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## ABSTRACT

Using data from a longitudinal sample of former and current welfare recipients in Michigan spanning 1997 through 1999, the Women's Employment Study, this analysis examined how transitions from welfare to work affect parenting behavior and child behavior problems. Researchers used a fixed-effects regression design to control for all time-invariant characteristics of mothers and children that might bias estimates of the associations between maternal work behavior and child well-being. The sample used was 575 women with a focal child (76% of the total study sample). Findings show that moving from welfare reliance to combining welfare and work is associated with a decrease in harsh parenting, an increase in positive parenting, and decreases in both internalizing and externalizing behavior problems among children. No evidence was found that parenting practices account for the associations between the transition from welfare to work and children's behavior problems. Overall, these results suggest that policies that allow women to combine welfare and work may be most beneficial for children. (Contains 1 figure, 4 tables, and 39 references.) (Author/SLD)

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## JCPR Working Paper 293

Maternal work behavior under welfare reform:  
How does the transition from welfare to work affect child development?

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Abstract

Using data from a longitudinal sample of former and current welfare recipients in Michigan spanning 1997-1999, this study examines how transitions from welfare to work affect parenting behavior and child behavior problems. We use a fixed-effects regression design to control for all time-invariant characteristics of mothers and children that may bias estimates of the associations between maternal work behavior and child well-being. We find that moving from welfare-reliance to combining welfare and work is associated with a decrease in harsh parenting, an increase in positive parenting, and decreases in both internalizing and externalizing behavior problems among children. We do not find evidence that parenting practices account for the associations between the transition from welfare to work and children's behavior problems. Overall, these results suggest that policies that allow women to combine welfare and work may be most beneficial for children.

Maternal work behavior under welfare reform:  
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In 1996 a new welfare policy was enacted, resulting in dramatic changes in the public assistance system for low-income families. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) ended the federal guarantee of cash assistance and replaced the Aid to Families with Dependent Children (AFDC) program with the Temporary Assistance for Needy Families (TANF) program. TANF requires recipients to participate in work or work-based activities in order to receive cash assistance. Under AFDC, the federal government automatically provided cash assistance to every qualified family. Now each state receives a block grant and has more flexibility in determining how that money is spent. However, the federal law subjects most recipients to a 5-year lifetime limit on the receipt of cash benefits, and most adults can receive welfare for no more than two consecutive years without finding a paid job in the labor market or performing some other work activity.

As the welfare rolls have plunged dramatically in most states, many political leaders have proclaimed welfare reform a success (Thompson, 2001; Weaver, 2000). However, advocates for the poor express concerns about what has happened to families who have lost their welfare benefits, and policy experts question whether the adults who are working because of welfare reform will be able to retain jobs and support their families (Primus, 2001). TANF was implemented in the robust economy of the late 1990's. Although there is considerable volatility in recipients' work trajectories, many former welfare recipients have found jobs. However, factors such as low human capital and a lack of job skills often lead former recipients into jobs that are part-time, low-paying, and do not provide health insurance (Johnson and Corcoran, 2002). Potential barriers to employment, such as limited human capital, mental health problems,

alcohol and substance abuse, and exposure to domestic violence are overrepresented among welfare recipients, and many of these factors are negatively associated with the ability to work enough to comply with the new welfare regulations (Danziger et al., 2000).

Little information is currently available regarding the effects of PRWORA on family processes and children's developmental outcomes. Developmental theory suggests that increased employment for welfare mothers could improve their self-esteem, motivation, and sense of personal control. These improvements could lead to better parenting and concomitant improvements in children's behavior. Increased economic resources from earnings could also benefit maternal parenting practices and child development. On the other hand, if employment is unstable or erratic, material hardships could ensue, family routines could be disrupted, and children's development could be adversely affected. Additionally, the stress of balancing work and family life could lead to changes in parenting styles and potentially negative impacts on child well-being.

In this paper, we draw on data from the Women's Employment Survey (WES), an ongoing longitudinal survey of current and former TANF mothers in Michigan to examine how patterns of work and welfare use in the three years since the implementation of welfare reform are associated with changes over time in mothers' parenting behavior and children's behavior problems. Our research questions are as follows:

- 1) How does the transition from welfare to work affect parenting behavior?
- 2) How does this transition affect child behavior problems?
- 3) Does the transition from welfare to work affect children's behavior problems through changes in parenting behavior?

In answering these questions, our analysis employs a rich array of background characteristics typically unobserved in other studies, including psychiatric diagnoses of maternal depression, substance use and post-traumatic stress disorder, and exposure to domestic violence. These maternal characteristics are potentially related to changes in employment, as well as in parental behavior and child development. We also use within-child fixed-effect regression techniques, taking advantage of the repeated measures of child well-being and parenting behavior. These techniques, described below, are unique in the literature relating welfare reform to child outcomes and allow us to control for unmeasured time-invariant child- or mother-specific measures that may be associated with both maternal work behavior and child well-being. The inability to control for such factors in Ordinary Least Squares analyses can bias estimates of the associations between the movement from welfare to work and child well-being.

## Background

### Welfare Reform, Maternal Work, and Family Processes

Although the work requirements of TANF are likely to affect parental behavior towards children, relatively few studies have examined changes in parenting practices that may result from welfare reform. Mothers in the post-welfare reform era will no longer have a choice regarding whether or not to work, nor will they have an option of leaving jobs with poor or stressful working conditions and returning to welfare (Heymann & Earle, 1998). These factors are likely to affect parent-child interactions. Leaving welfare for work could increase maternal self-esteem or efficacy, reduce financial strain, and raise family income, all of which could lead to improved parenting. However, it is possible that the work requirements inherent in welfare reform could increase parental stress as parents struggle to balance childrearing and employment, leading to less positive parenting behaviors. Finally,

movement away from welfare toward work means that mothers will spend less time with their children, which could alter their ability to monitor their children's behavior when they are not home. Overall, the effect of welfare reform on parenting is not clear.

Maternal employment is associated with improved maternal mental health (Hoffman and Youngblade 1999) and, through the additional income and the social and cognitive stimulation it provides the mother, may lead to more positive interactions with children (Parcel and Menaghan, 1990; Klebanov, Brooks-Gunn, and Duncan 1994; Wilson, Elwood, and Brooks-Gunn 1995). This evidence suggests that the movement from welfare to work may lead to improvements in mothers' parenting behavior.

At the same time, some evidence points to negative effects of maternal employment in low-income families. Parents employed in low-wage, repetitive, or unstimulating jobs provide less nurturing home environments than do parents with jobs that pay more or offer more complexity and autonomy (Moore & Driscoll, 1997). One study of welfare recipients in the pre-TANF era finds that mothers who left welfare for low-paying jobs and remained poor did not provide better home environments for their children compared with those who remained on welfare. If however, the mother left welfare and escaped poverty, her children had higher achievement scores and fewer behavior problems (Wilson, Ellwood, and Brooks-Gunn, 1995). Similarly, in a different pre-reform era study, Smith et al. (2001) find that among the group of families who moved off of welfare in a 2-year period and also left poverty, mothers evidenced less harsh parenting and more warm and firm parenting than those who left AFDC but remained poor.

Recent evidence from several experimental work-based demonstration programs also sheds some light on how current welfare reform programs might affect parenting. Results from

the experimental studies should be more relevant for research in the post-reform era because work participation in the experimental group was mandatory and failure to comply with program requirements was subject to sanctions much like the ones currently in place under TANF. In general, no overall impacts or some small positive impacts on parenting behavior and mothers' psychological well-being have been found, although the direction of effects varies for different subgroups (Smith et al., 2001). A relevant result from New Chance, a study of low-income young mothers with preschool-age children, linked participation in "human capital development" activities (e.g., employability development and skills training) to higher frequency of book reading to children and higher scores on emotional support available to the young child in the home (Morrison, Zaslow, & Dion, 1998). Taken together, these results suggest that the movement from welfare to work may lead to changes in parenting behavior, although the direction of the effect is not clear.

#### Welfare Reform and Children's Well-Being

Children represent two of every three people (9.3 of 13.6 million) affected by welfare reform (U.S. Department of Health and Human Services, 1999). The impacts for child outcomes may depend on the reforms' effects on the parents, other family risk and protective factors, children's experiences inside and outside the home, and the patterns and quality of mothers' work experiences (Zaslow et al., 1998). Pre-reform studies found few significant or substantive differences in child developmental outcomes between welfare families and those who are poor but not welfare dependent (Moore et al., 1995; Zill et al., 1991). Similarly, few differences exist between the two groups in the quality of the home environment and in parent mental health (Duncan et al., 2002; Klebanov, Brooks-Gunn, & Duncan, 1994). However, children in welfare families, relative to national samples, suffer from greater physical disabilities and more serious



health conditions than their nonwelfare counterparts, and they have less positive outcomes on tests of cognitive development (Moore et al., 1995; Olson & Pavetti, 1996). Among families receiving welfare, negative child development outcomes have been found when mothers report a low sense of personal efficacy and perceive multiple barriers to their own employment (Moore et al., 1995).

In a pre-reform study, Smith et al. (2000) found that children of low-income single mothers fared equally well when mothers either worked and received no welfare during the child's first three years of life or when mothers worked some or all of the time and also received public assistance. In contrast, children had poor outcomes when their mothers did not work at all and received financial support solely from AFDC.

More recent evidence from welfare reform experimental evaluations has shown that positive benefits can accrue to children when low-income mothers move from welfare to work. Results from the National Evaluation of Welfare to Work Strategies (NEWS), an experimental evaluation of the impact of the JOBS program, indicate that, for families with preschool children, the program yielded some positive impacts on cognitive development, unfavorable impacts on physical health indicators, and mixed impacts on maternal-reported child behavior problems (Zaslow, McGroder, & Moore, 2000). Overall, however, the program had a minimal impact on children and the effects were not widespread, suggesting that most children were not adversely affected by their mothers' participation in a welfare-to-work program.

In contrast, a different set of experimental evaluations has identified more consistently positive aspects of mandated work programs, particularly when the programs not only encourage work but also "make work pay." In the Minnesota Family Investment Program (MFIP), young

children of single-parent, long-term recipients who were assigned to the experimental group and faced work requirements had positive outcomes on measures of school performance and behavior problems compared to a control group who participated in the traditional AFDC program (Knox, Miller, & Gennetian, 2000). An important pathway of influence was through the program's financial incentives, which led to increased income and reduced poverty. Importantly, MFIP had no negative effects on children of long-term recipients. Similarly, another experimental work-based income-supplement program – New Hope – improved school performance and social behavior among school-age boys; in part this may have been due to the children's increased participation in structured, formal child care or extracurricular programs (Huston et al., 2001). Children in the experimental group increased their participation in such activities not only because parents were spending more time at work but also because they had modestly more income to pay for such activities.

Finally, Kalil, Dunifon, & Danziger (2001) used data from the Women's Employment Survey to examine whether work behavior among a cohort of women leaving welfare for work predicts measures of school-age children's behavior problems. Maternal work behavior was measured in three different ways: the proportion of months a mother worked between two waves of the longitudinal study, the number of hours she worked most recently, and how many times she cycled from work to nonwork. The authors consistently found that the intensity of work—months worked and hours worked per week—has little effect on three maternal report measures of positive and negative child behavior. In contrast, the number of transitions between working and not working increased children's anxious and depressed behavior, net of other factors. Leaving welfare to enter unstable, transitory jobs may lead to increased strain within a family, which, in turn, could be associated with increased behavior problems among children.

Overall, then, existing research suggests that the movement from welfare to work may have benefits for children, and that such benefits are most likely to be found when the transition off of welfare is accompanied by an increase in total family income.

### Summary

The overall effects of welfare reform on families will depend on the confluence of state and local policies, family risk and protective factors, and the patterns and quality of maternal work experiences (Zaslow et al. 1998). Welfare reform will likely bring about many changes in family life, and the ultimate effects will undoubtedly be a function of the interaction among, and accumulation of, these changes and the particular outcome of interest. A comprehensive analysis of the pathways from welfare reform to children's development is beyond the scope of this paper. Instead, we examine how patterns of work and welfare use over time, in the context of mandated employment under TANF, is related to maternal parenting behavior and to behavior problems in children. These variables are examined controlling for a rich set of relevant observable family characteristics. In addition, we use fixed -effects regression techniques to account for unobservable characteristics of the mothers and their children. Specifically, we ask whether patterns of work and welfare use over a three-year period are related to children's behavior and, if so, whether these effects can be explained by concomitant changes in mothers' parenting behavior.

### Data and Method

We use data from the Women's Employment Study (WES), a longitudinal study of a sample of women drawn from Michigan's TANF cash assistance rolls in February 1997 (after the state had begun to implement its TANF plans). The WES is being conducted at the University of Michigan under the auspices of the Poverty Research and Training Center. The

first wave of WES interviews was completed between August and December 1997, with a random sample of 753 single mothers who were welfare recipients in an urban Michigan county in February 1997. The random sample was limited to recipients between the ages of eighteen and fifty-four, and the average age was almost thirty. Almost nine out of ten lived in urban census tracts in the county.

Michigan's Family Independence Agency (FIA) provided names and addresses of all single-parent cases, and a stratified random sample was drawn; completed interviews represented an 86 percent response rate. The second wave of interviews was completed in fall 1998 with 693 respondents, representing a response rate of 92 percent. The third wave was completed in late 1999 with 632 respondents, a 91% response rate. Information about a focal child was collected at each wave if the mother had at least one child between the ages of 2 and 10 at wave 1. Of the mothers interviewed at wave 1, 76 percent (N=575) had a focal child. The present study uses the sample of mothers with focal children (76% of the total sample).

One advantage of the WES compared to a typical welfare "leavers" study is that it follows *both* welfare leavers and stayers. Overall, though, many of the women in the sample were making the transition from welfare to work during the study period (1997-1999). Work participation increased substantially between the waves of data collection: at the first-wave interview, 72 percent were receiving welfare and 65 percent were working; at the second-wave interview, 50 percent were receiving welfare and 75 percent were working; and at the third-wave interview, 31 percent were receiving welfare and 77 percent were working. We seek to relate changes in mothers' work/welfare status over the period between February

1997 (when the sample was drawn) and late 1999 (the time of the wave 3 interview) to changes over time in parenting and children's behavior.

### Measures

#### Maternal Work and Welfare Patterns

Our key independent variables represent mothers' work/welfare status, measured at each wave. Work/welfare status is measured using variables indicating the category mothers were in for at least 7/12<sup>th</sup> of the months between a) February 1997 (when the sample was drawn) and the wave 1 interview, b) wave 1 and wave 2, and c) wave 2 and wave 3, giving us measures of work/welfare status over three time periods. This is consistent with the definition of maternal work and welfare use used by Danziger et al. (2002). To construct these categories, we rely on life history calendars that measure maternal employment status in each month and administrative records of TANF cash benefits in each month over the study period.

This is an improvement over studies that use longitudinal data but measure receipt of public assistance and employment at the time of the survey only (e.g., Smith et al., 2001). Given evidence of substantial intra-year transitions in welfare use and employment spells among low-income single mothers, measuring women's work/welfare status over a multi-month period is an especially important feature of our analysis. For example, in the WES, 90% of women worked at least one month between the wave 2 and wave 3 interviews; however, less than 50% worked in all of these months. Using point in time data on work status could misrepresent the percentage of women who are working for a majority of a year (Danziger et al., 2002).

At each wave, women were classified as being on one of five mutually exclusive categories:

*Wage-reliant:* Wage-reliant mothers worked without simultaneously receiving welfare in at least 7/12<sup>th</sup> of the months between interview waves.

*Welfare-reliant:* Welfare-reliant women received welfare (i.e., TANF) without simultaneously working in at least 7/12<sup>th</sup> of the months between interviews.

*Combiners:* Combining women both worked and received welfare payments simultaneously in at least 7/12<sup>th</sup> of the months between interviews.

*No work/no welfare:* Women in this group spent at least 7/12<sup>th</sup> of the time between interviews neither working nor receiving welfare. Because the implications of being in this category may differ depending on whether a woman is living with another adult in the household, we include in all analyses an interaction term between being in this category and living with another adult.

*Transitioners:* Transitioning women were not in any of the above categories for at least 7/12<sup>th</sup> of the time between interviews; instead, they were transitioning between multiple categories over the study period and could not be easily classified.

Previous work (Danziger et al., 2002) has examined relationships between these work/welfare categories and other characteristics of women in the WES, using data on women's work/welfare categories in the year prior to wave 3. This research found that wage-reliant women are the most well-off in terms of income, poverty status, and a number of material resource measures, such as having enough food to eat, while welfare-reliant women are the least well-off economically.

To control for the intensity of maternal work, we include in all analyses a measure of each mother's total work hours between waves, reflecting work over the pre-interview period<sup>2</sup>.

### Parenting Behavior

In our first set of analyses, the dependent variables represent mothers' parenting behavior. We examine three measures of parenting behavior, each measured at all three waves of the survey.

*Parenting Stress.* The parenting stress scale is a seven-item index that measures the degree of stress or irritation mothers perceive in relation to their interactions with their children. This scale explores mothers' subjective sense of difficulty with regard to the parenting role and, in previous research, has been related to child maltreatment. Items for this scale were taken from or adapted from Abidin's Parenting Stress Index (PSI) (Abidin, 1990) and from the New Chance Study (Morrison et al. 1998). A sample item is "I find that being a mother is much more work than pleasure." Items are measured on a five-point scale and are coded such that a score of one means "never" and a score of five means "almost always." The theoretical range of the scale is seven through thirty-five, higher scores indicating greater parenting stress. Cronbach's alpha for this scale is .81.

*Harsh Parenting.* Mothers' harsh parenting toward the focal child is measured with an 8-item index. Mothers respond "often" (1), "sometimes" (2), or "never" (3) when asked how often they use harsh measures to punish the target child, including: spanking, yelling, threatening to send the child away, or talking things over with the child (reverse-coded). A higher score

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<sup>2</sup> The total work hours variable was created by multiplying a woman's usual weekly work hours from each wave by the percent of months worked between the previous wave and the current wave. This product was then multiplied by 52 to obtain an annual measure. Women with annual work hours greater than 3120 (or 60 hours per week) were top-coded at 3120 (N = 12).

indicates increased use of harsh parenting. Cronbach's alpha for this scale is .57. These items were derived from the New Hope Study.

*Positive Parenting.* Mothers' positive parenting toward the focal child is measured with a 4-item index at each wave. Mothers respond "never" (1), "1-2 times a month" (2), "once a week" (3) "a few times a week" (4), or "every day" (5) to questions such as: how often do you praise the target child, and how often do you and the target child laugh together? A higher score indicates a greater frequency of positive parenting. Cronbach's alpha for this scale is .53. These items were taken from the New Hope Study.

### Child Behavior

In our second set of analyses, the dependent variables of interest represent measures of children's behavioral adjustment, assessed using maternal reports. The survey contained a subset of items from the Behavioral Problems Index (BPI) described in Chase-Lansdale et al., (1991). Unfortunately, the WES did not include the entire 28-item BPI. In the WES, items are available from the externalizing and internalizing behavior problems subscales.

*Externalizing behavior* (4 items) includes items such as "bullies or is cruel or mean to others" and "breaks things deliberately". This variable is measured at each wave and the alpha ranges from .51 to .59. *Internalizing behavior* (4 items) focuses on sadness ("unhappy, sad"), being withdrawn, and self-feelings ("feels worthless"). This measure was also taken at each wave, and the alpha ranges from .61 to .71. These alphas are consistent with those found in the National Longitudinal Survey of Youth (Baker et al., 1993), which also administered the BPI.

### Family Economic Well-Being



All analyses control for the family's monthly gross income, which reflects family income for the month prior to the interview, including transfers and earnings.

Analyses also control for two other measures of family economic well-being, measured at all waves. The first is a measure of financial strain, which averages maternal responses to two questions: how difficult is it to live in their total household income (1= not at all difficult, 5=extremely difficult); and, whether, in the next 12 months, they anticipate hardships such as inadequate housing, lack of food, or lack of medical care (1=not at all, 5 =a great deal). The second is an indicator of whether the mother reports being hassled by a bill collection agency in the past year.

#### Demographic Control Measures

All analyses also include a series of demographic controls: age of the child, whether the mother has a high school degree, and whether an additional adult was living in the household at each wave. As described below, the use of a within-child fixed effects design means that time-invariant characteristics, such as child sex or race, are not explicitly included in the model, but are implicitly controlled.

#### Barriers to Employment

All analyses also control for a series of measures that represent potential barriers to employment measured at each wave. These measures are mothers' mental health, substance abuse, physical health, experience of domestic violence, and pregnancy. These measures may be correlated both with maternal work patterns and with mothers' reports of their children's behavior and their own parenting behavior (see Danziger et al., 2000).

*Maternal Mental Health and Substance Abuse.* Mothers' mental health and substance use were assessed at each wave using diagnostic screening batteries for the twelve-month

prevalence of psychiatric disorders as defined in the Diagnostic and Statistical Manual, revised third edition (DSM-III-R): major depression, posttraumatic stress disorder (PTSD), general anxiety disorder, alcohol dependence, and drug dependence. Questions are from the Composite International Diagnostic Interview (CIDI) used in the National Co-morbidity Survey (NCS), the first nationally representative survey to administer a structured psychiatric interview (Kessler et al. 1994). We created three indicator variables, one for mothers who met the diagnostic criteria for any mental health measure (PTSD, general anxiety, or depression) and two variables for those who affirmed any of the questions in the drug or alcohol battery, respectively.

*Physical health.* The women were asked about physical limitations and to rate their general health using questions taken from the SF-36 Health Survey at each wave (Ware et al. 1993). Respondents who rated their general health as poor or fair and who scored in the lowest age-specific quartile (based on national norms) of the multiple-item physical functioning scale were defined as having a health problem. In addition, those respondents who reported that at least one child in the family (not necessarily the focal child) had a physical, learning, or emotional problem that limited his or her activity were defined as having a child with a health problem. We included indicators for health problems of the mother and of any child.

*Domestic violence.* Domestic violence was measured at each wave with the Conflict Tactics Scale (CTS), a widely used measure of family violence (Strauss and Gelles 1986, 1990). A woman was coded as having experienced severe domestic violence if, during the past twelve months, she was hit with a fist or an object, beaten, choked, threatened with a weapon or forced into sexual activity against her will. We included in our analyses an indicator for women who experienced severe domestic violence in the past year.

*Pregnancy.* Finally, we controlled for whether the mother was currently pregnant at each wave. This measure could be associated both with mothers' employment and with their reports of their parenting behavior or the behavior of their children.

### Analysis Plan

We present three sets of regressions. First, we predict parenting behavior using the work/welfare categories. Next, we predict child behavioral outcomes. This allows us to examine the effects of work and welfare patterns on parenting and child outcomes respectively. Our third set of analyses also examines child behavioral outcomes, but includes parenting variables, allowing us to examine whether any effects on child behavior are accounted for by changes in parenting behavior.

Estimating the associations between maternal work behavior and children's outcomes raises the concern that mothers who move from welfare to work may differ in unobservable ways from those who remain on welfare. Without being able to control fully for all of the ways in which such women may differ, Ordinary Least Squares (OLS) regressions of child outcomes on maternal work/welfare behavior may be biased. To address this, we use within-child fixed-effects analyses, which are described in detail below. These analyses exploit the fact that we have up to three observations for each child.

The potential for bias from OLS regression analyses is shown in Equation 1. Here, the outcome of child  $i$  at time  $t$  is regressed on whether the mother is wage-reliant, combining, transitioning, or in the no work/no welfare group, as well as a series of control variables ( $controls_{it}$ ). The reference category is living with a welfare-reliant mother. However, it is likely that researchers are unable to measure and account for all of the ways in which women and children in these categories may differ from each other (these potential unobserved variables are

represented by  $Mother_i$  and  $Child_i$ ). If such measures are omitted from Equation 1, but are correlated with both a mothers' work/welfare status and a child's outcome ( $Y_{it}$ ), then estimates of  $\beta_1$  through  $\beta_4$  from Equation 1 will be biased. Specifically, the unmeasured components of  $Mother_i$  and  $Child_i$  would be included in the error term ( $\epsilon_{it}$ ) of Equation 1. The error term, in turn, would be correlated with both the dependent and independent variables, violating key assumptions of OLS analyses (Deaton, 1997).

$$Y_{it} = \alpha_{it} + \beta_1 work_{it} + \beta_2 combine_{it} + \beta_3 transition_{it} + \beta_4 now/now_{it} + \gamma_1 controls_{it} + Mother_i + Child_i + \epsilon_{it} \quad (1)$$

To address this concern, we use within-child fixed-effect regressions, relying on repeated observations of mothers' work/welfare status and the outcomes of interest. Rather than comparing the outcomes between children of welfare-reliant mothers and wage-reliant mothers, for example, the fixed-effects model examines changes within children's families over time and measures the effect on a child of a mother moving from welfare-reliance to wage-reliance.

The fixed-effects model used in this paper is shown in Equation 2 (for a more complete description see Greene, 1997 or Deaton, 1997). Each variable in the equation is averaged over all assessed time points for a specific child (for example,  $work_i$  is a mothers' average wage-reliant status across all periods of data). This average value is then subtracted from the value at a specific time point for that child ( $work_{it}$ , the wage-reliant status at a specific time point). As a result, all time-invariant measured and unmeasured characteristics for a specific child, (including  $Mother_i$  and  $Child_i$  in Equation 1, as well as other time-invariant measures such as child gender), drop out of the model. This includes any persistent components of the error term that are

correlated across time. This method helps address concerns about relying on maternal reports for key dependent and independent variables in our models. To the extent that unobservable time-invariant characteristics of women are biasing their reports of both sets of variables, using the fixed effects method will reduce that bias.

$$Y_{it} - Y_i = \alpha_{it} - \alpha_i + \beta_1(\text{work}_{it} - \text{work}_i) + \beta_2(\text{combine}_{it} - \text{combine}_i) + \beta_3(\text{transition}_{it} - \text{transition}_i) + \beta_4(\text{now}/\text{now}_{it} - \text{now}/\text{now}_i) + \gamma_1(\text{controls}_{it} - \text{controls}_i) + \varepsilon_{it} - \varepsilon_i \quad (2)$$

It should be noted that these analyses do not remove the biasing effects of unmeasured variables that change with time. Additionally, this method only produces estimates for families who experience changes in the dependent and independent variables over time. Thus, the effect of the work/welfare variables on child and parent behavior cannot be estimated for women who were in the same category for all three waves. However, only 16% of our observations contain women who were in the same work/welfare category for all three waves.

## Results

Figure 1 shows the distribution of WES women across the work/welfare status categories at each wave and illustrates the rapid movement over time away from welfare-reliance and toward wage-reliance in this sample. For example, at the Wave 1 interview, 5% of the women were wage-reliant; by Wave 3 this had increased to 38%. Conversely, at Wave 1, 41% of the sample was welfare-reliant, which decreased to 10% at Wave 3. Our goal is to relate these transitions to changes in parenting behavior and child well-being.

Table 1 presents means and standard deviations for the variables in our analyses. Over all three waves, 24% of the women on average are wage-reliant, 27% combine welfare and work,

5% rely neither on work or welfare, and 18% are transitioners; the remaining 26% of women are welfare-reliant. Means for the parenting stress and harsh parenting measures fall close to the middle of the distribution. Means for positive parenting are relatively high. Mothers do not report a high level of behavior problems among their children, although the standard deviation on this measure is quite large. Thirty-one percent of the women, on average, have a mental health diagnosis, and 20% report using drugs. Across all waves, the average age of children in this sample is 5.6 years.

Table 2 presents results of three sets of fixed-effects regressions in which the three parenting measures serve as dependent variables. The four work/welfare categories are used to predict parenting, with welfare-reliant serving as the omitted category. Thus, the coefficient on the “wage-reliant” variable represents changes in a mother’s parenting behavior that result from her movement from welfare-reliance to wage-reliance at some point between waves. As noted in Equation 2, all analyses examine changes occurring within a child over time, as a mother’s work/welfare status changes over time.

The first two columns of Table 2 present results predicting the outcome of parenting stress. Here, movement away from welfare-reliance is not associated with significant changes in parenting stress. Other factors found to predict changes in parenting stress are family income, financial strain, hassles from bill collectors, mental health problems, and child health problems, all of which are associated with increased parental stress.

In the next set of columns in Table 2, changes in work/welfare measures are used to predict harsh parenting. Here, moving from welfare-reliance to combining welfare and work is associated with a decrease in harsh parenting of .64 points, or about 1/3 of a standard deviation

in harsh parenting. Results from Table 2 also show that income is positively associated with harsh parenting, while current pregnancy status is associated with a decrease in harsh parenting.

Finally, the last columns of Table 2 present results of analyses predicting positive parenting. Here, moving from welfare-reliance to combining welfare and work is associated with an increase in positive parenting of .42 points, or 19% of a standard deviation in positive parenting. Also in Table 2, the number of adults in the household, current pregnancy, and child age all are associated with decreased positive parenting.

Table 3 presents the results of fixed-effects analyses in which the work/welfare categories are used to predict children's internalizing and externalizing behavior outcomes. Here, only one of the work/welfare measures is significant; moving from welfare-reliance to combining welfare and work is associated with a decrease in both internalizing and externalizing behavior problems (representing a change of 19% and 17% of a standard deviation in the dependent variables, respectively). Financial strain, child age and maternal mental health are associated with increases in children's behavior problems.

Finally, Table 4 presents the results of fixed-effects analyses in which both the parenting and work/welfare measures are used to predict child behavior. This allows us to test whether the effects of work/welfare changes on children's behavior are accounted for by changes in parenting behavior. Here, an increase in parenting stress is associated with an increase in both internalizing and externalizing behavior. An increase in harsh parenting is associated with a decrease in internalizing behavior, while an increase in positive parenting is associated with a decrease in internalizing behavior. In addition, the movement from welfare-reliance to combining welfare and work is still associated with decreases in both internalizing and externalizing behavior; the effect sizes have not changed from those presented in Table 3,

suggesting that parenting practices do not account for the associations between work/welfare status and children's behavior problems. Drug use, mental health, and child age are associated with increases in both internalizing and externalizing problems.

Additional analyses were performed to examine whether measures of household income or financial strain mediated the associations between changes in work/welfare status and child outcomes; no evidence of mediation was found.

### Discussion

In all, the results from this research suggest that changes in mothers' work/welfare status over a multi-year period are associated with changes in both parenting behavior and reports of children's behavior problems. Specifically, we find that moving from welfare-reliance to combining welfare and work is associated with a decrease in harsh parenting, an increase in positive parenting, and decreases in both internalizing and externalizing behavior problems among children. Given the stringent tests imposed on our data not only through the unusually large range of observable characteristics that are controlled, but also through the use of the fixed-effects method, it is noteworthy that we find such differences.

Despite evidence that the movement away from welfare-reliance is associated with improved child behavior, it is important to note that children in our sample still have relatively elevated levels of behavior problems (in particular, externalizing problems) compared to a national sample. For example, compared to same-aged children in the National Longitudinal Survey of Youth Mother-Child Sample in 1998, WES children's externalizing scores are .72 points higher, or about  $\frac{1}{2}$  of a standard deviation (a difference that is significant at  $p < .01$ ). Since tendencies toward aggression in childhood have been linked to adult criminal behavior in a variety



of studies (Gottfredson & Hirschi, 1990; Sampson & Laub, 1993), the elevated rates of externalizing behavior among WES children is a cause for concern.

A particularly interesting finding from this study is the evidence that the beneficial effects of being wage-reliant are no stronger than the benefits of combining welfare and work; in fact, we find that combining welfare and work is predictive of improved parenting and child behavior (relative to being welfare reliant), while wage-reliance alone is not. This suggests that employment can lead to positive outcomes, particularly if a woman remains on welfare while employed. This is consistent with the findings of Smith et al., (2000). Most work examining the well-being of children in the post-TANF era does not separately examine children whose mothers combine welfare and work; the results from the present study highlight the importance of focusing more attention on this group.

These findings raise questions about why combining welfare and work appears so beneficial for children. We do not find that our measures of parenting account for the association between movement away from welfare-reliance toward combining welfare and work and children's behavior problems, nor do we find evidence that measures of family income or financial strain account for these benefits. However, it is possible that other measures relating to a woman's financial well-being or parenting practices, beyond those captured in this study, may change when women leave welfare-reliance to combine welfare and work, and these measures may account for the beneficial effects of combining welfare and work on children.

Given evidence that women in this sample who do work often have unstable jobs with erratic work hours and low benefits (Johnson and Corcoran, 2002), it is possible that combining welfare and work gives mothers a sense of financial stability that is not found among wage-reliant mothers. Women who combine welfare and work can rely on a regular source of income

as well as health benefits, something that many wage-reliant women may not have. Indeed, Danziger et al. (2002) found that the one way in which wage-reliant women were less well-off economically than their welfare-reliant or combining counterparts is that they were significantly less likely to have health insurance for themselves and their children.

Other studies, using both qualitative and quantitative methods, have found that a fear of losing one's health insurance is a significant negative predictor of employment among welfare recipients (Kalil et al, 2001; Kalil, et al, 2000). Women who have left welfare but who lack health insurance may experience economic stress or anxiety, or perhaps barriers accessing needed services, compared to women who work but remain on welfare (almost all of whom, in the WES, still had health insurance; Danziger et al., 2002). If so, potentially negative effects of these conditions could offset any positive effects that are gained through the greater income and material well-being that wage-reliant women experience, thus resulting in no net benefit in terms of parent and child behaviors. On the other hand, women who combine work and welfare can also reap the benefits of moving to work; benefits that may include improved self-esteem and increased social connections. Thus combining welfare and work could provide women with the best of both worlds, providing them with a lifestyle that benefits their children.

All together, these results suggest that the movement away from welfare-reliance and toward work may not be associated with detrimental outcomes among children, and could in fact be predictive of improved parenting and improved child behavior when mothers combine work with welfare receipt. Importantly, these findings corroborate recent studies that generally show no negative effects (and sometimes small positive effects) of maternal transitions from welfare to work on children.

## Conclusions

The 1996 welfare reform, which took place in the context of a strong economy, has contributed to increased employment and higher incomes for many former recipient families. Welfare reform has dramatically changed the public assistance system offered to those who meet eligibility criteria. By federal law, these criteria have become more stringent than in the past. Welfare is more work-oriented in every state. Some states have used the new flexibility in the system to provide more work supports, such as earnings supplements, childcare subsidies, and extended health care benefits. However, some states make it very difficult to qualify for benefits, offer few supports and terminate benefits if a mother works part time in a minimum wage job.

The results from the present study provide some hint that maternal reliance on welfare without engaging in work may be detrimental to the children of these mothers. At the same time, combining welfare and work appears to be beneficial for children. Michigan is a fairly generous state in allowing women to keep more of their earnings while remaining eligible for welfare, thus making it easier to combine welfare and work than many other states. Michigan allows welfare recipients to keep the first \$200 of income, and 20% of the remainder without this money counting against welfare eligibility meaning that a single mother with two children in Michigan can earn up to \$774 dollars a month and remain eligible for welfare benefits (State Policy Documentation Project, 1999). This policy also facilitates mothers' retaining health insurance for themselves and their children. While most states have similar or more generous disregard policies, they, unlike Michigan, enforce time limits on cash assistance, limiting the amount of time families can combine welfare and work. For example, Connecticut allows welfare recipients to keep all earnings up to the federal poverty level without affecting welfare eligibility, but it also has a 21-month time limit on assistance.

Congress must reauthorize the 1996 welfare reform law in 2002, and many analysts and policy makers have suggested that several types of changes be considered. Our results suggest that policies that permit women to combine the receipt of welfare while still working may prove most beneficial for children. To promote child well-being, then, states, should be encouraged to employ generous earned income disregards and flexible work requirements, both of which allow recipients to engage in part time employment and maintain public supports.

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**Figure 1: Changes in Work/Welfare Status Across Waves**

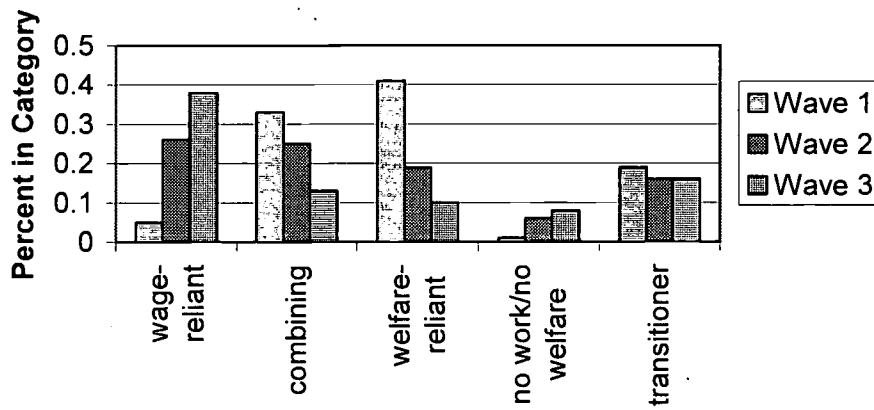




Table 1. Sample Description

	<u>Mean</u>	<u>SD</u>	<u>Min.</u>	<u>Max.</u>
Wage-reliant	0.24	0.42	0	1
Combine wage/welfare	0.27	0.45	0	1
No work/no welfare	0.05	0.22	0	1
Transitioner	0.18	0.39	0	1
Parental stress	20.69	5.76	7	35
Harsh parenting	13.93	2.06	8	22
Positive Parenting	17.04	2.17	8	20
Internalizing problems	4.77	1.22	4	12
Externalizing problems	5.63	1.40	4	12
Annual work hours	1216.52	828.71	0	3120
Monthly gross income	1486.30	930.39	0	9780
Financial strain	2.52	1.03	1	5
Reports of hassles	0.44	0.50	0	1
Any drug use	0.20	0.40	0	1
Met any of alcohol dependence criteria	0.05	0.22	0	1
Any MH diagnosis	0.31	0.46	0	1
Mother health barrier	0.19	0.40	0	1
Child health barrier	0.19	0.39	0	1
Domestic violence	0.14	0.35	0	1
Number of other adults in HH	1.59	0.74	1	6
Currently pregnant	0.08	0.27	0	1
Child Age	5.67	2.53	2	13

Table 2. Fixed-Effect Regression Results Predicting Parenting

Variables	Parental Stress		Harsh parenting		Positive parenting	
	COEFF	SE	COEFF	SE	COEFF	SE
Wage-reliant	-0.70	0.54	-0.46	0.35	0.30	0.24
Combine						
wage/welfare	-0.19	0.48	-0.64**	0.30	0.42**	0.21
No work/no welfare	1.02	1.76	1.48	1.11	-1.07	0.77
No work/no welfare*other adults in HH						
Transitioner	-0.77	0.93	-0.79	0.59	0.55	0.41
Annual work hours (1000s)	-0.12	0.42	-0.34	0.26	0.06	0.18
Monthly gross income (1000s)	0.17	0.24	0.07	0.15	-0.10	0.11
Financial strain	0.36**	0.16	0.19*	0.10	0.03	0.07
Reports of hassles	0.64***	0.15	0.02	0.09	0.02	0.06
Any drug use	0.79***	0.27	-0.06	0.17	0.08	0.12
Met any of alcohol dependence criteria	-0.45	0.38	0.17	0.24	-0.20	0.17
Any MH diagnosis	-0.11	0.57	-0.19	0.36	-0.11	0.25
Mother health barrier	0.93***	0.29	0.13	0.18	-0.02	0.13
Child health barrier	-0.08	0.37	-0.23	0.23	-0.09	0.16
Domestic violence	0.60*	0.33	-0.28	0.21	0.11	0.14
Number of other adults in HH	0.31	0.37	0.01	0.23	-0.02	0.16
Currently pregnant	-0.02	0.22	-0.10	0.14	-0.17*	0.10
Child Age	0.09	0.42	-0.76***	0.26	-0.42**	0.18
Constant	0.01	0.11	0.06	0.08	-0.26***	0.05
F value	17.79	0.78	13.80	0.52	18.64	0.36
Number of children	3.04***		1.44		3.87***	
	690		573		573	

\* p <.1 \*\* p <.05 \*\*\* p <.01.

NOTE: In column 3, the coefficients for combiners and no work/no welfare are significantly different at the 10% level such that movement to combining is associated with a larger decrease in harsh parenting than movement to no work/no welfare.

In column 5, the coefficients for combiners and no work/no welfare are significantly different at the 10% level such that movement to combining is associated with a larger increase in positive parenting than movement to no work/no welfare.

In column 5, the coefficients for combiners and transitioners are significantly different at the 5% level such that movement to combining is associated with a larger increase in positive parenting than movement to transitioning.

In column 5, the coefficients for wage-reliant and no work/no welfare are significantly different at the 10% level such that movement to wage-reliant is associated with a larger increase in positive parenting than movement to no work/no welfare.

Table 3. Fixed-Effect Regression Results Predicting Child Outcomes

Variables	Internalizing		Externalizing	
	COEFF	SE	COEFF	SE
Wage-reliant	-0.10	0.15	-0.18	0.15
Combine				
wage/welfare	-0.23*	0.13	-0.24*	0.13
No work/no welfare	0.53	0.48	0.18	0.49
No work/no welfare*other adults in HH	-0.21	0.26	-0.11	0.26
Transitioner	0.01	0.12	-0.03	0.12
Annual work hours	0.14**	0.07	0.09	0.07
Monthly gross income	-0.04	0.04	0.04	0.04
Financial strain	0.10**	0.04	0.08*	0.04
Reports of hassles	0.12	0.07	0.13*	0.07
Any drug use	0.24**	0.11	0.17	0.11
Met any of alcohol dependence criteria	0.21	0.16	-0.09	0.16
Any MH diagnosis	0.21***	0.08	0.30***	0.08
Mother health barrier	0.02	0.10	0.03	0.10
Child health barrier	0.14	0.09	0.07	0.09
Domestic violence	-0.04	0.10	-0.17	0.10
Number of other adults in HH	0.07	0.06	0.03	0.06
Currently pregnant	-0.07	0.11	0.01	0.12
Child Age	0.17***	0.03	0.11***	0.03
Constant	3.23	0.23	4.59	0.23
F value	5.15***		2.73***	
N	573		573	

\* p <.1 \*\* p <.05 \*\*\* p <.01.

NOTE: For both outcomes, the coefficients between combiners and transitioners are significantly different at the 5% level, such that movement to the combining category is associated with a larger decrease in internalizing problems than movement to transitioning.

Table 4. Fixed-Effect Regression Results Predicting Child Outcomes, Including Parenting Measures

Variables	Internalizing		Externalizing	
	COEFF	SE	COEFF	SE
Parenting stress	0.03***	0.01	0.04***	0.01
Harsh parenting	-0.03*	0.01	-0.02	0.01
Positive Parenting	-0.03	0.02	-0.05**	0.02
Wage-reliant	-0.09	0.15	-0.16	0.15
Combine				
wage/welfare	-0.23*	0.13	-0.23*	0.13
No work/no welfare	0.44	0.48	0.07	0.48
No work/no welfare* other adults in HH	-0.14	0.26	-0.05	0.26
Transitioner	0.01	0.12	-0.05	0.12
Annual work hours	0.14**	0.07	0.08	0.07
Monthly gross income	-0.04	0.04	0.03	0.04
Financial strain	0.08*	0.04	0.05	0.04
Reports of hassles	0.09	0.07	0.11	0.08
Any drug use	0.26**	0.10	0.18*	0.11
Met any of alcohol dependence criteria	0.17	0.16	-0.11	0.16
Any MH diagnosis	0.17**	0.08	0.26***	0.08
Mother health barrier	0.04	0.10	0.04	0.10
Child health barrier	0.11	0.09	0.05	0.09
Domestic violence	-0.05	0.10	-0.20**	0.10
Number of other adults in HH	0.05	0.06	0.03	0.06
Currently pregnant	-0.10	0.11	-0.01	0.12
Child Age	0.16***	0.03	0.09***	0.03
Constant	3.61	0.56	5.02	0.56
F value	5.24***		3.68***	
N	572		572	

\* p <.1 \*\* p <.05 \*\*\* p <.01.

NOTE: In column 1, the coefficients between combiners and transitioners are significantly different at the 5% level, such that movement to combining is associated with a larger decrease in internalizing problems than movement to transitioning.

In column 3, the coefficients between combiners and transitioners are significantly different at the 10% level, such that movement to combining is associated with a larger decrease in internalizing problems than movement to transitioning.



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