paternity judgment. In Cohort 21 there were 873 paternity cases available for this report: 302 voluntary and 571 adjudicated paternities. After weighting to account for the stratified sampling collection procedure, we find that 13.5 percent of nonmarital cases entering the court system in these counties during this time period were cases with paternity acknowledged.

Because the voluntary paternity cases in this sample were chosen from cases which actually went to court for a support or child placement order, the sample is a select group within the full population of voluntary paternity cases. While this limits the applicability of our findings for the larger population of voluntary paternity cases, the WCRD has the advantage of collecting information on child placement outcomes that are not available in the KIDS data.

[11]Specifically, these children are missing the PAEJ event code, which would clearly identify them as voluntary acknowledgment cases.

CHARACTERISTICS OF PARENTS AND CHILDREN FROM THE KIDS SAMPLE

To begin this analysis we address the question of whether there are there any identifiable characteristics of the children or their parents that would influence the parents' behavior regarding the process of establishing paternity. This is important because when we examine how voluntary paternity acknowledgment might influence child support payment behavior, we need to understand whether or not there are differences in the kinds of parents who choose voluntary acknowledgment. These differences may also lead them to behave differently in terms of child support payments. First we examine characteristics of the children at the time of their birth or the date at which paternity was established.

Paternity Establishment by Age of the Child

The date of paternity establishment we are using from KIDS is a best approximation. KIDS does not always record the date of the filing of the VPA form. We use an event code date, which may be somewhat later than the actual filing of the form. For example, a couple may file the form shortly after the child's birth, but the mother may not apply for child support or public assistance, and thus enter the KIDS system, for many months. The date associated with a case worker's validation of the VPA provides our approximation of a date of acknowledgment.

Tables 3 and 4 show the rate of paternity establishment by the calendar quarter of the child's birth. Children are grouped into four time periods, reflecting birth during six-month periods in 2000 and 2001. Table 3 shows that a greater percentage of the oldest children (those born in Time 1) have had paternity established by the time information was extracted from KIDS in January 2003. By this date, 72.8 percent of the oldest children have had paternity established, as compared to 67.1 percent of the youngest children. This trend is to be expected, since the older children have had more opportunity to have paternity established. It should be noted, however, that the percentage of children born in Time 4 have as high a rate of paternity establishment as children born in Time 3, six months earlier. This would suggest that there is some improvement or streamlining of the process of paternity establishment in late 2001 or 2002.

Table 4 shows that a greater percentage of the oldest nonmarital children have had paternity adjudicated through the courts. This is probably a function of two trends: first, an increased use of the voluntary paternity acknowledgment program over time, so that younger children are more likely to have had paternity voluntarily established; and second, an increased likelihood that older children have had an adjudicated paternity process initiated and completed (in the absence of an earlier voluntary acknowledgment of paternity). The percentage of children falling into the voluntary acknowledgment category grows over time. We think that this reflects a trend in increased use of voluntary paternity acknowledgment, but is probably not a completely accurate reflection of increased use. Some of the earlier voluntary acknowledgments are probably hidden in the "method unclear" category, which is highest for children born in Time 1. And the percentage of children with paternity established, primarily through the court system, can be expected to increase over time.

Table 3
Paternity Establishment by Quarter of Birth (Relative Age) of the Child

	Time 1 Q1–2, 2000 (oldest)	Time 2 Q3–4, 2000	Time 3 Q1–2, 2001	Time 4 Q3–4, 2001 (youngest)
Number of Children	9,522	9,999	9,615	9,731
Nonmarital Children				
Paternity not established	27.2%	30.4%	32.7%	32.9%
Paternity established	72.8	69.6	67.3	67.1

Source: KIDS data system.

Table 4
Type of Paternity Establishment by Quarter of Birth (Relative Age) of the Child

	Time 1 Q1–2, 2000 (oldest)	Time 2 Q3–4, 2000	Time 3 Q1–2, 2001	Time 4 Q3–4, 2001 (youngest)
Number of Children	6,932	6,960	6,469	6,527
Paternity Established				
Paternity adjudicated	57.8%	54.5%	53.8%	50.3%
Paternity voluntarily acknowledged	31.3	37.1	38.7	41.4
Paternity established by legitimization	0.4	0.8	0.8	0.9
Paternity established, method unclear	10.5	7.6	6.7	7.4

Source: KIDS data system.

Age of Child at Paternity Establishment

Table 5 shows the mean age of the child at time of paternity establishment, by category. Paternity is established earlier, at a mean of 5–7 months, when friendlier methods of paternity establishment are used, as compared to cases adjudicated through the courts (9.8 months).[12] Voluntary acknowledgment children have the youngest mean age (5.2 months). These differences in age could result from longer processing in adjudicated cases and/or a preference (and encouragement through the PATH program) for using voluntary acknowledgment with infants. (There is, however, no child's age limit for voluntary acknowledgment). This difference in the age at which the child's father is established could be very important in terms of bonding, perhaps resulting in later differences in behavior toward the child, including payment of child support.

[12]It should be noted that these mean months are accurate only for data extracted from KIDS at this point in time (January 2003). These means will increase with time, as additional children have paternity established or as additional nonmarital children in this birth cohort enter the KIDS database.

Table 5
Mean Age of the Child at Paternity Establishment

	Mean Age, in Months
Nonmarital Children	
All nonmarital children	7.9
Paternity adjudicated	9.8
Paternity voluntarily acknowledged	5.2
Paternity established by legitimization	6.6
Paternity established, method unclear	7.0

Source: KIDS data system.

Table 6 shows the same information in a different way for the oldest children in our data, those born in Time 1 (January–June, 2000). We compare the percentage of children with paternity established by voluntary acknowledgment and court adjudication over time. The table shows that the largest share of voluntary acknowledgments were established in the first three months of the child's life, and these rates decline dramatically after that. These figures attest to, and probably underreport, the success of the PATH program in encouraging new fathers to establish paternity.[13] Adjudication through the court system peaks at 4–6 months, and then the rate falls, though more gradually than the decline in rates of voluntary acknowledgment. After the third month of life, a child is three to four times more likely to have paternity established through court adjudication than through voluntary acknowledgment. By age 30 months, 29.6 percent of these children remained without paternity established.

[13]As noted above, we do not necessarily have an accurate date at which the VPA form was filed. The children who appear to have paternity voluntarily acknowledged in later months may have had a VPA form filed early in life, but did not appear in KIDS until many months later, and are therefore reported here as having a later date of paternity establishment.

Table 6
Age in Months at Time of Paternity Establishment among Children Born in Time 1 (Oldest Children, N = 9,522))

	Paternity Established	
	By Voluntary Acknowledgment	By Adjudication
Age, in Months		
1–3	10.6%	4.2%
4–6	3.1	9.3
7–9	1.9	7.3
10–12	1.4	5.2
13–15	1.5	3.6
16–18	1.1	2.7
19–21	0.7	2.2
22–24	0.7	1.9
25–27	0.4	2.0
28–30	0.4	1.4
Paternity established through legitimization or method unclear[a]	8.8%	
Paternity not established within 30 months	29.6%	

Source: KIDS data system.
[a]Includes 226 cases of voluntary or adjudicated paternity where the date of establishment is missing

Sex of the Child

The behavior of parents may be influenced by the sex of the child. Some studies have shown that parents, fathers in particular, behave differently toward male and female children (Lundberg and Rose, 2002, 2003; Dahl and Moretti, 2003). Table 7 shows the ratio of male to female children in each category of marital/nonmarital legal fatherhood.[14] The only category that shows an imbalance of male children is

[14]Computations from birth statistics available from the Wisconsin Department of Health and Family Services, Bureau of Health Information Web site (http://dhfs.wisconsin.gov/wish/measures/wis_births), indicates that the male to female birth ratio for the combined years of 2000 and 2001 in Wisconsin was 103.9. It was 103.0 among nonmarital children.

the small (N=201) legitimized category, with a ratio of 132 boys per 100 girls. Since marriage followed the birth of the child in these cases, there appears to be a greater likelihood that a father will marry the mother of a boy. With this exception, there is little difference between male and female children and paternity establishment, although there is a slightly above-average ratio of boys in cases with paternity established, as compared to a slightly below-average ratio of boys among those without paternity established. This suggests that some fathers may be more amenable to establishing paternity for male children.

Table 7
Male to Female Ratio among the Children

	Number of Boys per 100 Girls
Nonmarital Children	
All nonmarital children	102.4
Paternity not established	100.1
Paternity adjudicated	102.8
Paternity voluntarily acknowledged	104.2
Paternity established by legitimization	131.8
Paternity established, method unclear	99.7
Marital Children	103.5

Source: KIDS data system.

The next set of tables shows characteristics of the parents of these children at the time of the birth, at paternity establishment, and in the year prior to the birth.

Age of Parents

Tables 8 and 9 show the ages of the parents at the time of the birth of the child. The most obvious difference is that married parents are older than unmarried parents when the child is born (Table 8). The mean age of married mothers is 2.5 years greater than unmarried mothers, and married fathers are almost 3 years older than unmarried fathers. The ages of unmarried parents do not appear to differ much across

the types of paternity establishment: the mean age of unmarried mothers is about 23 years; of fathers, 25.3 years.

Table 9 shows the youth of the nonmarital parents more clearly. Only 21 percent of married mothers were under age 21 at the birth of the child, as compared to 40 percent of nonmarital mothers. Among fathers, about 10 percent of those married were under age 21, as compared to 25 percent of unmarried fathers.

Table 8
Mean Parental Age at Birth of Child

	Mother	Father
Parents of Nonmarital Children		
Paternity not established	23.3%	NA[a]
Paternity adjudicated	22.6	25.2%
Paternity voluntarily acknowledged	22.8	25.3
Paternity established by legitimization	23.1	25.7
Paternity established, method unclear	23.3	25.9
All nonmarital children	22.9	25.3
Parents of Marital Children	25.4	28.0

Source: KIDS data system.

[a]Since paternity has not been established in these cases, there is no known father's age.

Table 9
Mean Parental Age at Birth of Child, by Age Category

	Age			
	Under 21	21–24	25–29	30+
Mothers				
Mothers of Nonmarital Children				
Paternity not established	38.0%	28.0%	18.8%	15.2%
Paternity adjudicated	42.3	30.0	16.2	11.5
Paternity voluntarily acknowledged	40.5	31.3	16.8	11.4
Paternity established by legitimization	39.3	26.9	21.9	11.9
Paternity established, method unclear	34.8	33.6	19.3	12.3
All nonmarital mothers	40.1	29.9	17.4	12.6
Mothers of Marital Children	21.1	29.7	27.0	22.2
Fathers				
Fathers of Nonmarital Children				
Paternity not established	NA	NA	NA	NA
Paternity adjudicated	26.6	29.9	21.9	21.6
Paternity voluntarily acknowledged	23.7	32.3	22.9	21.1
Paternity established by legitimization	19.6	31.7	26.1	22.6
Paternity established, method unclear	20.6	30.0	25.0	24.4
All nonmarital fathers	25.0	30.8	22.6	21.6
Fathers of Marital Children	10.2	25.1	28.8	35.9

Source: KIDS data system.

Number of Children Born to the Mother

The number of other children the parents have at the time of the child's birth may be related to paternity establishment. Table 10 shows the percentage of mothers who have other children listed in the KIDS database and whether or not those other children have the same father. The nonmarital mothers with the highest percentage of other children are those whose children have adjudicated paternity. Mothers with voluntarily acknowledged paternity are less likely to have other children. It is not surprising that the group using the voluntary method of paternity establishment, which is relatively new, is the group with the highest percentage of new mothers (no other children). When they do have other children, mothers with adjudicated paternity are also more likely to have these children with other fathers.

Table 10
Other Children Born to the Mother

	Percentage of Mothers Who Have:		
	No Other Children	Other Children, Same Father	Other Children, Other Father[a]
Mothers of Nonmarital Children			
Paternity not established	86.2%	NA	NA
Paternity adjudicated	77.0	19.1%	3.9%
Paternity voluntarily acknowledged	85.3	12.6	2.1
Paternity established by legitimization	81.6	16.4	2.0
Paternity established, method unclear	78.9	16.5	4.6
All nonmarital mothers, paternity established	80.3	16.4	3.3
Mothers of Marital Children	52.6	44.9	2.5

Source: KIDS data system.

[a]Includes other children who have not had paternity established.

Race/Ethnicity

Table 11 shows the racial and ethnic categories of mothers. There are sharp differences across the categories of paternity establishment. A relatively large percentage of Asian mothers in our KIDS extract have marital children (25.6 percent). Thirteen to eighteen percent of children with Hispanic or white mothers are marital children. Children in our KIDS extract with black mothers are least likely to be marital children (5.9 percent).

Table 12 shows the racial/ethnic categories among unmarried mothers. Asian mothers are those least likely to have paternity established for their children (42 percent), and white mothers are those most likely to have paternity established for their children.

Table 13 shows differences in the types of paternity establishment by race and ethnicity of mothers from the KIDS extract. Black mothers overwhelmingly have paternity adjudicated through the court system (over 70 percent), whereas about 48 percent of white and Hispanic mothers have paternity established by voluntary acknowledgment. Interestingly, a relatively large percentage of American Indian

children (5.5 percent) have paternity established through marriage legitimization (about 20 percent of all legitimization cases found in this extract were children of American Indian mothers).

Table 11
Race and Ethnicity of Mothers in KIDS Extract

	Black	White	Hispanic	American Indian	Asian
Cases with Known Race/Ethnicity	11,725	23,162	4,078	1,023	602
Nonmarital Mothers					
Paternity established, method unclear	4.1%	5.4%	4.0%	7.2%	4.1%
Paternity not established	34.0	16.6	32.2	24.9	31.2
Paternity adjudicated	42.4	31.7	26.3	35.5	19.6
Paternity voluntarily acknowledged	13.5	28.0	23.6	17.6	19.3
Paternity established by legitimization	0.1	0.5	0.4	3.5	0.2
Marital Mothers	5.9	17.8	13.5	11.3	25.6

Source: KIDS data system.

Table 12
Race and Ethnicity of Unmarried Mothers in KIDS Extract

	Black	White	Hispanic	American Indian	Asian
Unmarried Mothers					
Paternity not established	36.1%	20.1%	37.2%	28.1%	42.0%
Paternity adjudicated	45.1	38.5	30.4	40.0	26.3
Paternity voluntarily acknowledged	14.3	34.1	27.3	19.8	25.9
Paternity established by legitimization	0.1	0.6	0.5	4.0	0.2
Paternity established, method unclear	4.4	6.7	4.6	8.1	5.6

Source: KIDS data system.

Table 13
Race and Ethnicity of Mothers: Nonmarital Cases, Paternity Established

	Black	White	Hispanic	American Indian	Asian
Paternity adjudicated	70.6%	48.3%	48.3%	55.6%	45.4%
Paternity voluntarily acknowledged	22.4	42.6	43.5	27.6	44.6
Paternity established by legitimization	0.2	0.8	0.8	5.5	0.4
Paternity established, method unclear	6.8	8.3	7.4	11.3	9.6

Source: KIDS data system.

The race and ethnicity of fathers from the KIDS extract show similar patterns (Table 14 and 15). Asian fathers have the highest percentage of marital children, and black fathers have the lowest percentage of marital children. Black fathers have the highest percentage of children with paternity established through adjudication (almost 69 percent); this figure is about 47 percent among white or Asian fathers (Table 15). Though few in number, children with American Indian fathers have a greater rate of paternity establishment through marriage legitimization.

Table 14
Race and Ethnicity of Fathers from KIDS Extract

	Black	White	Hispanic	American Indian	Asian
Cases with Known Race/Ethnicity	9,258	14,683	3,137	710	358
Nonmarital Fathers					
Paternity not established	NA	NA	NA	NA	NA
Paternity adjudicated	63.2%	37.3%	41.7%	45.5%	33.0%
Paternity voluntarily acknowledged	22.1	34.5	34.3	24.8	32.4
Paternity established by legitimization	0.2	0.7	0.8	4.4	0.3
Paternity established, method unclear	6.3	6.1	5.8	8.1	5.0
Marital Fathers	8.2	21.4	17.4	17.2	29.3

Source: KIDS data system.

Table 15
Race and Ethnicity of Fathers: Nonmarital Cases, Paternity Established

	Black	White	Hispanic	American Indian	Asian
Paternity adjudicated	68.8%	47.4%	50.4%	54.9%	46.6%
Paternity voluntarily acknowledged	24.1	44.0	41.5	29.9	45.9
Paternity established by legitimization	0.2	0.8	1.0	5.3	0.4
Paternity established, method unclear	6.9	7.8	7.1	9.9	7.1

Source: KIDS data system.

Earnings

Table 16 shows the mean income of parents in the year before the child was born. The earnings are derived from Unemployment Insurance (UI) wage records, matched with the social security number (SSN) of the parents. If the SSN of a parent is missing, or if the parent is known to have lived in another state in the year prior to the birth of the child, those cases are excluded from the calculations. If there is a valid SSN for a parent, but no wage record, wages are assumed to be zero and are included as such in the calculations. It should be understood that UI wage records do not capture all of the income of all workers in Wisconsin. These figures should be considered as minimal estimates of actual income. They are most useful in assessing relative levels of wages among fathers and mothers and among parents in the paternity establishment categories.

As expected, fathers have higher mean earnings than mothers (this was the year in which the mother was pregnant). The table also shows that married mothers and fathers have considerably higher mean wages than other parents. The highest earnings of parents in paternity cases are those in which paternity was voluntarily acknowledged. Fathers in the court-adjudicated category and mothers in the not established category have the lowest mean earnings.

Table 16
Mean Earnings of Parents in the Year Prior to Birth of the Child

	Mothers	Fathers
Nonmarital Parents		
Paternity not established	$5,699	NA
Paternity adjudicated	6,522	$9,161
Paternity voluntarily acknowledged	7,453	12,149
Paternity established by legitimization	6,437	10,149
Paternity established, method unclear	6,974	10,651
All nonmarital parents	6,571	10,390
Marital Parents	8,935	16,226

Source: KIDS data system and Unemployment Insurance wage records.

Receipt of Public Assistance

Table 17 shows the percentage of mothers in each marital/nonmarital category that received at least one month of Food Stamps, Wisconsin Works (W-2), or Medicaid benefits in the twelve months prior to the birth of the child. Much higher percentages of nonmarital mothers received at least one month of some type of public assistance than married mothers (69 versus 48 percent). Although Table 16 shows that mothers who have not established paternity for their children have the lowest earnings, fewer of these mothers received public assistance in the year prior to the birth of the child than any other category, except for the (relatively well-off) married mothers. This lower take-up of public assistance is probably a result of the requirement that mothers who receive aid cooperate with the state in establishing paternity for their children.

In looking at specific types of public assistance use, the Medicaid/BadgerCare program is used by the highest proportion of mothers, and these numbers drive the percentages in column 4—a composite measure of public assistance use. Those groups using the "friendlier" paternity establishment methods (voluntary, marriage legitimization) show the highest rates of Medicaid use (73–80 percent compared to an overall rate of 66 percent among all nonmarital mothers). Among W-2 grant recipients (the most

impoverished), the voluntary and legitimization groups are those with the lowest rates of participation (6–7 percent compared to 14–16 percent for other nonmarital mothers).

Table 17
Percentage of Mothers Receiving Public Assistance, in the Twelve Months Prior to Birth of Child

	Percentage Receiving Assistance in at Least One Month			
	Food Stamps	Medicaid/ BadgerCare	W-2	At Least One Month of Food Stamps, Medicaid, W-2
Mothers of Nonmarital Children				
Paternity not established	37.9%	53.8%	14.0%	57.9%
Paternity adjudicated	43.6	67.7	15.7	71.3
Paternity voluntarily acknowledged	29.8	72.6	6.9	75.4
Paternity established by legitimization	32.3	80.5	5.6	82.1
Paternity established, method unclear	41.7	75.7	14.2	78.3
All nonmarital mothers	38.2	65.7	12.8	69.1
Mothers of Marital Children	24.0	45.8	4.6	47.8

Source: KIDS and CARES data systems.

Residential Location

County location is an important variable, for a number of different reasons. Residential information is the only method we have of identifying parents who were living together at the birth of the child, at the time of paternity establishment, or at some point later in the life of the child. Residential location also gives us information about the rural/urban environment in which the parents live, which might influence employment or other options available. County location also allows us to note specific differences in county caseloads, which may indicate differences in the judicial process, the PATH process as implemented by hospitals in that county, or administrative case handling, including the coding of information into the KIDS data system by county child support workers.

Table 18 shows the percentage of nonmarital parents who did and did not live together at the time of the child's birth. This table is based on examination of the address history for both parents in KIDS, and a match of the address fields defined for each parent at the time of the child's birth. If both parents' addresses were missing for that time period, this absence was defined as unknown. If one of the parents' addresses was missing, but we have information on the other parent, the case was defined as not living together. If we have both parents' addresses, then we match on street address and define positive matches as living together and failed matches as not living together.[15] The first three columns of Table 18 show that addresses for almost 12 percent of the nonmarital parents (at the time of the child's birth) are missing. For those cases in which we know an address of at least one of the parents at the time of the child's birth (the last two columns of the table), about 17 percent of the parents with "friendlier" paternity establishment methods were living together, as compared to 8 percent of those parents who later established paternity through the courts.

Perhaps a more relevant time period for comparison of cohabitation is in the month during which paternity was established. This information is shown in Table 19. Less than 2 percent of the addresses are missing at this point in time. Like the figures shown on Table 18, twice the percentage of parents in voluntary acknowledgment cases as compared to adjudicated cases are reported to be living together. But it should be noted that there is an increase in the percentages of parents living together among all categories: a rise to 12 percent in adjudicated cases and 25 percent in voluntary acknowledgment cases.[16]

A history of the parents living together may reap benefits for the child in later years, even if the parents later separate. The opportunity for father-child bonding during these months may influence the

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[15]The matching algorithm matches on the first 10 characters of the street address (number and name) with all blanks, hyphens, and periods removed. If the street number matches, but not street name, a follow-up SOUNDEX match is done to capture misspellings and abbreviations in the street name, which would otherwise cause an incorrect "no match."

[16]It should be noted that this is not due to inclusion of the cases with both addresses unknown at birth, which may represent parents who were living together at the time of the child's birth. These cases have been excluded from the calculations of percentages in the last two columns of this table.

later behavior of fathers in many ways—continued residence with the child, increased time spent with the child, or increased child support paid when separated from the child.

Table 18
Percentage of Nonmarital Parents Who Did and Did Not Live Together at Time of Child's Birth

	All Parents			Parents with Known Addresses	
	Unknown	Not Together	Together	Not Together	Together
All Nonmarital Parents	11.5%	78.1%	10.4%	88.2%	11.8%
Paternity adjudicated	11.0	81.7	7.3	91.8	8.2
Paternity voluntarily acknowledged	12.6	72.6	14.8	83.1	16.9
Paternity established by legitimization	6.0	79.1	14.9	84.1	15.9
Paternity established, method unclear	10.7	78.5	10.8	87.9	12.1

Source: KIDS data system.

Table 19
Percentage of Nonmarital Parents Who Did and Did Not Live Together at Time of Paternity Establishment

	All Parents			Parents with Known Addresses at Birth & Paternity Establishment	
	Unknown	Not Together	Together	Not Together	Together
All Nonmarital Parents	1.4%	81.8%	16.8%	82.7%	17.3%
Paternity adjudicated	0.9	87.5	11.6	88.0	12.0
Paternity voluntarily acknowledged	1.9	74.0	24.1	74.9	25.1
Paternity established by legitimization	1.5	75.1	23.4	75.0	25.0
Paternity established, method unclear	1.8	80.6	17.6	83.0	17.0

Source: KIDS data system.

For analysis of the environment in which the child is living, counties of residence were classified in four groups: Milwaukee, large urban, small urban, and rural. The urban classifications follow the 2000 Census designations of SMSA metropolitan and "micropolitan" (small urban) counties.[17] Table 20 shows that children in Milwaukee are much more likely to be nonmarital, and much less likely to have had paternity established. Children in other large urban areas are the next most likely to be nonmarital and also the next least likely to have had paternity established. Small urban and rural areas are very similar in the percentage of nonmarital children and in the percentage with paternity established. Small urban and rural areas have higher percentages of voluntary acknowledgment cases. Milwaukee has the lowest percentage of voluntary paternity acknowledgment cases.

Table 20
Percentage of Cases in Urban and Rural Location

	Milwaukee	Large Urban	Small Urban	Rural
Number of Cases	15,899	19,789	4,685	5,316
Nonmarital Cases				
Paternity not established	33.4%	24.4%	17.9%	18.9%
Paternity adjudicated	37.3	29.9	29.1	25.3
Paternity voluntarily acknowledged	16.4	23.7	27.3	26.2
Paternity established by legitimization	0.3	0.2	0.2	1.9
Paternity established, method unclear	3.4	5.3	4.1	7.3
Marital Cases	9.2	16.5	21.4	20.4

Source: KIDS data system.

[17]2000 Census metropolitan county areas include Milwaukee, Brown, Calumet, Chippewa, Columbia, Dane, Douglas, Eau Claire, Fond du Lac, Kenosha, Kewaunee, Iowa, La Crosse, Marathon, Oconto, Outagamie, Ozaukee, Pierce, Racine, Rock, St. Croix, Sheboygan, Washington, Waukesha, and Winnebago. Micropolitan counties include Dodge, Dunn, Florence, Grant, Green, Jefferson, Lincoln, Manitowoc, Marinette, Portage, Sauk, Walworth, and Wood.

Table 21 shows the range from lowest percentage to highest percentage of children, by county for each category. These percentages are limited to counties with over 100 children represented.[18] Paternity establishment rates of adjudicated cases range from 7.8 to over 50 percent. Voluntary paternity acknowledgment cases range from a low of less than 1 percent in one county to a high of 44 percent in another county. The percentages of method unclear cases range from 1.6 to 27 percent. This indicates that there are individual counties that are either not receiving, encouraging, or handling voluntary acknowledgment cases, or have coded their cases in KIDS in such a way that the method of paternity establishment cannot be accurately discerned.[19] We should expect wide ranges in how nonmarital cases are coded in the KIDS system, since even the percentage of marital children shows a wide range across counties: 2.4 percent in one county to almost 31 percent in another county. Paternities established by legitimization range from 0 to a high of over 21 percent of all children in one county. The small number of legitimization cases are highly concentrated in just a few counties in the state,[20] probably because caseworkers in a few counties have been trained to use the legitimization codes or because of the higher use of legitimization in locally concentrated American Indian populations.

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[18]Eleven counties were eliminated from this analysis due to small numbers of children born in this time period and found in KIDS.

[19]A conversation on January 14, 2004, with Veronica Harper, a Bureau of Child Support specialist in the Wisconsin voluntary paternity acknowledgment program, indicated that at least one county processed all nonmarital cases through the court system, even when parents signed and filed a VPA form.

[20]Forty percent of all legitimized cases occur in Door, Shawano, and Sheboygan counties.

Table 21
Lowest and Highest Percentages of Children in Counties with More than 100 Children

	Lowest Percentage	Highest Percentage
Nonmarital Children		
Paternity not established	8.8%	49.6%
Paternity adjudicated	7.8	50.6
Paternity voluntarily acknowledged	0.6	44.2
Paternity established by legitimization	0	21.4
Paternity established, method unclear	1.6	27.0
Marital Children	2.4	30.8

Source: KIDS data system.

CHARACTERISTICS OF PARENTS AND CHILDREN IN THE WCRD SAMPLE

We can look at many of these same characteristics using information from the Wisconsin Court Record Data. Even though this is only a sample of court record cases from a sample of counties in Wisconsin, we find many of the same relationships that we saw in the KIDS data. The results are presented in Table 22.[21]

As in KIDS, cases with paternity acknowledged have younger children (mean of 0.9 years or 11 months) than those with paternity adjudicated (2.7 years); almost two-thirds of the acknowledged cases have a child under age 1, while only 44 percent of adjudicated cases do so. We see no substantial differences in the sex ratios of those children, and it appears that the ages of mothers and fathers at the child's birth are not significantly different.

We also find that whereas there is little difference in whether pairs of parents have additional children, there is a substantial difference in the percentage of mothers who have children with a different father—only 1.6 percent for voluntary paternities, but over 20 percent for adjudicated paternities.

[21]All analyses using the WCRD are weighted to correct for sample size differences between adjudicated and voluntary paternity acknowledgment cases.

Finally, we see that voluntary paternity cases are substantially better off financially than adjudicated cases. The fathers in acknowledged cases make $5,800 more a year (as measured by their earnings reported to the Unemployment Insurance system) than do the fathers in adjudicated cases. Similarly, mothers in voluntary paternity cases are doing better financially in the year before the court petition, with earnings higher by about $2,300, and are much less likely to have participated in the state's public assistance programs than are adjudicated cases. Finally, we see that adjudicated cases are strongly concentrated in Milwaukee while acknowledged cases are predominantly in other large counties in the state.

In both data sets we find many of the same patterns. Children with voluntary paternity acknowledgments are more likely to be an only child and to live outside Milwaukee than are children who have adjudicated paternity. Acknowledged children are younger at the time when paternity is established and younger at the time the child support petition is filed. They have parents with higher earnings, and their parents are less likely to have spent time on public assistance. Additional variables from the KIDS data show that adjudicated paternity children appear more often to have black parents and parents who were not living together at the birth of the child, while children with voluntary paternity acknowledgment are more likely to have white parents and parents who have lived together at birth or at the time of paternity establishment.

Table 22
Characteristics of Cases, by Paternity Type, Using the WCRD

	Voluntary Paternity	Adjudicated Paternity
N	302	570
Age of Youngest Child at Petition Date		
Mean (years)	0.92	2.7
Less than 1	61.9%	44.1%
1	18.8	15.6
2	8.6	9.5
3–5	6.4	14.8
6–8	3.3	4.1
9–11	0.7	3.2
12–14	0.3	4.8
15–18	0.0	4.0
Sex of Youngest Child		
Male	54.5	56.3
Female	45.5	43.7
Parent's Ages at Child's Birth		
Mother's mean age (years)	22.5	22.7
Father's mean age (years)	24.5	25.5
Age of Mother		
Less than 20	37.5	35.0
20–24	38.9	38.6
25–29	14.2	14.3
30–39	9.4	11.4
40 and higher	0.0	0.8
Age of Father		
Less than 20	23.8	20.6
20–24	41.7	31.0
25–29	20.3	26.2
30–39	10.4	19.4
40 and higher	3.9	3.9

(table continues)

TABLE 22, continued

	Voluntary Paternity	Adjudicated Paternity
Mother Has Multiple Children with This Father	13.5%	13.7%
Mother Has Children with Another Father	1.6	20.4
Father's Income in Year before Petition Date (mean)	$13,934	$8,190
Mother's Income in Year before Petition Date (mean)	$9,263	$6,941
Mother's Public Assistance Participation in Year before Petition Date		
W-2	19.9%	31.4%
Food Stamps	32.6	64.2
Medicaid/BadgerCare	57.0	72.4
Location of Court Case		
Milwaukee County	18.0	74.0
Large Urban	68.3	20.7
Small Urban	6.7	2.1
Rural	7.0	3.3

Source: WCRD, Cohort 21.

LATER LIVING ARRANGEMENTS, WAGES, AND CHILD SUPPORT—DESCRIPTIVE OUTCOMES FOR KIDS DATA

In this section of the report we examine changes in the first year after the child's birth in living arrangements, wages, receipt of public assistance, child support orders, and payment of child support.

Residential Location

The addresses of the parents were examined a year after the child's birth to see if changes had occurred in living arrangements of the parents. Table 23, when compared to Table 18 above, shows an increase in the percentage of parents who were living together, from about 11 percent to 16 percent overall. Parents who established paternity through voluntary acknowledgment were living together at twice the rate of those with adjudicated paternity (23 percent compared to 11 percent).

Table 23
Percentage of Nonmarital Parents Who Lived Together at Time of Child's First Birthday

	All Parents			Parents with Known Addresses	
	Unknown	Not Together	Together	Not Together	Together
All Nonmarital Parents	2.7%	81.6%	15.7%	83.9%	16.1%
Paternity adjudicated	3.0	86.4	10.6	89.0	11.0
Paternity voluntarily acknowledged	2.4	74.9	22.7	76.7	23.3
Paternity established by legitimization	1.0	71.1	27.9	71.9	28.1
Paternity established, method unclear	2.5	81.4	16.1	83.5	16.5

Source: KIDS data system.

Earnings

Table 24 examines the mean wages earned by parents in the four quarters following the birth of the child.[22] The income of most mothers declined, in comparison with incomes prior to the birth of the child (Table 16, above). The exceptions are mothers in the two less "friendly" categories of paternity establishment (paternity not established and paternity established through court adjudication). These were mothers with the lowest incomes prior to the birth of their child. Mean incomes of all categories of fathers increased in the year after the birth of the child. Fathers with the lowest reported wages, both before and after the birth of the child, are those in the adjudicated category. Marital fathers have the highest reported wages.

Table 24
Mean Earnings of Parents in the Year after the Birth of the Child

	Mothers	Fathers
All Nonmarital Parents	$6,601	$11,608
Paternity not established	5,842	NA
Paternity adjudicated	6,658	10,034
Paternity voluntarily acknowledged	7,256	13,739
Paternity established by legitimization	6,062	12,097
Paternity established, method unclear	6,787	12,023
Marital Parents	8,521	17,438

Source: KIDS data system and Unemployment Insurance wage records.

Table 25 shows the receipt of Food Stamps, Medicaid and BadgerCare, and W-2 in year after the child's birth. The use of these three public assistance programs increased among all categories of mothers (compare with Table 17). Nonmarital mothers still received public assistance at higher rates than mothers of marital children (almost 83 percent compared to about 58 percent). Nonmarital mothers whose child

[22]If a parent was reported in KIDS to have had an out-of-state address in the year after the birth of the child, that parent was eliminated from this analysis, since Wisconsin UI wage records report only wages earned in the state.

had not had paternity established received public assistance below the rates shown for other categories of nonmarital mothers, although they were the poorest mothers. This may be because some of these mothers were sanctioned for noncooperation in establishing paternity, or because mothers not receiving public assistance are also not receiving referral, encouragement, or assistance from caseworkers in initiating or completing the paternity establishment process.

Table 25
Percentage of Mothers Receiving Public Assistance in the Year After the Birth of Child

	Percentage Receiving Assistance in at Least One Month			
	Food Stamps	Medicaid/ BadgerCare	W-2	At Least One of Food Stamps, Medicaid, W-2
All Nonmarital Mothers	54.0%	78.7%	32.6%	82.7%
Paternity not established	51.6	60.6	30.9	73.1
Paternity adjudicated	61.6	80.9	40.5	85.1
Paternity voluntarily acknowledged	45.2	84.7	22.8	88.0
Paternity established by legitimization	44.1	89.2	13.3	91.3
Paternity established, method unclear	54.2	83.8	33.9	86.4
Mothers of Marital Children	40.1	61.5	12.5	65.3

Source: KIDS and CARES data systems.

Child Placement

In order to assess child support accurately, it is necessary to know the physical placement of the child. However, there is no physical placement variable available in KIDS. Therefore we use the "court-ordered payee" variable to *assume* physical placement. This variable unfortunately does not allow us to identify shared placement cases, where one parent may be ordered to pay child support to the other parent even though both parents have the child equal or substantial periods of time. Since this is a particular problem in divorce cases, but remains rare in paternity cases, we use the "court-ordered payee" designation as a proxy for custodial or primary parent.

Another problem with identifying the primary parent is the problem of dating events in KIDS. A history of "court-ordered payee" is not maintained in KIDS, and the timing of placement changes is unclear. The physical placement information we present primarily identifies whether the father or another relative was *ever* a primary parent (however temporary) during the life of the child. The remaining cases are defined as those in which the mother of the child appears to be the parent with primary physical placement during the entire life of the child.

Table 26 reveals interesting trends. Fewer marital children are shown to have been living with their mothers during the entire time since birth than children in any nonmarital category, with the exception of method unclear. We know from the WCRD data on Wisconsin divorces that a large percentage of shared placement cases are not represented or identified in KIDS.[23] If there are shared placement cases to be found in the nonmarital caseload (evenly distributed, or disproportionately concentrated), we are not able to identify them in the KIDS data.

Nonmarital children who have not had paternity established appear to be those who most often lived with "others." Some of these children may, in fact, be living with their biological fathers, even though paternity has not been formally established. Legitimized and voluntarily acknowledged children show the lowest rates of placement with fathers or others. Children who have had paternity established through an unclear method are most likely to have lived with their father or with others, indicating that their placement with fathers or others made the definition of paternity establishment unclear.

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[23]See Cancian, Cassetty, Cook, and Meyer (2002).

Table 26
Physical Placement ("Court-Ordered Payee") of Children

	Percentage of Children with Court-Ordered Payee as:		
	Mother, Entire Time	Legal Father, Ever	Other[a], Ever
All Nonmarital Children	92.3%	2.1%	5.6%
Paternity not established	92.1	INAP	7.9
Paternity adjudicated	90.7	3.3	6.0
Paternity voluntarily acknowledged	96.2	1.4	2.4
Paternity established by legitimization	97.0	2.0	1.0
Paternity established, method unclear	87.0	8.2	4.8
Marital Children	88.6	8.2	3.2

Source: KIDS data system.

[a]"Others" are primarily grandmothers and aunts of the children. "Ever" refers to the period from the birth of the child until the KIDS extract in January 2003

Child Support Orders

Table 27 shows the percentage of children who were covered by a child support order at any point from birth to January 2003. The older children, those born in 2000, were the subjects of this analysis, since more time had elapsed during which an order for child support could have been issued.[24] Cases with the highest percentage of orders are the adjudicated paternity cases: 71 percent had a child support order. About 48 percent of the voluntary acknowledgment cases have child support orders. Fifty-nine percent of marital children were covered by child support orders.

We originally thought that this difference in child support orders among nonmarital children might be explained by the high percentage of parents with voluntary acknowledgment who were living together. The second column of the table shows child support orders only for children with parents who were not living together as of January 2003. This column shows an increase in the percentage of cases with orders in all categories, although a wide discrepancy among categories remains. Nearly 75 percent of

[24]A number of children in KIDS cases have other children in the family. In order to identify orders that include children born in 2000, only orders dated on or after six months prior to the birth of the child are included.

adjudicated cases had a child support order, as compared to only 55.5 percent of voluntary paternity acknowledgment cases.

The relatively low rate of orders in marital cases may reflect a fairly recent date of separation or a higher rate of shared physical placement among marital children.

The lower percentage of child support orders among voluntary acknowledgment cases may have several explanations. It may be that many of those with a child support order are misclassified as adjudicated cases. Or it may be that parents in voluntary acknowledgment cases have informal arrangements for child support, or perhaps more sharing of childrearing, reducing the need for a formal child support order. It is also possible that since mothers in voluntary acknowledgment cases are financially better off, some may not wish or require child support. Still another possibility is that the dates associated with addresses in KIDS are incomplete or out-of-date, and that more of these parents are in fact living together than are recorded in KIDS.

Table 27
Percentage of Children Born in 2000 Ever Covered by a Child Support Order

	Child Support Order	
	All Cases	Parents Not Living Together
Nonmarital Children		
Paternity not established	NA	NA
Paternity adjudicated	71.4%	74.5%
Paternity voluntarily acknowledged	48.4	55.5
Paternity established by legitimization	24.4	25.0
Paternity established, method unclear	42.2	46.3
Nonmarital with paternity established	60.6	65.7
Marital Children	59.2	62.9

Source: KIDS data system.

Child Support Payments

Table 28 shows child support payments made in 2002 on behalf of marital children and nonmarital children with paternity established by January 1, 2002. The first column shows the percentage of children covered by a child support order for whom any payments were made in 2002. The highest rates of payments occurred in marital and voluntary acknowledgment cases (about 86 percent). Adjudicated cases had the lowest rate of payment, just over 75 percent. In the second column is the percentage of the child support owed amount that the father actually paid for those fathers with a fixed dollar order. Again we can see that fathers with voluntary paternity pay a higher percentage of their orders (56 per cent) than do adjudicated fathers (44 per cent). The third column shows mean payments across all cases, whether or not an order existed, and the fourth column shows mean payments among cases with an order. The highest payments were made in marital cases with a child support order, partly as a result of the higher incomes of marital fathers and partly as a result of higher orders due to multiple children. The mean payment among nonmarital cases with an order is $1,872. Higher payments occurred in voluntary acknowledgment cases ($2,038) than in adjudicated cases ($1,744), perhaps in part because of the higher incomes of fathers voluntarily acknowledged, shown in Table 24.

Table 28
Child Support Payments in 2002 for Children with Paternity Established Prior to January 2002

	% with Order for whom Any Payment was Made	Payment to Owed Ratio[25]	Mean Payments	
			All Cases	Cases with Order
All Nonmarital with Paternity Established	79.0	48.3	$1,027	$1,872
Paternity adjudicated	75.3	44.0	1,207	1,744
Paternity voluntarily acknowledged	85.7	56.3	860	2,038
Paternity established by legitimization	82.4	45.0	345	1,463
Paternity established, method unclear	78.2	48.5	923	2,239
Marital Children	85.9	58.8	1,713	3,350

Source: KIDS data system.

LATER LIVING ARRANGEMENTS, WAGES, AND CHILD SUPPORT—DESCRIPTIVE WCRD DATA OUTCOMES

Table 29 shows child support, public assistance, and child placement outcomes among WCRD cases. The results are similar to those in the KIDS data. Some differences are due to the differences between the two data sets. Because the WCRD contains only cases which have entered the court system, the level of child support orders in 2002 is much higher than reported in the KIDS data and is similar (about 80 percent) across the two paternity types. Since there is little difference between the two groups in the existence of a child support order, the differences in payment and payment amounts are not substantially affected by the inclusion or exclusion of cases without child support orders. Looking at all cases, regardless of an order, we find that 80 percent of voluntarily acknowledged fathers paid child support in 2002, while only 59 percent of adjudicated fathers did so. Excluding the cases without orders increases these levels to 92 and 72 percent. The percentage of owed amounts which are paid is quite a bit higher for voluntary paternity cases (68 per cent) than for adjudicated cases (46 per cent).

[25] 5.4 per cent of cases with "percentage-expressed" or "hybrid" orders were excluded from this column.

The average annual payment amount was $1,986 for fathers voluntarily acknowledged, but only $1,224 among adjudicated fathers, and $2,244 and $1,497, respectively, among fathers with an order. Examining only fathers who paid at least something, we still find that average annual payment amounts were $400 more among voluntary paternity cases.

As noted earlier, these differences may be an effect of the cooperative nature of the voluntary procedure itself, or they may be accounted for by pre-existing differences in the fathers. We use statistical modeling techniques in the next section to examine these possibilities.

The second panel of Table 29 reveals differences in mother's public assistance participation after the court petition. Participation in all three programs is lower among the voluntary paternity cases.

The WCRD data are important in allowing us to examine child placement arrangements assigned by court order. As stated earlier, previous research has found that child placement with anyone other than the mother is quite rare in Wisconsin paternity cases, and the data here confirm that finding. Even in voluntary paternity cases, where the level of cooperation between the two parents may be higher, 88 percent of the final child placement arrangements are solely with the mother. We do find a statistically significant difference between the two paternity types: 9.4 percent of voluntary acknowledgment cases are shared- or father-physical placement, while only 3.3 percent of adjudicated children are of this form.

Table 29
Outcomes, by Paternity Type, Using the WCRD

	Voluntary Paternity Cases	Adjudicated Paternity Cases
Child Support in 2002		
Any order in year	81.3%	80.9%
Paying any	80.5%	59.3%
Paying any among those with order	92.1%	71.8%
Payment to Owed Ratio	68.2%	45.9%
Mean amount paid	$1,986	$1,224
Mean amount paid among those with order	$2,244	$1,497
Mean amount paid among those with any payment	$2,466	$2,066
Mother's Public Assistance Participation in Year After Petition Date		
W-2	13.7%	33.4%
Food Stamps	41.1	67.3
Medicaid/BadgerCare	61.7	76.8
Physical Placement of child at Final Judgment[a]		
Primary placement with mother	88.4%	93.2%
Shared Placement	7.6	2.3
Primary Placement with father	1.8	1.0
Placement of child with third party	2.2	3.6

Source: WCRD, Cohort 21.
[a]Excludes 33 cases where parents were living together.

MODELING CHILD SUPPORT AND CHILD PLACEMENT OUTCOMES

We have emphasized that although there are fairly sharp differences in later living arrangements and child support outcomes across the various paternity categories, these differences may be related to contrasts in the characteristics of the father rather than to a direct effect of the paternity process itself. In Tables 30 and 31 we show the results of models which examine the relationship between paternity type and the various outcomes, controlling for the demographic and socioeconomic factors reported in previous sections of this paper. We must be cautious in interpreting these results. While we have

controlled for several background factors which may account for the differences between voluntary acknowledgment and adjudicated paternity cases, other factors not controlled for in these models may account for the differences. Only an experimental-control analysis could truly distinguish the effects of the paternity type from the effects of all possible background differences.

Table 30 shows three models of aspects of child support, using data from KIDS. Since the primary topic of interest for this report is the difference between voluntarily acknowledged and adjudicated paternity, we have limited the cases in these models to those two paternity types. In Model 1, we use a probit regression model to estimate the effect of voluntary paternity on whether the child has support ordered, controlling for background characteristics. We find that even controlling for these factors, voluntary acknowledgment cases are still less likely to have an order than are adjudicated cases. This may result from the nature of the voluntary paternity process, which reflects a cooperative relationship between the parents that may imply a private understanding of the father's involvement in the child's upbringing, avoiding the courts.

Model 2 presents a probit regression model to estimate the effect of paternity type on child support payment. This model is limited to those cases which actually had a child support order, since those without would not be payers, by definition. Children with voluntary acknowledgment of paternity have a significantly increased probability of child support payment, even when we control for the facts that voluntarily acknowledged fathers are better off financially than adjudicated fathers, that these mothers are less likely to be on public assistance, and that these children are younger. The model results predict that for a case which was average on all the control characteristics of the model, 82 per cent of those with voluntary paternity would be expected to make a payment on their order, while 77 per cent of those who are adjudicated would make a payment. Again, it may be the nonconfrontational nature of the voluntary process or other parental relationship differences that increases payment likelihood, or there may be other background differences between these groups of fathers that account for this significant difference.

Table 30
Results on Child Support Orders and Payments, Using KIDS

	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
Parameter	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Intercept	-1.7009	0.3127	<.0001	-1.0236	0.5068	0.0434	1689.766	1346.3614	0.2095
Type of Paternity									
Voluntary acknowledgment	-0.5167	0.018	<.0001	0.1795	0.0307	<.0001	-45.858782	50.385737	0.3628
Adjudicated (omitted)	0	0	.	0	0	.	0	.	.
Father is Ever Custodial Parent									
Yes	-0.0449	0.0536	0.4022	-0.0946	0.0787	0.2293	-548.51041	139.8535	<.0001
No	0	0	.	0	0	.	0	.	.
Nonparent ever Custodial Parent									
Yes	0.1127	0.0409	0.0058	-0.271	0.0512	<.0001	-539.17456	109.87741	<.0001
No	0	0	.	0	0	.	0	.	.
Other Children with Same Father									
Yes	1.1285	0.3082	0.0003	1.0197	0.4993	0.0411	276.27793	1335.493	0.8361
No	0	0	.	0	0	.	0	.	.
Any Children with Other Fathers									
Yes	0.2227	0.0679	0.001	-0.0993	0.0817	0.2244	-445.93828	163.52851	0.0064
No	0	0	.	0	0	.	0	.	.
Mother's Race/Ethnicity									
Black	0.0761	0.0257	0.0031	-0.4134	0.035	<.0001	-733.00959	69.359925	<.0001
Hispanic	-0.1842	0.0361	<.0001	-0.1889	0.0569	0.0009	-616.0969	106.58881	<.0001
Native American	-0.0298	0.0576	0.6057	-0.3178	0.0816	<.0001	15.16812	164.72651	0.9266
Asian	-0.7203	0.0937	<.0001	-0.446	0.1835	0.0151	986.03257	337.74434	0.0035
Other, unknown	-0.1076	0.039	0.0058	-0.0127	0.0678	0.8511	-111.4743	106.43561	0.295
White (omitted)	0	0	.	0	0	.	0	.	.

(table continues)

TABLE 30, continued

Parameter	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Age of Mother									
Under 18	0.1713	0.0384	<.0001	-0.0561	0.0542	0.3007	-98.922891	101.61565	0.3303
21–25	-0.117	0.0232	<.0001	-0.0213	0.0349	0.5418	50.399579	63.228388	0.4254
26–30	-0.1962	0.0324	<.0001	0.0522	0.0508	0.3043	154.14162	89.769012	0.086
31–40	-0.121	0.0401	0.0025	0.1037	0.0647	0.1093	705.71042	109.49015	<.0001
Over 40	-0.1664	0.1324	0.2088	-0.0565	0.2201	0.7974	412.65099	374.8215	0.271
18–20 (omitted)	0	0	.	0	0	.	0	.	.
Age of Father									
Under 18	0.0027	0.0471	0.955	0.0349	0.062	0.5733	-425.04052	128.56229	0.0009
21–25	-0.0677	0.0255	0.0079	-0.0108	0.0366	0.7675	-94.195426	68.029782	0.1662
26–30	-0.1015	0.0313	0.0012	0.0236	0.0461	0.6079	-148.54804	85.127194	0.081
31–40	-0.1154	0.0355	0.0011	0.0042	0.0535	0.9373	-171.86379	96.582183	0.0752
Over 40	-0.2127	0.057	0.0002	0.1164	0.0945	0.2182	103.82565	158.23117	0.5117
18–20 (omitted)	0	0	.	0	0	.	0	.	.
Time Period of Child's Birth									
2nd half 2000	-0.0444	0.0239	0.0631	0.0129	0.0353	0.7149	-247.87918	62.140885	<.0001
1st half 2001	-0.1198	0.0242	<.0001	-0.0507	0.0362	0.1615	-491.68757	64.481552	<.0001
2nd half 2001	-0.1986	0.0243	<.0001	-0.1673	0.0364	<.0001	-815.02312	66.470729	<.0001
1st half 2000 (omitted)	0	0	.	0	0	.	0	.	.
Sex of Children									
Girls	0.0131	0.017	0.4436	0.02	0.0257	0.4362	-62.290701	45.984973	0.1756
Unknown	-0.7256	0.1262	<.0001	0.3388	0.3123	0.278	194.54408	412.76496	0.6374
Boys (omitted)	0	0	.	0	0	.	0	.	.

(table continues)

TABLE 30, continued

Parameter	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Parents Cohabiting At Time of Establ.									
Parents living apart	0.7313	0.0241	<.0001	0.1732	0.0471	0.0002	206.97912	81.662109	0.0113
Cohabiting status unknown	0.5964	0.0799	<.0001	0.5503	0.1538	0.0003	-234.37001	229.1146	0.3064
Parents living together (omitted)	0	0	.	0	0	.	0	.	.
Location									
Large urban	0.1921	0.0228	<.0001	0.3116	0.0329	<.0001	468.33522	63.375143	<.0001
Small urban	0.2107	0.0331	<.0001	0.3652	0.0528	<.0001	334.2401	87.766842	0.0001
Rural	0.082	0.0328	0.0125	0.3262	0.0524	<.0001	261.52656	90.591384	0.0039
Milwaukee County	0	0	.	0	0	.	0	.	.
Father's Income									
$0–$5,000	0.2121	0.0262	<.0001	0.2183	0.0349	<.0001	-625.83758	80.551677	<.0001
$5,000–$10,000	0.2424	0.0306	<.0001	0.7395	0.0437	<.0001	-226.34497	86.726858	0.0091
$10,000–$15,000	0.2292	0.0337	<.0001	0.9015	0.0516	<.0001	112.0169	92.642651	0.2266
$15,000–$20,000	0.1936	0.0359	<.0001	0.9631	0.0591	<.0001	603.50672	99.100532	<.0001
$20,000–$25,000	0.1446	0.04	0.0003	1.2448	0.0777	<.0001	846.33426	108.50941	<.0001
Over $25,000	0.1712	0.0343	<.0001	1.3463	0.0668	<.0001	2225.9948	94.381169	<.0001
No SSN	-0.5358	0.0593	<.0001	-0.1937	0.1035	0.0613	102.39642	257.5635	0.691
No UI Income (omitted)	0	0	.	0	0	.	0	.	.

(table continues)

TABLE 30, continued

Parameter	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Mother's Income									
$0–$5,000	0.1828	0.0275	<.0001	0.0816	0.0402	0.0422	41.307906	81.729318	0.6133
$5,000–$10,000	0.2752	0.0313	<.0001	0.1233	0.0467	0.0082	166.53777	89.543075	0.0629
$10,000–$15,000	0.2832	0.0346	<.0001	0.1644	0.0546	0.0026	27.878567	97.759641	0.7755
$15,000–$20,000	0.3911	0.0399	<.0001	0.0787	0.063	0.2112	120.57431	109.89935	0.2726
$20,000–$25,000	0.4811	0.051	<.0001	0.0259	0.0829	0.7547	368.27611	134.61414	0.0062
Over $25,000	0.5635	0.0619	<.0001	0.1861	0.1012	0.0659	706.24587	155.22182	<.0001
No SSN	0.0285	0.1234	0.8172	0.4756	0.1726	0.0059	316.51914	407.69526	0.4376
No UI Income (omitted)	0	0	.	0	0	.	0	.	.
Mother on Food Stamps Year Before									
Yes	0.2755	0.0228	<.0001	-0.1645	0.0345	<.0001	-84.367799	61.283228	0.1686
No SSN	-0.1173	0.1094	0.2836	-0.3836	0.143	0.0073	-45.856539	359.36413	0.8985
No	0	0	.	0	0	.	0	.	.
Mother on W-2 Year Before									
Yes	0.1626	0.0312	<.0001	-0.1011	0.0399	0.0113	117.50829	85.084338	0.1673
No SSN	0	0	.	0	0	.	0	.	.
No	0	0	.	0	0	.	0	.	.
Mother on Medicaid/BadgerCare Year Before									
Yes	-0.0851	0.0236	0.0003	0.0134	0.0374	0.7212	14.035289	63.299655	0.8245
No SSN	0	0	.	0	0	.	0	.	.
No	0	0	.	0	0	.	0	.	.

Source: KIDS data system.

Model 3 uses an ordinary least squares linear regression model of the amount of child support paid by those who made any payment. We find no significant effect of voluntary paternity on payment amounts above and beyond the effect on whether a payment is made. Any effect of voluntary paternity acknowledgment appears to occur in the initial decision to cooperate with the system rather that the level of support that is paid. If we look at payment amounts for all cases with an order, regardless of whether they make a payment , an average case that had voluntary paternity would be expected to pay $1582 while those with adjudicated paternity would pay $1544. This difference is also not significant.

Although our primary concern in this report has been the relationship between paternity type and child support outcomes, we want to note other relationships evidenced in these models. The models show results similar to those in previous child support research, which has found that child support is positively associated with higher incomes, living outside of Milwaukee, and is higher among whites (compared to blacks and Hispanics). On the other hand, we find that when the child is not living with the mother and when the child is younger, child support is less likely and smaller in amount.

Table 31 presents similar models of child support payments and amounts, using data from the WCRD. We find a pattern similar to that shown in the KIDS data. When we control for the background characteristics we find that voluntary paternity cases are associated with a lower likelihood of having a child support order, a higher likelihood of payment (when an order exists), and no significant difference in the amount paid (when any is paid). The higher likelihood of payment raises the likelihood of payment for a case that is otherwise average in all characteristics from 84 per cent for an adjudicated case to 87 per cent for a voluntary paternity case. It is somewhat surprising that voluntary paternity is associated with a lower likelihood of a child support obligation in the WCRD, given that when we used this data set to look at the one-to-one relationship between paternity type and child support orders using this data (see Table 29), we found no relationship. Controlling for differing characteristics between the two paternity types reveals a significant relationship that was obscured in the simple descriptive analysis. The explanation we offered for this relationship in the KIDS data (i.e., that voluntary paternity may be associated with private

Table 31
Results on Child Support Orders and Payments: WCRD Date

	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
Parameter	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Intercept	0.7633	0.0884	<.0001	0.4686	0.1013	<.0001	1389.75	269.6131	<.0001
Type of Paternity									
Voluntary acknowledgment	-0.1816	0.0631	0.004	0.2334	0.0883	0.0082	66.22157	180.5938	0.714
Adjudicated (omitted)	0	0	.	0	0	.	0	.	.
Other Children With Same Father									
Yes	0.0042	0.1525	0.9781	1.0782	0.2456	<.0001	1041.372	426.9023	0.015
No	0	0	.	0	0	.	0	.	.
Any Children with Other Fathers									
Yes	0.7564	0.0658	<.0001	0.4789	0.0658	<.0001	-245.622	191.2221	0.1995
No	0	0	.	0	0	.	0	.	.
Age of Youngest Child									
1	-0.4354	0.0579	<.0001	-0.2998	0.0726	<.0001	301.4357	218.2881	0.1679
2	-0.1332	0.0805	0.0979	-0.3091	0.0843	0.0002	-893.782	254.4227	0.0005
3–5	-0.2751	0.0669	<.0001	0.5747	0.0941	<.0001	-376.046	206.587	0.0693
6–8	-0.3281	0.1063	0.002	0.5258	0.1454	0.0003	637.5607	350.0326	0.0691
9–11	-0.687	0.1129	<.0001	0.1177	0.1645	0.4743	-1615.06	508.0492	0.0016
12–14	-0.5679	0.1026	<.0001	-1.3007	0.1325	<.0001	-823.933	382.2165	0.0315
15–18	0.2945	0.1421	0.0382	0.7689	0.2097	0.0002	1040.685	333.6753	0.0019
Missing	0.631	0.1348	<.0001	-1.2643	0.1211	<.0001	-324.521	338.7705	0.3385
Less than 1 (omitted)	0	0	.	0	0	.	0	.	.

(table continues)

Table 31, continued

	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
Parameter	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Mother's Age									
<20	-0.0454	0.0555	0.4136	-0.0105	0.0621	0.8662	-241.43	173.8591	0.1655
25–29	0.1904	0.0732	0.0093	-0.2847	0.086	0.0009	-422.726	221.6551	0.057
30–39	-0.7834	0.0763	<.0001	-0.0803	0.1178	0.4956	170.2148	264.2866	0.5198
40+	6.1914	2199.61	0.9978	-2.2712	0.2494	<.0001	1631.624	1129.123	0.149
Missing	-0.189	0.0859	0.0277	-0.1482	0.118	0.2093	145.1004	289.6539	0.6166
20–24 (omitted)	0	0	.	0	0	.	0	.	.
Father's Age									
<20	0.4876	0.0633	<.0001	-0.6293	0.068	<.0001	-187.495	192.581	0.3307
25–29	0.1221	0.0578	0.0347	-0.4412	0.0661	<.0001	132.95	177.0855	0.4531
30–39	-0.3503	0.0672	<.0001	-0.0669	0.0891	0.4523	196.7348	236.027	0.4049
40+	-0.0211	0.1195	0.8598	-0.3037	0.1838	0.0983	-300.35	426.6146	0.4817
Missing	-0.1851	0.1467	0.207	5.6828	2392.648	0.9981	305.3644	488.6475	0.5323
20–24 (omitted)	0	0	.	0	0	.	0	.	.
Sex of Youngest Child									
Male	-0.3275	0.0441	<.0001	0.0148	0.0524	0.778	-198.493	135.0825	0.1423
Missing	0.1509	0.0843	0.0736	-0.3736	0.0907	<.0001	-378.937	301.7438	0.2097
Female (omitted)	0	0	.	0	0	.	0	.	.
Location									
Large urban	0.1364	0.0565	0.0158	0.614	0.0693	<.0001	233.4355	176.0823	0.1855
Small urban	0.7638	0.1375	<.0001	0.3648	0.1323	0.0058	331.7549	287.3843	0.2488
Rural	-0.0045	0.1102	0.9675	0.8808	0.1895	<.0001	408.0617	330.427	0.2174
Milwaukee County (omitted)	0	0	.	0	0	.	0	.	.

(table continues)

Table 31, continued

Parameter	Model 1: Having a Child Support Order			Model 2: Making a Payment (for those with an order)			Model 3: Amount of Payment (for those paying any)		
	Est.	s.e.	P	Est.	s.e.	P	Est.	s.e.	P
Earnings in Previous Year									
$0–$5,000	0.0055	0.0512	0.9145	0.142	0.0562	0.0115	-180	197.075	0.3615
$5,000–$10,000	0.329	0.0859	0.0001	1.6826	0.1179	<.0001	313.6253	237.9192	0.188
$10,000–$15,000	0.2361	0.0817	0.0039	1.5068	0.134	<.0001	400.6595	246.4801	0.1046
$15,000–$20,000	0.6573	0.1007	<.0001	2.3072	0.1793	<.0001	552.5226	242.0861	0.0229
$20,000+	0.3456	0.0677	<.0001	1.3351	0.0893	<.0001	1861.437	201.608	<.0001
$0 (omitted)	0	0	.	0	0	.	0	.	.
Mother's Earnings in Previous Year									
$0–$5,000	-0.0553	0.0612	0.3658	-0.1219	0.0707	0.0846	322.8848	207.9777	0.1211
$5,000–$10,000	0.2301	0.0743	0.0019	-0.1022	0.0848	0.2282	-267.992	236.357	0.2574
$10,000–$15,000	0.3614	0.0841	<.0001	-0.0466	0.0934	0.6182	834.3143	243.5542	0.0007
$15,000–$20,000	0.6923	0.0926	<.0001	0.39	0.105	0.0002	753.4858	257.0064	0.0035
$20,000+	0.3143	0.0839	0.0002	0.599	0.1166	<.0001	1209.584	263.99	<.0001
$0 (omitted)	0	0	.	0	0	.	0	.	.
Food Stamps in Any Previous Year									
Yes	0.0764	0.0534	0.1521	0.1758	0.0666	0.0083	-23.2055	167.5218	0.8899
No	0	0	.	0	0	.	0	.	.
W-2 in Any Previous Year									
Yes	-0.1035	0.0552	0.0608	-0.4939	0.0666	<.0001	-243.307	187.3896	0.1947
No	0	0	.	0	0	.	0	.	.
Medicaid/BadgerCare in Any Previous Year									
Yes	0.089	0.0573	0.1199	-0.1103	0.075	0.1415	39.31228	184.13	0.831
No	0	0	.	0	0	.	0	.	.

Source: WCRD, Cohort 21.

cooperative agreements concerning the father's responsibility) does not appear to apply here, since all of these cases have already entered the court system for purposes of a child support, medical support, or child placement order.

Other effects in the model are generally in the directions expected, although fewer are significant, owing to the smaller size of the WCRD sample. Fathers' earnings in the previous year show a positive relationship with all three child support outcomes, and, the greater the number of children the mother has, the greater is the likelihood of an order and a payment. Payments are more likely in all areas outside Milwaukee, but only the small urban areas have a significantly higher likelihood of orders than does Milwaukee. Older mothers appear less likely to receive an order.

The main advantage of the using the WCRD is that it contains information on child placement outcomes. Table 32 presents the results from a model which predicts the likelihood that child placement is shared or solely with the father (as opposed to being solely with the mother).[26] Even though shared- and father-primary placement cases are few, voluntary paternity acknowledgment cases are significantly more likely to have father involvement, primarily as shared placement, even when we control for other characteristics associated with voluntary acknowledgment.[27] Other characteristics related to the child's placement with the father (sole father or shared) include older children, higher fathers' earnings and being outside Milwaukee. Lower rates of shared or father placement are found in cases with higher mothers' income and mothers' participation in Medicaid or BadgerCare.

CONCLUSION

Examining differences in child support and placement outcomes between cases where paternity was voluntarily acknowledged and cases where paternity was adjudicated is complicated

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[26]Cases in which the child is placed with a third party are excluded.

[27]Father sole placement is rare compared to shared placement (see Table 29), so this finding is driven almost entirely by the greater likelihood of shared placement among voluntary paternity cases. A model comparing shared with mother-sole placement excluding father-sole cases, found very similar results.

Table 32
Results on Shared or Father-Only Child Placement: WCRD Data

	Model: Shared or Sole-Father Placement		
Parameter	Estimate	SE	Pr > ChiSq
Intercept	-4.2209	0.357	<.0001
Type of Paternity			
Voluntary acknowledgment	0.6719	0.1144	<.0001
Adjudicated (omitted)	0	0	.
Other Children With Same Father			
Yes	-0.5181	0.339	0.1264
No	0	0	.
Any Children with Other Fathers			
Yes	1.226	0.2657	<.0001
No	0	0	.
Age of Youngest Child			
1	0.4853	0.1534	0.0016
2	0.8773	0.169	<.0001
3–5	0.6272	0.1865	0.0008
6–8	0.5678	0.2589	0.0283
9—18	0.7836	0.2301	0.0007
Missing	1.5544	0.1859	<.0001
Less than 1 (omitted)	0	0	.
Mother's Age			
<20	-0.7624	0.1544	<.0001
25–29	-0.4871	0.2058	0.0179
30+	-0.5278	0.2219	0.0174
Missing	-0.3376	0.1555	0.0299
20–24 (omitted)	0	0	.
Father's Age			
<20	0.4411	0.159	0.0055
25–29	0.468	0.1446	0.0012
30–39	0.1091	0.2059	0.596
40+	0.2564	0.3178	0.4198
Missing	0.7154	0.2065	0.0005
20–24 (omitted)	0	0	.

(table continues)

Table 32, continued

Parameter	Model: Shared or Father Primary Placement		
	Estimate	SE	Pr > ChiSq
Sex of Youngest Child			
Male	-0.0397	0.1025	0.6984
Missing	0.3481	0.2347	0.1379
Female (omitted)	0	0	.
Location			
Large urban	1.9311	0.277	<.0001
Small urban	2.0156	0.3063	<.0001
Rural	2.1826	0.3134	<.0001
Milwaukee County (omitted)	0	0	.
Earnings in Previous Year			
$0–$5,000	0.6781	0.1847	0.0002
$5,000–$10,000	0.6708	0.1973	0.0007
$10,000–$15,000	0.767	0.2247	0.0006
$15,000–$20,000	0.0772	0.2614	0.7677
$20,000+	0.813	0.1727	<.0001
$0 (omitted)	0	0	.
Mother's Earnings in Previous Year			
$0–$5,000	0.0272	0.1494	0.8558
$5,000–$10,000	-0.3192	0.1771	0.0714
$10,000–$15,000	-0.7199	0.22	0.0011
$15,000–$20,000	-0.7395	0.2348	0.0016
$20,000+	-0.6076	0.2087	0.0036
$0 (omitted)	0	0	.
Food Stamps in Any Previous Year			
Yes	-0.2469	0.1404	0.0786
No	0	0	.
W-2 in Any Previous Year			
Yes	0.0326	0.1516	0.8299
No	0	0	.
Medicaid/BadgerCare in Any Previous Year			
Yes	-0.2754	0.1375	0.0452
No	0	0	.

Source: WCRD, Cohort 21.

by the fact that the two groups of fathers are different in other relevant ways. Without controlling for other differences we found that adjudicated fathers paid $150 more per year in child support than did voluntarily acknowledged fathers, but this finding did not take into account that a much lower percentage of voluntary paternity cases have a child support order (owing in part to the higher likelihood of voluntary paternity fathers living with the mother). When we limit our analysis to just fathers who have orders, we find the voluntary paternity fathers are 10 percentage points more likely to pay, and they pay about $250 more per year than do adjudicated fathers.

Differences in the likelihood of having an order are not the only distinctions between voluntary and adjudicated cases that require consideration. Voluntary cases tend to be better off in a number of ways, with paternity establishment at an earlier age for the child, fewer children overall, higher earnings, and less participation in public assistance programs. We used multivariate models to control for the differences in background characteristics. With the controls, voluntary paternity acknowledgment cases as compared to adjudicated cases are associated with a lower incidence of child support orders, a higher likelihood of payment when an order exists, no significant difference in the level of payment when any is paid, and a greater likelihood of shared child placement. Cases at the average in all other characteristics have a 77 percent probability of paying child support if paternity was adjudicated and an 82 percent probability of paying child support if paternity was voluntary.

Since our analysis could not use an experimental design, we cannot attribute a causal relationship between voluntary paternity and higher incidence of payment. It is likely that there are unmeasured differences between voluntary and adjudicated paternity cases perhaps reflecting the nature of the relationship between the two parents, that affect the likelihood of paying child support. Still, it is encouraging to note that the relationship between voluntary paternity and the probability of child support payment is maintained after controlling for a long list of known differences between the paternity types.

FUTURE RESEARCH

One shortcoming of the present report is that we are only observing children who have entered the child support system in some way (by being entered into the KIDS system or by having a court case started). We do not observe children who have voluntary paternity acknowledged but have no other contact with the child support system. Ideally we would be able to start with a sample taken from the population of all nonmarital children born in the state in a certain time period and follow their subsequent paternity establishment and child support history. In future research we would like to start with a sample of birth records collected from vital statistics, although we have not yet been able to gain access to these records. These records would allow us to select cases from the full population of nonmarital children.

Another advantage of the vital statistics records would be to provide an additional source of information as to whether a voluntary paternity acknowledgment was made for this particular child. As discussed in this report, determining whether paternity was voluntarily acknowledged in the current KIDS system is neither straightforward nor error free. One recommendation we might make to improve the accuracy of future research on this topic would be to improve the indicators in the KIDS system that identify the method of paternity establishment.

The most important factor in determining the relationship between voluntary paternity acknowledgment and child support payments is controlling for the background characteristics that affect both the likelihood of acknowledging paternity and the likelihood of paying child support. Although we have used the information on parents available to us in the current data, there are additional factors which may explain these relationships and which are not observed, and therefore cannot be included in the models. An experimental analysis would solve this problem, but such an analysis is unlikely, since it would require preventing some couples from choosing voluntary paternity. One answer might be to use information about differences between counties or individual hospitals in the degree to which voluntary acknowledgment is marketed to unwed parents to control for additional differences. This is another possible route for future research.

Finally, it would be of interest to do longer and more in-depth tracking of child support and other outcomes to see if the differences observed here persist over time or extend to other outcomes. One possibility would be to conduct interviews with voluntary and adjudicated parents in order to measure such other outcomes as subsequent cohabitation and marriage, contact with child, or informal support arrangements.

Appendix A

Three variables from two different DB2 tables in KIDS are used to determine whether a case involves divorce, paternity adjudication, or proceedings involving voluntary paternity acknowledgment cases.

The KIDS DB2 table, TEVENT, contains information about case events, including paternity events and establishment codes. The variable CD_EVT_TYPE indicates which type of event occurred and CD_DISPTN_EVT indicates the final result of this event. We extract all paternity related events and dispositions from TEVENT for a relevant case. This includes paternity interviews and hearings, document information such as summons and petitions, judgments, filings of PATH forms or rescissions, and genetic tests (PEST, ATPI, ATEP, ATPF, HESP, HEPT, PATH, RFPE, QFPA, BTRS, RCND, and any PE** code), as well as any paternity related dispositions which tell whether paternity was established or excluded (PSCB, PSAB, PSAC, PSUP, PHIO, PENF, PANC, PACC, PBRT, PCOS, PLEG, PAEJ, EXCL, EXOF, EXBT, EXJD, CPAT, RCND and DEFT).

Another important paternity establishment variable is CD_PAR_DISPTN_PF on the KIDS table, TPART_CASE. The codes in this variable indicate the result of the paternity action against the potential father on the case. The values in this variable are the same as the disposition paternity-relevant event codes listed above.

In general, these two variables, CD_DISPTN_EVT and CD_PAR_DISPTN_PF, when paternity-relevant, do not conflict. Eighteen percent of the time, one or the other contains a missing value. Seventy-six percent of the time they are identical values and only 6 percent of the time are they non-matching. If the data is delimited to only including paternity disposition-relevant observations, those that do not match drops to only 3 percent.

Determining Whether a Voluntary Agreement is Involved or Not:

Specifically, if CD_EVT_TYPE contains the code 'PATH' (Paternity Acknowledgment Through Hospitals) and CD_DISPTN_EVT equals 'PAFI' (Paternity Acknowledgment Filed, as opposed to 'PANF', Paternity Acknowledgment Not Filed), and there is only one child on the KIDS case, or the date of the PATH event is less than one month before, or less than two years after the birth of the child, then we define the observation as a Voluntary Paternity Acknowledgment event.

Then, CD_PAR_DISPTN_PF values are examined. If CD_PAR_DISPTN_PF contains the code 'PAEJ' and there is only one child on the KIDS case, or the date of the event is less than one month before, or less than two years after the birth of the child, then we define the observation as a Voluntary Paternity Acknowledgment event.

Alternatively, if CD_PAR_DISPTN_PF contains the code 'PLEG' and there is only one child on the KIDS case, or the date of the event is less than one month before, or less than two years after the birth of the child, then we define the observation as a Voluntary Paternity Acknowledgment event.

Finally, if CD_PAR_DISPTN_PF contains the code 'PACC' and there is a court case number assigned to it that does not contain a 'PA' value, and there is only one child on the KIDS case, or the date of the event is less than one month before, or less than two years after the birth of the child, then we define the observation as a Voluntary Paternity Acknowledgment event. With a 'PA' or missing court case value, we define the 'PACC' event as undeterminable in terms of whether a voluntary or adjudication method was involved.

The same sequence in logic is then applied to the CD_EVT_TYPE variable for the 'PAEJ', 'PLEG', and 'PACC' values.

If CD_EVT_TYPE or CD_PAR_DISPTN_PF contains the code 'RCND' and the date associated with either of these variables follows the birth of the child, we still define the case as Voluntary Paternity Acknowledgment, however, a rescission code is created and a date is associated with it.

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