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# Work, welfare, and young children's health and behavior in the Fragile Families and Child Wellbeing Study

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## Abstract

Using data from the Fragile Families and Child Wellbeing Study, we investigate the effects of welfare receipt and employment on the health and behavioral outcomes of 3-year-old children whose mothers received welfare during the course of the child's life. Employed mothers who are no longer receiving welfare report better health and behavioral outcomes for their children; however, OLS and instrumental variable analyses suggest that these advantages are largely explained by the characteristics of mothers who make a successful transition to employment, rather than by work per se. Children of mothers who had left welfare but were not currently employed had similar behavioral outcomes to children of mothers on welfare, but the latter were more likely to be in poor health.

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## 1. Introduction

The primary goal of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 was to transition mothers from welfare dependence toward employment; an implicit assumption of the policy-makers was that this transition would increase maternal resources and thus improve children's well-being. PRWORA ended poor mothers' long-standing entitlement to welfare benefits under the Aid to Families with Dependent Children (AFDC) program, which critics argued discouraged employment (Mead, 1992), encouraged nonmarital childbearing (Murray, 1984), and generally provided a disservice to the mothers and children it served. AFDC was replaced by the Temporary Assistance for Needy Families (TANF) program,

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which mandates that mothers meet work requirements in order to receive benefits and limits lifetime welfare benefits to a maximum of five years.

Employment, supporters argue, provides a family with a regular schedule, gives the child a positive role model of a working parent, enhances the mother's self-esteem and motivation, and increases the family's income. Each of these factors should, in turn, promote better parenting behaviors and improve children's health and behavior.

Opponents of strict work requirements under TANF had less sanguine predictions as to how maternal employment, particularly low-wage, unstable employment, would affect parenting and child well-being. Low-wage, unstable employment may not significantly increase a mother's resources and may introduce higher levels of stress into the household as the mother attempts to balance caring for her children with many more competing responsibilities. Thus maternal and child well-being may diminish as a result (Duncan & Brooks-Gunn, 2000).

The consequences of welfare for employment and earnings have been well studied (see the introductory chapter in this volume). The welfare rolls declined precipitously and most of the women leaving welfare found employment, even though the majority entered low-paying and unstable jobs (Johnson & Corcoran, 2003; Pavetti & Acs, 2001; Zedlewski, 2002), and many left the rolls without employment. By contrast, fewer welfare studies have focused on the well-being of very young children despite the fact that over two-thirds of welfare recipients are children and improving child well-being was a major motivation for reform (U.S. H.R. 3734, 1996, Sec. 101).

The existing studies of the effects on children of leaving welfare for employment generally conclude that children of employed mothers compared with welfare mothers have similar or somewhat better outcomes (Morris, Huston, Duncan, Crosby, & Bos, 2001; Zaslow et al., 2002). These effects are largely explained by the antecedent characteristics of mothers who leave welfare for work and by increases in their household incomes resulting primarily from policies that enhance earnings disregards and provide income supplements (Dunifon, Kalil, & Danziger, 2003; Kalil, Dunifon, & Danziger, 2001; Morris, Gennetian, & Duncan, 2005). Indeed, maternal employment is not associated with better outcomes for children unless the mother's income increases (Gennetian & Miller, 2002; Morris et al., 2001).

Further analyses of the effects of welfare and employment on child well-being are needed, however, before a consensus can be formed. Welfare regimes vary widely across states, and maternal employment is sensitive to changes in the economy; thus the effects of welfare on children may vary across states and over time. Few studies have examined how welfare mothers and their children have fared since the economic downturn of 2000, particularly those mothers who left welfare without stable employment. Furthermore, most of the experimental research is based on programs that predate PRWORA. The effects of employment may also differ by the age of the child, and little research has been conducted on infants and toddlers (Duncan & Chase-Lansdale, 2001; Morris et al., 2001).

In this analysis, we use data from the Fragile Families and Child Wellbeing Study (Fragile Families Study), a survey of primarily unmarried, low-income mothers who live in 20 large cities across the United States, to examine the health and emotional behavior of 3-year-old children. We limit the sample to mothers who received welfare over the course of their child's life and compare child outcomes across three groups of mothers: those who currently receive welfare, those who have moved off welfare into employment following their child's birth, and those who no longer receive welfare but do not work. Specifically, we investigate whether children of mothers who have left welfare for employment have better health and behavioral outcomes at age 3 compared with children of mothers who remain on welfare or who do not work. It is unclear whether the benefits of employment will outweigh the potential costs to welfare mothers who face many

barriers to employment (Danziger et al., 2000) and who generally participate in low-wage employment (Johnson & Corcoran, 2003; Pavetti & Acs, 2001; Zedlewski, 2002). However, based on the existing research on slightly older children, we anticipate that children of mothers who make the transition from welfare to work will have better health and behavioral outcomes at age 3. We examine several possible mechanisms through which employment may affect child well-being, including household income, maternal depression, and maternal stress.

Although we control for several antecedent characteristics of the mother that may be correlated with welfare receipt, employment, and child well-being, the risk remains that we have not accounted for some unmeasured or unobserved characteristics that are driving the observed associations. To this end, we use instrumental variable models to limit selection bias. Because the Fragile Families Study includes women from 20 cities across 15 states, the data provide a somewhat unique opportunity to employ state-level policies as instruments for welfare receipt and employment.

## 2. Theoretical perspectives

Whether moving from welfare to work improves child well-being is thought to depend on several factors, including changes in economic resources that result from work versus welfare and the effect that employment has on the mother's psychological functioning. To the extent that income and psychological health increase as a result of work, the mother's interaction with her child and the child's well-being should improve as well (McLoyd, 1990). If income does not increase and employment results in maternal psychological distress, then the quality of mother–child interaction may deteriorate along with the child's well-being (Duncan & Brooks-Gunn, 2000).

With regard to economic resources, family income is an important predictor of child well-being. Children who live in poverty, particularly at very young ages, are at elevated risk for a host of negative outcomes, with both short-term and long-term consequences (Duncan & Brooks-Gunn, 2000). Poverty affects child well-being through the limited material resources available to the child, as well as through the deficits poverty imposes on the mother's emotional well-being, which affects the mother–child interaction (McLoyd, 1990). Maternal employment is generally associated with higher levels of income than mothers receive on welfare (Gennetian & Miller, 2002), but the employment trajectories of former welfare recipients may be unstable, income may not be steady, and it may not be enough to cover the increased expenses associated with work or enough to offset the loss of welfare benefits (Cancian, Haveman, Meyer, & Wolfe, 2002; Hennessy, 2005; Turner, Danziger, & Seefeldt, 2006). Thus, slight increases in household income associated with maternal employment following welfare receipt may not substantially advance the mother's economic resources nor improve the child's well-being.

With regard to psychological functioning, high levels of maternal stress and depression dampen a mother's ability to care and provide for her child and thus may lead to lower levels of child well-being (McLoyd, 1990). Maternal employment is generally associated with lower levels of maternal stress and depression (Chase-Lansdale & Pittman, 2002; Dunifon et al., 2003), but this finding is more likely to be true if the mother's job encourages independence and self-sufficiency (Moore & Driscoll, 1997; Parcel & Meneghan, 1997). Women moving from welfare into work are those least likely to move into jobs that promote autonomy, and thus employment for these women may not be associated with better emotional well-being. In fact, employment in low-wage, menial work may diminish a mother's self-esteem. In addition, maternal employment may impose serious strains on the mother as she attempts to balance work and family responsibilities with limited resources (Marshall & Barnett, 1991).

The above theoretical framework suggests that employment has a causal effect on children's well-being through improving mothers' economic and psychological resources. However, it is likely that mothers who are capable of transitioning from welfare to work have certain positive characteristics that are also associated with better child outcomes; thus the benefits associated with work may be due to selection, rather than to work per se. Several studies have identified barriers that make it difficult to transition from welfare to work. These factors need to be included in analyses examining the effect on child outcomes of leaving welfare for employment; they include lack of a partner in the household, persistent maternal and child health problems, substance abuse, domestic violence, low levels of education, and parity (Danziger et al., 2000; Danziger & Seefeldt, 2002; Nam, 2005; Seefeldt & Orzol, 2005).

### 3. Previous research

Research has increasingly focused on understanding how children have fared as a result of welfare reform. This research is based on the random-assignment welfare programs that began prior to the implementation of PRWORA, as well as on observational studies, such as those discussed in the first chapter of this volume. Overall, the empirical research finds that maternal employment among former welfare recipients is not harmful to younger children (Chase-Lansdale et al., 2003) and is beneficial in some cases, as long as employment is associated with concomitant increases in income (Gennetian & Miller, 2002; Morris et al., 2001; Zaslow et al., 2002). The results differ somewhat based on the age of the child (Morris, Duncan, & Clark-Kauffman, 2005), with more positive results for younger children, and neutral or slightly negative results for older children, and the intensity of the effect seems to differ across child outcomes, as discussed below (Duncan & Chase-Lansdale, 2001; Morris et al., 2001).

Findings from the experimental studies generally show that, for adolescents, maternal employment is associated with poorer academic achievement (Gennetian et al., 2004) and more behavioral problems (Lohman, Pittman, Coley, & Chase-Lansdale, 2004) (although see Chase-Lansdale et al., 2003 for non-experimental findings related to improvements in adolescent mental health), perhaps because of reduced monitoring and supervision (Duncan & Chase-Lansdale, 2001; Morris et al., 2001) and adolescents taking on more adult roles such as sibling care (Gennetian et al., 2004).

By contrast, for younger children, particularly those transitioning to middle childhood (Morris et al., 2005), maternal employment is associated with increased academic achievement and fewer behavioral problems (Duncan & Chase-Lansdale, 2001; Gennetian & Miller, 2002; Huston et al., 2001), but the effects are generally modest (Morris et al., 2001) and these children continue to lag behind national norms for child development (Zaslow et al., 2002). The effects on children's health are minimal at all ages (Morris et al., 2001). An important note is that the employment effects on young child well-being are the result of increases in income from policies that granted enhanced earnings disregards and income supplements, rather than employment and earnings per se. Higher levels of income seem to drive the increases in child outcomes (Gennetian & Miller, 2002; Morris et al., 2001) because mothers use this income to exercise better child care arrangements for their children (Chase-Lansdale & Pittman, 2002; Huston et al., 2001). As mothers leave welfare programs that enhance their earnings, the positive effects of employment on child behavior seem to dissipate over time (Huston et al., 2005).

These studies are important because they demonstrate a causal link between leaving welfare for work and better outcomes for young children, as long as policies ensure that income increases as a result of employment. A limitation of these studies is that most of the experimental programs

predated actual welfare reform and the downturn in the economy (Morris et al., 2001) and thus the results are difficult to generalize to current welfare climates. In addition, the majority of these studies focused on the health, behavioral, and academic outcomes of older children (ages 6 to 9) and adolescents, with little research focused on children ages 0 to 3 (Duncan & Chase-Lansdale, 2001; Morris et al., 2001). The 0 to 3 period is a critical developmental stage, and outcomes at age 3 are highly predictive of subsequent development (McLeod & Kaiser, 2004). Outcomes for the very youngest of children may differ from those of slightly older children because infants and toddlers are more sensitive to their home environment and maternal interactions (Morris et al., 2005).

The studies based on observational data delve more deeply into the nature of maternal employment and its effects on children, exploring such facets as transitions into and out of employment, the number of months and hours worked, and working nonstandard work hours. These studies generally find that children of mothers who transition from welfare to employment, or who combine welfare and work (Dunifon et al., 2003; Smith, Brooks-Gunn, Klebanov, & Lee, 2000), have slightly better outcomes than children who remain on welfare, but that having a lengthy commute (Dunifon, Kalil, & Bajracharya, 2005) and making several transitions into and out of employment from welfare (Kalil et al., 2001) are negatively associated with children's behavior. The characteristics of the mothers who leave welfare for employment largely account for differences in child outcomes, but it is difficult to determine if these characteristics are the cause or result of employment (Chase-Lansdale et al., 2003) because of the non-experimental nature of the studies. Several welfare studies have attempted to correct for selection bias by employing fixed-effects (Dunifon et al., 2003; Kalil et al. 2001), and instrumental variable models (as we do in this analysis) (Currie & Cole, 1993; Levine & Zimmerman, 2005), but the problem of selection bias is inevitable in any observational study.

Our study contributes to this emerging body of research by (1) focusing on the health and behavior of 3-year-old children, an age group for which fewer data have been previously available, (2) examining child well-being early in the 2000s, during a time when the economy was less robust than in the late 1990s, (3) examining the well-being of children whose mothers have left welfare but are not employed, and (4) employing instrumental variable techniques, in addition to OLS methods, to account for selection bias into employment.

## 4. Method

### 4.1. Data

We use data from the Fragile Families Study to examine the effects of welfare and employment on 3-year-old children's health and behavioral outcomes. The Fragile Families Study follows a cohort of nearly 5000 children born in 20 large urban areas between 1998 and 2000. Because the design includes an oversample of nonmarital births, these data provide extensive information on the population of women who were most likely to be affected by PRWORA — low-income, unmarried mothers. The 20 cities (in 15 states) in the Fragile Families sample were drawn via a stratified random sample designed to capture the extremes of welfare and child support policies and labor market conditions (see Reichman, Teitler, Garfinkel, & McLanahan, 2001 for more detail on the study design).

Mothers were interviewed in the hospital around the time of the focal child's birth, with follow-up interviews occurring around the child's first and third birthdays. At baseline, the Fragile Families sample included 1186 married mothers and 3712 unmarried mothers whose

response rates were 82% and 87%, respectively. Child outcomes are measured at the 3-year follow-up in a supplement to the core survey. We exclude from our sample mothers who did not respond to the 3-year core survey ( $n=667$ ) and mothers who did not respond to the 3-year child supplement ( $n=914$ ).

We also exclude 1932 mothers who did not receive welfare during the course of the focal child's life, because we are particularly interested in the effects on child outcomes of employment following welfare receipt. Only 63 mothers who were married at their child's birth received welfare over the course of their child's life, and thus married mothers represent over half of the 1932 mothers who are excluded based on this criterion. We also drop from the sample 80 mothers who are immigrants because the Fragile Families Study does not have data on immigrants' legal status, and PRWORA limits legal immigrants' participation in Medicaid and TANF, with rules applied differentially to legal immigrants depending on date of arrival. Finally, we drop 29 cases that are missing data on one of our key measures, resulting in a final sample of 1276 mothers. We used a hotdecking procedure to impute a small amount of missing data ( $n=161$ ) for mothers missing information on household income, parenting stress, or child temperament.

#### 4.2. Outcome measures

We examine three outcomes of child emotional and behavioral problems at age 3: aggressive, withdrawn, and anxious/depressive behavior. The scale items for the three outcomes, derived from the 1992 *Child Behavior Checklist 2–3* (Achenbach, 1992), are displayed in Table 1, and the mean and standard deviation for each measure are listed in Table 2. Each item was read to the child's mother, and the mother indicated whether the statement was not true (0), sometimes or somewhat true (1), or often or very true (2) of her child. The aggressive scale comprises the mean responses of 15 items ( $M=11.0$  and  $SD=6.3$ ). The withdrawn scale consists of the mean responses of 14 items ( $M=4.9$  and  $SD=3.7$ ), and the anxious/depressive scale consists of the mean responses of 10 items ( $M=6.2$  and  $SD=3.3$ ).

Table 1  
Outcome measures: questions in child emotional and behavioral problem scales

Aggressive	Withdrawn	Anxious/depressive
Defiant	Acts too young for age	Clings to adults, dependent
Demands met immediately	Avoids eye contact	Feelings easily hurt
Disobedient	Doesn't answer people	Looks unhappy
Easily frustrated	Refuses to play games	Self-conscious, embarrassed
Fights often	Unresponsive to affection	Too fearful or anxious
Hits others	Shows little affection	Unhappy, sad, depressed
Angry moods	Shows little interest in things	Upset by separation from parents
Punishment doesn't matter	Withdrawn, doesn't get involved	Overtired
Screams a lot	Underactive, slow moving	Shy, timid
Selfish or won't share	Doesn't get along with others	Wants attention
Temper tantrums	Doesn't know how to have fun	
Easily jealous	Lacks guilt after misbehaving	
Moody	Stubborn, sullen, irritable	
Unusually loud	Uncooperative	
Whiny		

Source: Fragile Families and Child Wellbeing Study.

Notes: Scales are based on Achenbach (1992) for 2- to 3-year-olds. Mothers' responses range from 0 (not true) to 2 (very/often true).

Table 2

Descriptive statistics for dependent and independent variables by maternal employment and welfare status at year 3

	Total N=1276	Receives welfare (N=497)	Working, no welfare (N=458)	No welfare or work (N=321)
<i>Child outcomes</i>				
Aggressive behavior (0–30)	11.0(6.3)	11.4	10.3 <sup>a</sup>	11.3 <sup>b</sup>
Withdrawn behavior (0–28)	4.9(3.7)	5.2	4.5 <sup>a</sup>	5.2 <sup>b</sup>
Anxious/depressive behavior (0–20)	6.2(3.3)	6.6	5.8 <sup>a</sup>	6.3 <sup>b</sup>
Overall health (1–5)	1.6(0.8)	1.6	1.5 <sup>a</sup>	1.5
<i>Demographic controls<sup>c</sup></i>				
Mothers' age (mean)	23.1(5.1)	23.1	23.0	23.4
Mother less than high school (%)	45.1–	56.1	29.5 <sup>a</sup>	50.5 <sup>b</sup>
Mother high school (%)	35.7–	32.0	40.6 <sup>a</sup>	34.3
Mother any college (%)	19.2–	11.9	29.9 <sup>a</sup>	15.3 <sup>b</sup>
Mother is Black (%)	69.8–	72.4	72.1	62.6 <sup>a,b</sup>
Mother is Hispanic (%)	17.1–	16.3	14.6	21.8 <sup>b</sup>
Cohabiting with child's father (%)	42.1–	39.0	40.2	49.5 <sup>a,b</sup>
Experienced domestic violence (%)	8.5–	8.2	7.4	10.6
Number of children (mean)	1.6(1.0)	1.7	1.4 <sup>a</sup>	1.7 <sup>b</sup>
Plans to work next year (%)	88.4–	87.9	90.2	86.6
Prenatal smoking (%)	29.1–	34.0	22.1 <sup>a</sup>	31.5 <sup>b</sup>
Prenatal drug use (%)	8.2–	10.1	5.0 <sup>a</sup>	10.0 <sup>b</sup>
Mother in fair/poor health (%)	9.6–	10.7	6.8	12.1 <sup>b</sup>
Mother's cognitive score (0–16)	6.5(2.5)	6.3	6.7 <sup>a</sup>	6.4
Child's age in months (mean)	35.8(2.5)	35.7	35.9	35.9
Child is a girl (%)	46.4–	46.3	46.5	46.4
Child's emotionality—1 year (3–15)	8.9(3.4)	9.0	8.7	9.0
Child's shyness—1 year (3–15)	7.5(3.0)	7.6	7.3	7.6
<i>Possible mediators at year 3</i>				
Household income/\$10,000 (mean)	1.7(1.7)	1.2	2.3 <sup>a</sup>	1.6 <sup>b</sup>
Mothers' depressive symptoms (%)	27.8–	31.0	21.6 <sup>a</sup>	32.1 <sup>b</sup>
Mothers' parenting stress (1–4)	2.3(0.7)	2.4	2.2 <sup>a</sup>	2.4 <sup>b</sup>

Source: Fragile Families and Child Wellbeing Study.

Notes: Characteristics are unweighted. Standard deviations are in parentheses.

<sup>a</sup> Mean/percent statistically different from mean for receives welfare group at  $p < .10$ .<sup>b</sup> Mean/percent statistically different from working only at  $p < .10$ .<sup>c</sup> Measured at child's birth unless otherwise indicated.

The fourth child outcome is a categorical indicator of the child's overall health, which is based on the mother's assessment of the child's health as excellent, very good, good, fair, or poor. A value of 1 represents excellent health and 5 represents poor health. As shown in Table 2, the mean on this item is 1.6 and the standard deviation is 0.8.

#### 4.3. Independent variables

The key independent variables are measures of mothers' welfare receipt and employment when the focal child was 3-years old. We compare child outcomes across three mutually exclusive groups of mothers: those who are receiving cash welfare (TANF), those who are currently employed and no longer receiving TANF, and those who no longer receive TANF and do not

work. Welfare receipt is measured by a question that asks mothers if they received any income from welfare or TANF in the past *month*. Employment is measured by a question that asks the mother if she did any regular work for pay in the past *week*. In this sample of mothers who received welfare since their child's birth, 39% of mothers are receiving TANF, 36% are currently employed and not receiving TANF, and 25% of mothers report that they are not receiving TANF and are not employed.

Although there is a slight time discrepancy between the welfare and employment measures (one refers to the past month and one the past week), this cannot account for the large proportion of mothers who are not receiving welfare or working. Approximately one-half of the mothers neither employed nor receiving welfare report that they are looking for employment. Among the remainder, one-third report that they are stay-at-home mothers, and the rest are in school or disabled.

It is important to note that work and welfare may not be mutually exclusive in this sample. Mothers who are no longer receiving TANF may still be receiving other forms of assistance; for example, about 25% of mothers who are working and no longer receiving TANF are receiving food stamps. In addition, 22% of mothers who are receiving TANF are also working. Preliminary analyses showed, however, that the mothers (and their children) who are receiving TANF and are working do not differ significantly on baseline characteristics or child outcomes from those who are receiving TANF and are not working, but both groups differ from working mothers who are no longer receiving TANF; thus, we combined all mothers receiving TANF (regardless of employment status) into one group. This finding is similar to work by Lohman et al. (2004), but different from earlier work that finds that children of women who combine welfare and employment have better outcomes compared with those on welfare alone (Dunifon et al., 2003; Smith et al., 2000).

Current employment status and reliance on welfare are two indicators of mothers' transition to employment. However, mother's hours worked per week, weeks worked per year, and the amount of time since leaving welfare for employment may also be important considerations for children's well-being. To this end, we considered several alternative specifications of the employment measure, but the results suggest that it is employment itself (without welfare receipt), rather than intensity or duration of employment, that mattered most for child well-being. This could be because in this sample most of the mothers with 3-year olds who are employed have been working full time and for most of the year (mean weeks = 40; 58% worked 50–52 weeks; mean hours = 37; 77% work 30 or more hours per week).

#### 4.4. Control measures

Our aim is to account for the characteristics of the mothers who may be more likely to make a transition from welfare to employment, so that we may isolate the effect of employment and welfare receipt on child outcomes. To this end, we control for several antecedent characteristics of the mother and child that are predictive of welfare receipt, employment, and child outcomes. All variables are measured at the child's birth, unless otherwise noted. These include mother's age, educational level (less than high school, high school, and any college), race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, other), whether the mother was cohabiting (or married) with the child's biological father at birth, reported domestic violence (hit/slap), number of previous children she had, her plans to work in the year following the child's birth, her prenatal smoking or drug use, and her overall health status (fair or poor versus excellent, very good, or good). In addition, we include a measure of the mother's cognitive ability, which is the mother's

total score on the Similarities subtest of the *Weschler Adult Intelligence Test* (WAIS-R) measured at the three-year follow-up. This measure of mother's cognitive ability is considered a fixed trait, and thus should reflect the mother's score at the time of the child's birth, and should not be affected by welfare receipt or employment.

Because a mother's psychological functioning may affect her reporting of her child's behavior (Friedlander, Weiss, & Traylor, 1986), we include two measures of the mother's perception of her child's temperament at age 1 (emotionality and shyness). These measures should pick up the bias in reporting child behavior that is associated with maternal depression and stress, and the temperament indicators may also account for the possibility that a child's behavior influences a mother's ability to work. These measures are derived from the *EAS (Emotionality, Activity, and Sociability) Temperament Survey for Children*.<sup>1</sup> We also control for the age and gender of the child. Finally, we include an indicator variable for each city because employment and welfare factors differ across cities.

#### 4.5. Potential mediators

Our theoretical model posits that maternal employment leads to better health and behavioral outcomes among 3-year-olds when employment is associated with higher income and better psychological functioning. To this end, we examine three potential mediators of the effect of employment on child well-being: household income, maternal depression/anxiety, and maternal parenting stress. Household income is measured at year 3 and is based on the mothers' reports. The amount is divided by \$10,000 in the models. For mothers who provided only bracketed income data rather than an actual dollar amount, we used hotdecking procedures to impute household income based on mothers who provided the full dollar amount in the same bracketed range. Mothers' depression or anxiety is derived from the *Composite International Diagnostic Interview Short Form* or CIDI-SF (Walters, Kessler, Nelson, & Mroczek, 2002). Mothers' parenting stress at the 3-year interview is the mean response to four questions: being a parent is harder than I thought it would be, I feel trapped by my responsibilities as a parent, I find that taking care of my child(ren) is much more work than pleasure, and I often feel tired, worn out, or exhausted from raising a family. Mothers respond on a scale of 1 (strongly agree) to 4 (strongly disagree). We reverse code these items so that higher responses represent higher levels of stress.

#### 4.6. Analytic approach

Our goal is to understand whether leaving welfare for employment is beneficial to a child's health and behavioral outcomes at age 3. Because we aim to account for the characteristics that might both motivate a mother to leave welfare for work and that are also associated with her child's outcomes, we incorporate two analytic strategies: ordinary least squares (OLS) models with a substantial set of control measures, and instrumental variable (IV) models. Ideally, rather than using OLS models we would use fixed-effects methods (e.g. Dunifon et al., 2003; Kalil et al., 2001); however, we do not have repeated observations across time of our outcome variables.

We begin by using OLS techniques to determine the bivariate association between each of our four child outcomes and the three groups of mothers (receiving welfare, working, and no welfare

<sup>1</sup> Documentation on the EAS and WAIS-R measures can be obtained from the Fragile Families one-and three-year scales documentation (See <http://www.fragilefamilies.princeton.edu/documentation.asp>).

or work). The second OLS model includes an extensive set of control variables (primarily measured at the child's birth) that are predictive of leaving welfare for employment as well as the child outcomes. These include the mothers' age, race (non-Hispanic white, non-Hispanic black, Hispanic), educational level (less than high school, high school, any college), cohabitation status, reported domestic violence, prior number of children, plans for work in the following year, prenatal smoking and drug use, health status, cognitive WAIS-R score, child's gender and age at the third interview, child temperament at age one, and city indicators.

The third OLS model adds in the potential mediators (household income, maternal depression, and parenting stress) through which employment following welfare receipt may affect child health and behavior. We examine the attenuation of the employment effects on each of the child outcomes with the inclusion of these variables in the model.

Despite the inclusion of an extensive set of control variables, we cannot account for all of the probable unobserved differences between women who leave welfare for work and those who remain on welfare, and thus may attribute to work what is really due to characteristics that influence a mother's likelihood of work *and* her child's well-being. To limit the possibility that there are unobserved maternal characteristics driving the observed association, we employ instrumental variable (IV) models.

Instrumental variable models use a two-stage regression approach. In the first stage the likelihood that a mother is working (or not on welfare and not working) is predicted by her demographic characteristics (age, race, educational level, and child gender) and a set of state-level policies. We use OLS as the functional form in this first stage even though the dependent variable is dichotomous; however, our results are robust to a non-linear first-stage. Angrist and Krueger (2001) argue that OLS estimates are sufficient in the first stage regardless of the functional form, and that changing the functional form may do more harm than good.

The welfare instruments include six policies that may influence a mother's decision or ability to receive welfare or work: (1) the maximum TANF plus Food Stamp benefit for a family of three (this is divided by \$100 in the models); (2) the harshness of sanctions for non-compliance with welfare policies (lenient—1, moderate—2, or stringent—3); (3) whether there were any restrictions, aside from financial eligibility, on two-parent families' welfare receipt; (4) whether there were transitional child care guarantees for at least some families; (5) whether there was a cash diversion program for first-time applicants to welfare; and (6) the age (in months) of a mother's youngest child for which she remains exempt from work requirements.<sup>2</sup>

The second stage examines whether the predicted value of employment is associated with the child's outcomes. The advantage of the IV models is that the predicted value of employment is a function of policies and demographic variables in the models, and is thus uncorrelated with other measured or unmeasured maternal characteristics. The IV approach assumes that the instruments we use to predict employment (in this case state welfare policies) are not correlated with child outcomes except through their effects on welfare receipt and employment. Given that the policies we use should have their impact via employment and/or income, we think this is a plausible assumption. Alternatively, if these policies affect the income, but not employment, of some mothers, they may not yield unbiased estimates of the effects of employment. In addition, the instrumental variables will be unbiased if the welfare policy instruments are correlated with state or city characteristics, which in turn affect children's well-being (Angrist & Krueger, 2001). To

<sup>2</sup> The classification of sanction policies and earnings disregards was obtained from Blank and Schmidt (2001). The remaining measures are based on data from 1999 and were obtained from the State Policy Documentation Project ([www.spdp.org](http://www.spdp.org)).

check the exogeneity of the instruments, we computed tests of overidentifying restrictions using Hansen's *J*-statistic. For these models, we use two-stage least squares estimation, with standard errors clustered at the state level.

The results from the first-stage regressions are presented in Appendix A Table 1. The *F*-statistics for the tests of the joint significance of the instruments are over 10, as recommended by Staiger and Stock (1997). This implies that the state-level policies we use as instruments explain sufficient variation in maternal employment and welfare receipt to proceed with the IV analysis. We tried using several measures of labor market conditions (e.g. unemployment rate and job growth), and alternate measures of welfare policies (e.g., earnings disregards) as instruments, but these measures did not predict employment and welfare. The policies operate as expected in the first-stage models. In the model predicting work, having stricter sanctions, any two-parent restrictions on welfare receipt, or an upfront cash diversion program is associated with increased employment. More generous TANF benefits are associated with a reduced likelihood of working following welfare. An older age for youngest child exemption is associated with a greater likelihood of not being on welfare or working, whereas two-parent restrictions and transitional child care guarantees are associated with a reduced likelihood of not being on welfare or working.

Among this relatively homogeneous sample of current and former welfare recipients, observed individual-level characteristics are less important predictors of welfare receipt and employment than among a more representative sample. Results indicate that highly-educated mothers are more likely to be employed and slightly less neither to be working nor on welfare. Older mothers are less likely than their younger counterparts to be working and more likely not to be working or receiving welfare. Black mothers are least likely to be neither employed nor on welfare.

## 5. Results

### 5.1. Descriptive results

Table 2 shows the means of the child outcome measures and the characteristics of mothers and children in our sample based on the mothers' employment and welfare status when the focal child was 3-years-old. The difference in means of the child outcomes suggests that children of mothers who are working and no longer receiving welfare have fewer reported behavioral problems compared with all other children in this sample; the difference in child health is also statistically significant, but minimal. Children of mothers who receive welfare and those who no longer receive welfare but are not working have similar outcomes.

These differences in child outcomes across groups mirror differences in maternal characteristics that are associated with making a successful transition from welfare to work. For example, mothers who are working and no longer receiving welfare are more educated, have fewer previous children, were much less likely to smoke or use drugs during their pregnancy, have a higher cognitive score and household income, and report lower levels of depressive symptoms and parenting stress compared with the other two groups of mothers in this sample.

For the total sample, mothers are, on average, 23.1 years old at the child's birth, and 45% attained less than a high school degree. Nearly 70% of the sample is Black and 17% is Hispanic. Forty-two percent of mothers were cohabiting with the focal child's biological father at the child's birth (63 of these mothers were married). Prior to the focal child's birth, on average the mothers had 1.6 children, and almost 90% of the mothers reported that they planned to work in the year following their child's birth. Approximately 30% of mothers smoked during pregnancy, and over 8% reported using illicit drugs; almost 10% of mothers reported they were in fair or poor health at

Table 3

OLS estimates of effects of employment following welfare on child outcomes at age 3

	Poor health			Aggressive behavior		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>(Welfare)</i>						
Working	-0.16**	-0.12*	-0.11 <sup>^</sup>	-1.10**	-0.74 <sup>^</sup>	-0.51
No welfare or work	-0.10 <sup>^</sup>	-0.11 <sup>^</sup>	-0.11 <sup>^</sup>	-0.09	-0.08	-0.10
<i>Controls</i>						
Mothers' age/5 years	-	0.01	0.01	-	-0.33	-0.30
(White)						
Black	-	-0.08	-0.07	-	-0.62	-0.46
Hispanic	-	-0.00	0.00	-	0.17	0.25
(High school)						
Less than high school	-	-0.01	-0.00	-	-0.21	-0.14
Any college	-	0.02	0.01	-	-0.68	-0.66
Cohabiting at birth	-	-0.05	-0.05	-	-0.52	-0.50
Domestic violence	-	0.02	0.01	-	1.01*	0.87 <sup>^</sup>
Number of children	-	0.05*	0.05 <sup>^</sup>	-	0.24	0.18
Plan to work next year	-	0.07	0.07	-	1.62**	1.62**
Prenatal smoking	-	-0.09 <sup>^</sup>	-0.10 <sup>^</sup>	-	0.29	0.02
Prenatal drug use	-	0.09	0.09	-	0.26	0.26
Fair/poor health	-	0.27**	0.26**	-	1.15 <sup>^</sup>	0.88
Cognitive ability	-	-0.03**	-0.02**	-	-0.08	-0.07
Child age (years)	-	-0.25*	-0.26*	-	-0.35	-0.55
Child is a girl	-	-0.12**	-0.11**	-	-0.77*	-0.75*
Child emotionality	-	0.02**	0.02*	-	0.51**	0.46**
Child shyness	-	-0.00	0.00	-	0.03	0.02
<i>Possible mediators</i>						
Household inc./\$10,000	-	-	0.01	-	-	0.05
Depressive symptoms	-	-	0.15**	-	-	1.80**
Parenting stress	-	-	0.06 <sup>^</sup>	-	-	1.36**
Constant	1.63	2.24	2.11	11.37	9.84	7.16
	Withdrawn			Anxious/depressed		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>(Welfare)</i>						
Working	-0.64**	-0.37	-0.19	-0.87**	-0.51*	-0.37 <sup>^</sup>
No welfare or work	-0.00	-0.00	0.03	-0.35	-0.26	-0.23
<i>Controls</i>						
Mothers' age/5 years	-	-0.09	-0.08	-	-0.10	-0.10
(White)						
Black	-	-0.58 <sup>^</sup>	-0.56 <sup>^</sup>	-	-0.32	-0.32
Hispanic	-	0.01	0.02	-	0.18	0.19
(High school)						
Less than high school	-	0.28	0.29	-	0.30	0.30
Any college	-	-0.53 <sup>^</sup>	-0.46 <sup>^</sup>	-	-0.45 <sup>^</sup>	-0.39 <sup>^</sup>
Cohabiting at birth	-	-0.26	-0.21	-	-0.40*	-0.36*
Domestic violence	-	0.28	0.20	-	0.53*	0.47 <sup>^</sup>
Number of children	-	0.14	0.11	-	0.07	0.05
Plan to work next year	-	0.83**	0.81**	-	0.66*	0.65*

Table 3 (continued)

	Withdrawn			Anxious/depressed		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>Controls</i>						
Prenatal smoking	–	–0.35	–0.48*	–	–0.06	–0.16
Prenatal drug use	–	0.61	0.61	–	0.01	0.02
Fair/poor health	–	0.51	0.37	–	0.55 <sup>^</sup>	0.44
Cognitive ability	–	–0.15**	–0.14**	–	–0.11**	–0.10**
Child age (years)	–	–1.36*	–1.44*	–	0.08	0.02
Child is a girl	–	–0.70**	–0.69**	–	–0.29 <sup>^</sup>	–0.29 <sup>^</sup>
Child emotionality	–	0.18**	0.16**	–	0.16**	0.14**
Child shyness	–	0.08*	0.08*	–	0.15**	0.14**
<i>Possible mediators</i>						
Household inc./\$10,000	–	–	–0.08	–	–	–0.06
Depressive symptoms	–	–	0.63**	–	–	0.41*
Parenting stress	–	–	0.67**	–	–	0.57**
Constant	5.15	8.94	7.80	6.65	5.70	4.73

Source: Fragile Families and Child Wellbeing Study.

Notes: Poor child health is based on a 1–5 scale of overall health, with 5 representing poor health.

Models 2 and 3 also include controls for city of residence.  $N=1276$ .

<sup>^</sup> $p \leq .10$ ; \* $p \leq .05$ ; \*\* $p \leq .01$ .

their child's birth. At the third wave of interviews, the children are approximately 36 months old and 46.4% are girls.

With regard to the possible mediators, at the year 3 interview the mean household income is approximately \$17,000 per year and over one-quarter of mothers exhibit depressive symptoms. These estimates are in line with estimates of depression among mothers with young children (Heneghan, Silver, Bauman, Westbrook, & Stein, 1998; Jayakody & Stauffer, 2000) and among welfare recipients (Lennon, Blome, & English, 2002). Finally, the mean of the parenting stress scale is 2.3 out of 4, with a level of 4 indicating the highest level of stress.

## 5.2. OLS Results

Our primary goals are to determine the effect of employment following welfare receipt on young children's health and behavioral outcomes, and to understand the possible mechanisms through which employment affects child well-being. We compare health and behavioral outcomes of 3-year-olds whose mothers have left welfare for work with those whose mothers remain on welfare and those who have left welfare without employment.

Model 1 in Table 3 presents the bivariate associations between welfare/employment status and our child outcomes. For the health and behavioral problem measures, children whose mothers are working and no longer receiving welfare have fewer reported behavioral problems compared with children whose mothers remain on welfare and those whose mothers have left welfare but are not working. The effect sizes are modest, ranging from 17% of a standard deviation for aggressive ( $\beta = -1.10/SD = 6.3$ ) and withdrawn behavior ( $\beta = -0.64/SD = 3.7$ ), 20% for child health ( $\beta = -0.16/SD = 0.8$ ), and 26% of a standard deviation for anxious/depressed behavior ( $\beta = -0.87/SD = 3.3$ ). Children whose mothers who have left welfare and are not working have similar behavioral outcomes as children whose mothers remain on welfare, at the bivariate level.

However, children whose mothers are not working or receiving welfare are slightly less likely to be in poor health compared with children of welfare recipients.

The inclusion of an extensive set of control variables in Model 2 that are predictive of both employment and child well-being attenuates the effect of working (relative to welfare receipt) for each of the outcomes, but does not fully account for the differences on three of the four outcomes. These control variables jointly explain 25% of the effect of working on child health (the coefficient declines from  $-0.16$  to  $-0.12$ ), 32.7% on aggressive behavior, 41% for anxious/depressed behavior, and 42% on withdrawn behavior (the coefficient declines from  $-0.64$  to  $-0.37$  and is no longer significant).

In other analyses (not shown) we included additional characteristics of the mother and child measured at the child's birth (e.g., low birth weight, a grandparent lives in the household) in an effort to limit selection bias into employment; however, the effects of maternal employment on the outcomes, particularly child health and anxious/depressed behaviors, are robust to alternate specifications.

Many of the control variables in these models are correlated with one another, so it is difficult to determine precisely the association between each of them and the child outcomes; however, some consistent patterns emerge in Model 2. Mothers' age and race are not significantly associated with child health or behavior, net of the other variables included in the model. Child's gender and temperament are strongly associated with each of the outcomes, and maternal education (any college), health, experience of domestic violence, cognitive ability, and plans to work in the year following her child's birth are also predictive of most of the child outcomes.

Thus, although the characteristics of mothers who leave welfare for employment explain a substantial portion of the positive outcomes of their children, none of the estimated coefficients for working declines to zero in Model 2, and for three of the outcomes (child health, aggressive, and anxious/depressed) the coefficients remain statistically significant. Therefore, the OLS estimates indicate that there may be positive effects for very young children of their mothers' transition from welfare to employment.

We test three possible mediators or pathways through which maternal employment following welfare receipt may affect child health and behavior: household income, maternal depression, and maternal stress. Model 4 shows that lower levels of depression and maternal stress among employed mothers explain a significant portion of the better outcomes of their children. Maternal depression and stress are strongly associated with each child outcome and substantially reduce the effect of maternal employment. In Model 4, the effect of employment is not statistically different from zero for aggressive or withdrawn behavior, and is only marginally significant for anxious/depressed and poor health. Surprisingly, despite the fact that mothers who leave welfare for employment have higher household incomes (\$23,000) than mothers who remain on welfare (\$12,000) and those who have left welfare and are not employed (\$16,000), household income at age 3 is not significantly associated with child health and behavior net of all of the other variables in the model. Jointly, the three mediating variables are significantly related to each of the outcomes ( $F$ -test for joint significance finds  $p \leq 0.01$  for each outcome).

Because the child outcomes and mediating variables are measured at the same point in time, it is not possible to determine the direction of these associations. Our conceptual model posits that maternal employment leads to higher income and lower maternal stress and depression and thus better child outcomes, but it is possible that mothers with these characteristics may actually be more likely to leave welfare for work *and* to have children with fewer behavioral problems and better health. Ideally, we would control for maternal depression and parenting stress prior to maternal employment; however, many of the mothers leave welfare for employment prior to the child's first birthday, but these measures were first collected when the child was 3-years old.

Table 4  
OLS and IV estimates of effects of welfare and employment on child outcomes at age 3

Variable	Poor health		Aggressive		Withdrawn		Anxious/depressed	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
<i>(Welfare)</i>								
Working	-0.12*(0.05)	0.62(0.82)	-0.74^(0.40)	3.20(6.98)	-0.37(0.24)	3.65(4.57)	-0.51*(0.22)	-1.70(3.30)
No welfare or work	-0.11^(0.06)	0.24(0.62)	-0.08(0.45)	-4.29(5.50)	-0.00(0.27)	-1.49(3.78)	-0.26(0.23)	-1.65(2.12)
<i>(White)</i>								
Black		0.05(0.08)		-0.73(0.80)		-0.41(0.41)		-0.07(0.33)
Hispanic		0.10(0.11)		0.36(0.79)		0.23(0.38)		0.12(0.40)
<i>(High school)</i>								
Less than high school		0.16(0.16)		0.86(1.39)		1.23(0.88)		0.35(0.66)
Any college		-0.13(0.13)		-1.91(1.31)		-1.56^(0.87)		-0.60(0.62)
Mothers' Age/5 years		0.08^(0.04)		0.03(0.31)		0.17(0.24)		-0.05(0.14)
Child is a girl		-0.13**(0.04)		-0.86*(0.33)		-0.73**(0.16)		-0.31(0.20)
Constant	2.24**(0.42)	0.87^(0.50)	9.84**(3.44)	11.55**(4.26)	8.94**(2.01)	3.53(3.12)	5.70**(1.77)	7.63**(2.09)

Source: Fragile Families and Child Wellbeing Study.

Notes: OLS models include controls from Model 2 in Table 3. Robust standard errors are shown in parentheses.  $N=1276$ .

$\wedge p \leq .10$ ; \* $p \leq .05$ ; \*\* $p \leq .01$ .

Regardless, higher levels of income and lower levels of maternal stress and depression among mothers who have left welfare for employment jointly explain a significant portion of the better outcomes of their 3-year-olds. The antecedent characteristics of mothers who are employed as opposed to still receiving welfare also play a significant role in explaining the better health and behavioral outcomes of children of mothers who have left welfare for work. Thus, based on the OLS models, it is difficult to determine the extent to which work per se affects children's health and behavior.

One might have been concerned that children of mothers who are not working or receiving welfare would have the worst outcomes. As strict sanctions and time limits forced some women off the welfare rolls without stable employment, children of these mothers may be at the greatest risk of poor developmental outcomes. However, the only outcome predicted by having a mother who is not working or on welfare is poor health. This finding is robust to the inclusion of additional controls (including low birth weight, not shown) and the potential mediators. Perhaps mothers with children in poor health are more likely to remain on welfare than mothers with healthier children, because of their need for health insurance or exemptions from work requirements. However, the no-welfare-or-work group is somewhat heterogeneous, including both mothers who have recently had a child, those who are looking for work (and may be off of welfare due to sanctions), and mothers who are supported by a partner, so it is difficult to draw any firm conclusions.

### 5.3. *Instrumental variable models*

The OLS regression results presented above provide evidence that child health and behavior are associated with maternal welfare and work experiences. However, as mentioned previously, these results may be biased because we are unable to control for unobservable characteristics of mothers who “choose” employment versus welfare, and these characteristics may also affect child behavior. To address this problem of selection bias, we use instrumental variables to determine whether welfare and work affect children's well-being.

In *Table 4*, the IV results are compared with the second model of the OLS estimates (shown in *Table 3*), in which none of the potential mediators is included. The IV results indicate that maternal employment is not associated with the health and behavior of young children. This implies that the observed associations between maternal employment and better health and behavioral outcomes in the OLS models are due to omitted-variable bias. These findings are similar to prior welfare studies using IV models to examine effects of employment and welfare on child outcomes (Currie & Cole, 1993; Levine & Zimmerman, 2005). Thus, maternal employment does not appear to *cause* better health and behavior; rather the mothers who make the transition from welfare to work differ in important ways that are also associated with better child outcomes.

The magnitudes of the effects in the IV analyses are much larger, but much less precisely measured than in the OLS models. Such large coefficients and standard errors for IV estimates are relatively common (Currie & Cole, 1993; Levine & Zimmerman, 2005). First, the variation in generosity of welfare policies is much smaller than the variation in welfare receipt and employment. Second, as is common in instrumental variables analyses, the predicted receipt variables generated by instrumental variable models are estimated with less precision than the observed receipt variables, resulting in larger standard errors. Given these limitations, and the possibility of omitted variable bias in the OLS models, we cannot determine with certainty that the group differences are entirely due to selection.

## 6. Conclusion

The primary goal of this analysis has been to determine whether maternal employment following welfare receipt affects young children's health and behavior. We compare health and behavior of 3-year-olds whose mothers were working and no longer on welfare, not working and not receiving welfare, and those who remained on welfare. Our conceptual model posits that leaving welfare for employment may increase household income and reduce maternal stress and depression, and thus improve child outcomes. Alternatively, we argued that employment may have the opposite effect if it is not associated with higher levels of income and thus increases maternal stress and depression. We find that mothers who work and are no longer on welfare report that their 3-year-olds are in better health and better behaved than other mothers. The OLS results suggest that a significant portion of the advantages experienced by children of working mothers is explained by the characteristics of mothers who make the full transition from welfare to work, but that significant differences remain net of an extensive set of covariates. We tested three possible mechanisms through which employment may affect child well-being and found that lower levels of maternal stress and depression among working mothers account for remaining differences in child health and behavior. We cannot, however, determine if these conditions predate employment or are caused by employment as our model posits.

We also found that children of mothers who leave welfare but are not employed have similar outcomes as children whose mothers remain on welfare, with the exception that these children have slightly better health. This difference is robust to an extensive set of covariates, and the possible mediating variables.

We employed instrumental variable models to limit selection bias in our models. These two-stage least squares estimates suggest that work is not causally related to better child outcomes, but rather that the observed differences in child outcomes between working and welfare mothers are due to unobserved characteristics of mothers who transition from welfare to work, rather than to employment per se. These findings are consistent with those from two other studies that have used IV models to examine the effect of leaving welfare for work on older children's outcomes prior to welfare reform (Currie & Cole, 1993) and prior to the downturn in the economy (Levine & Zimmerman, 2005). Nevertheless, because of the imprecision of the IV estimates and the possibility of omitted variable bias in our OLS estimates, firm conclusions are not warranted.

In addition, there are several other limitations to this work. We only observe children's health and behavioral outcomes at one point in time. With subsequent waves of data, we will be able to determine how changes in employment status are associated with changes in income, depression, stress, and ultimately in child health and behavioral outcomes. Similarly, we hope to be able to more fully explore the nature and extent of maternal employment. In this analysis, we found that the results were similar regardless of whether we measured employment as a point in time estimate or as weeks or hours worked. Understanding the quality of the mother's job and the transitions into and out of employment needs to be explored further.

In summary, these results imply that the children whose mothers make the transition from welfare receipt to employment will do better than those whose mothers do not. Mothers who remain on welfare, even if they combine welfare with work, are less educated, have lower levels of income, more maternal stress, and higher levels of depression than mothers who leave welfare and these characteristics impede their children's health and behavioral development. Policies should address these barriers to employment in order to facilitate employment and enhance children's outcomes. In addition, welfare policies should help mothers balance employment with caring for children, so that depression and parental stress are reduced. These factors significantly

influence a child's health and behavior outcomes as early as age 3, and outcomes at this early age are highly predictive of subsequent child development (McLeod & Kaiser, 2004).

## Appendix A

Table 1  
Estimates of first-stage regressions

	Working	No welfare or work
Mothers' characteristics		
Black	-0.01(0.04)	-0.09^(0.05)
Hispanic	-0.01 (0.04)	-0.00(0.05)
Less than high school	-0.18**(0.04)	0.04^(0.02)
Any college	0.17**(0.03)	-0.04(.03)
Mothers' age/5 years	-0.04**(0.01)	0.02*(.01)
Child is a girl	0.00(0.02)	0.01(.02)
Instruments		
Max TANF+FS 1999	-0.03^(0.01)	0.01(.01)
Sanctions (higher = stricter)	0.05**(0.01)	-0.00(.01)
2-parent restrictions	0.08**(0.01)	-0.02^(.01)
Cash diversion	0.04**(0.02)	0.01(.01)
Transitional child care	-0.02 (0.02)	-0.10**(,02)
Exempt age (in months)	-0.00 (0.00)	0.00**(,00)
Constant	0.64** (.15)	0.19(.06)
F-statistic of instruments	14.0	27.4

Source: Fragile Families and Child Wellbeing Study.

Notes: Robust standard errors in parentheses. Standard errors clustered at state level.  $N=1276$ .

^ $p \leq .10$ ; \* $p \leq .05$ ; \*\* $p \leq .01$ .

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