Low-Wage Maternal Employment and Outcomes for Children: A Study

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Abstract

Despite the importance of anticipating how children may be affected by policies that move mothers off welfare and into employment, as the article by Zaslow and Emig in this journal issue points out, few research studies have addressed this critical policy question. To help fill that gap, this article presents the results of a new study using national survey data to examine child outcomes among families that had previously received welfare. About half the families studied had mothers who remained at home, the others were working at varying wage levels.

The findings reported here echo themes discussed in the two preceding articles. Maternal employment does not appear to undermine children’s social or cognitive development from ages 5 to 14, and it may yield advantages. Children whose mothers earned more than $5.00 per hour, particularly, had somewhat better outcomes than others. The authors emphasize, however, that background characteristics specific to the mothers who chose employment contributed to these positive outcomes. The authors add that it would be risky to apply these generalizations based on these findings to families forced into employment by welfare reform.

As policymakers redesign their welfare programs, strengthening employment opportunities and requirements for mothers who receive public assistance, there is little research that can tell them how the children in welfare-dependent families will fare as their mothers are coaxed or pressed into the labor market. As noted in the research overview by Zaslow and Emig in this journal issue, most women who have moved from welfare into employment have done so voluntarily, and these women are likely to differ in important ways from women who are not motivated or able to find employment on their own. Those very differences can also be expected to contribute to a home environment that fosters child development. (See the article by Parcel and Menaghan in this journal issue.) Little previous research on maternal employment has isolated the separate influence of the mother’s work status on child development from the myriad of child and family background characteristics that make some women more likely to work and that may also directly influence their children’s development.
The study discussed in this article is an effort to fill that gap, while focusing on a low-income sample.

Past research shows that the implications for children of maternal employment differ according to family income and preferences for employment and may also depend on the specific employment circumstances the mother is facing. For welfare mothers, mandatory transitions to employment may result in work that pays low wages, is sporadic or involves irregular hours, and is repetitive and unstimulating. Consequently, to obtain a fair estimate of the effects that welfare reform work requirements may have on children, one must focus on employment in the types of jobs that women leaving welfare can usually obtain.

This article takes advantage of a representative national survey with rich data on employment and public assistance to examine how maternal employment in low-wage jobs is linked to the development of children between 5 and 14 years of age in families that have received welfare. Although cognitive and social development outcomes varied for boys and girls, the data show no overall pattern of effects for children whose mothers voluntarily enter the labor force. Thus, the study results suggest that (voluntary) maternal employment—even at low wages—is not harmful to children in this age range.

**The Study Design**

This study of the effects that maternal employment in low-wage jobs has on children focuses on a sample of 1,154 children whose mothers were single and received Aid to Families with Dependent Children (AFDC) at some point during a five-year period (1986 through 1990). Measures of children’s cognitive and social development are used to compare outcomes for children whose mothers were and were not employed at differing wage levels during 1991. The study takes into account maternal and family characteristics that predispose low-income mothers to be employed, and it distinguishes mothers who earn very low wages from those earning somewhat more.

The data used in this study are from the National Longitudinal Survey of Youth, an annual, nationwide survey of youths who were 14 to 21 years of age when the study began in 1979 and who have now entered adulthood. Starting in 1986, information was collected about the children born to the women in the original sample, including their cognitive and social development, physical health, experiences of child care, and academic achievement. This study combines data from the 1979 survey on background characteristics of the mothers; data from 1986 to 1990 on marriage, employment, and welfare receipt; facts about the mothers’ employment and wages in 1991; and information from 1992 on the children’s cognitive attainments and behavior when they ranged in age from 5 to 14 years. The mothers received AFDC assistance for at least one month during the years 1986 to 1990 and were unmarried for one or more years during this period.

Four groups of families with some history of AFDC receipt are compared. The first group included mothers who were not employed in 1991 (48% of the total). The other three groups included families with working mothers: some 25% earned quite low wages (less than $5.00 per hour), 17% earned low to moderate wages ($5.00 to $7.50 per hour), and only 10% earned somewhat higher wages ($7.50 to $12.00). Contrasts between


these groups offer crucial information to policymakers who need to know whether the implications of maternal employment for children in families with some history of AFDC receipt will depend upon the mother’s wages.

Families who have depended on public assistance are generally disadvantaged, and those included in this study were no exception. Half the children, who averaged 10 years of age, had never lived with their biological father. One child in eight was a low birth weight baby, and one in seven was in poor health in 1992. The mothers averaged only 11 years of education. In the five years from 1986 to 1990, the average mother had worked just over two years and had received AFDC for nearly three years. Black children made up 58% of the sample, and whites and Hispanics accounted for 20% and 21%, respectively. During 1991, more than half the mothers were working, and the mean household income of all the families was just over $14,000, close to the nationwide 1991 poverty threshold for a family of four of $13,924. As Table 1 shows, the employed mothers tended to have stronger educational and employment backgrounds than those who relied on welfare.

As child outcomes, the study examines children’s behavioral problems and three aspects of academic achievement. The academic measures are from the Peabody Individual Achievement Test. The reading recognition assessment measured word recognition and pronunciation ability; the reading comprehension test measured the child’s ability to derive meaning from sentences that are read silently; and the mathematics assessment began with recognizing numerals and progressed to advanced concepts in geometry and trigonometry. The children’s social behavior was described by mothers using a rating scale called the Behavior Problems Index that can be used to characterize children as, for instance, antisocial, anxious, depressed, headstrong, dependent, or withdrawn.

This study tests whether, for children in low-income families whose mothers received welfare at some point, maternal employment is associated with better or poorer cognitive and behavioral development. In these families, maternal employment might entail disadvantages such as the stress of low-paying employment that is either monotonous or highly demanding. On the other hand, the child could benefit from the mother’s employment through an increase in household income and material resources or through lower levels of maternal depression. The study also tests the idea that children of women with more fulfilling and higher paying positions will fare better than children of mothers with low-wage and dissatisfying jobs.

The employed mothers in the survey chose to work rather than depend on welfare and were not pressed into work by welfare reform. Because the voluntary nature of such entry into work may affect children’s adjustment, this study took into account a

Table 1

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Not Working</th>
<th>Earning Under $5.00/hour</th>
<th>Earning from $5.00 to $7.50/hour</th>
<th>Earning Over $7.50/hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of sample</td>
<td>48%</td>
<td>25%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Mother’s Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>11 years</td>
<td>11 years</td>
<td>12 years</td>
<td>12 years</td>
</tr>
<tr>
<td>Cognitive test score</td>
<td>411</td>
<td>463</td>
<td>540</td>
<td>538</td>
</tr>
<tr>
<td>Married in 1991</td>
<td>15%</td>
<td>17%</td>
<td>30%</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Experiences Between 1986 and 1990</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time on AFDC</td>
<td>42 months</td>
<td>31 months</td>
<td>25 months</td>
<td>22 months</td>
</tr>
<tr>
<td>Time spent working</td>
<td>15 months</td>
<td>37 months</td>
<td>43 months</td>
<td>37 months</td>
</tr>
</tbody>
</table>

Source: Authors’ tabulations based on data from the National Longitudinal Survey of Youth (CD-ROM) Ohio State University, 1979–92. Available from NLS User Services, 921 Chatham Lane, Suite 200, Columbus, OH 43221.
host of attributes of the mother and child that are likely to lead to employment and to influence the child’s development. Statistical analyses using large samples can take into account numerous background characteristics in order to remove their extraneous influences and show how the fact of maternal employment itself affects child development. However, statistics cannot approximate the conditions of welfare reform where work is mandated or time limits are imposed.

The background factors controlled in this study include the following: characteristics of the mother that are unalterable (her race and family of origin) or relatively modifiable (her education, cognitive performance, and attitudes towards women’s roles and welfare use); characteristics of the child (age, sex, birth order, weight at birth, and current health); and aspects of the family’s situation such as absence of the father, earlier maternal employment, reliance on AFDC, and income outside the mother’s wages. Most of these factors are either associated with or predict maternal employment, and they may contribute to the positive effects that maternal employment at higher wage levels appears to have on children’s development. Note, however, that this study can only point out associations between family characteristics and child outcomes, it cannot establish that one causes the other.

Study Findings
The discussion of the study’s results below first reports the simple link between maternal employment and child outcomes without considering the background factors described above, then gives the more statistically appropriate estimate of the effects of maternal employment on children once other factors are taken into account. Both sets of effects are summarized in Table 2.

Simple Effects of Maternal Employment
When one examines only the simple effects—the extent to which maternal employment at varying wage levels is linked with outcomes for children, without controlling for other factors—the results suggest that maternal employment is associated with more positive child outcomes, but only when wages exceed $5.00 per hour. For some outcomes, benefits appear only at wages of $7.50 or better. For instance, children whose mothers earned more than $7.50 per hour had fewer behavioral problems than did the children of mothers who did not work or who earned lower wages. Similarly, reading recognition, reading comprehension, and math scores were higher for children of mothers who worked and earned more than the lowest wages. Reading recognition and math scores were significantly higher even at wages of more than $5.00, while reading comprehension scores rose only for children whose mothers earned above $7.50 per hour.

But maternal employment and wages are far from the only factors that influence children’s behavior and achievement, of course. Background factors significantly influence child development and may also be related to mothers’ work status and earnings. As mentioned above, these factors include the following: the child’s age, birth order, gender, and race; the mother’s education, cognitive attainment, attitudes about gender roles, and reliance on welfare; and the family’s history of employment or AFDC use and household income. Clearly, their impact must be considered when one attempts to measure the effects of employment on children.

Accounting for Background Factors
The findings change substantially when the statistical analysis takes into account background factors that are linked with both maternal employment and child development. This analysis suggests that the mother’s work status and wages are not a dominant influence on her children. The overall pattern of results suggests that maternal employment has not harmed children in this sample of low-income families with some history of single parenthood and AFDC receipt.

Differing patterns link maternal employment to the four child outcomes studied, as Table 2 shows. Overall, children whose mothers fell into the highest wage category had fewer behavioral problems than other children. Separate analyses of boys and girls revealed that daughters of employed mothers who earned more than $5.00 per hour had fewer problems than girls whose mothers did not work or worked and earned less than this amount. No clear pattern of differences appeared among the boys.
For cognitive outcomes, the pattern of findings is more varied but again provides little evidence of harmful effects. There is no indication that mothers' employment status affects children's reading scores, after taking into account the influence of such factors as the child's gender and the mother's education and problem-solving ability. For the math outcomes, the pattern differed for boys and girls. While maternal employment is related to lower math scores for boys, especially at the lowest wage levels, girls with mothers in the highest wage category did better on the math achievement test.

To summarize, when background factors are taken into account, maternal employment is still associated with lower levels of behavioral problems for girls and for all children whose mothers earn more than $7.50 per hour. The only clear effect of maternal employment on cognitive outcomes was found for math scores; girls with working mothers had higher scores while comparable boys scored lower. Thus, no overall pattern of positive or negative effects was found.

### Conclusions

Viewed from the perspective of policymakers, these results focus attention on the wage levels mothers leaving welfare can command. About half the employed mothers in this sample (mothers who were at any time single and at any time on AFDC) earned wages of less than $5.00 per hour. Yet, when a number of background differences were taken into account, this study showed that outcomes for the children whose mothers earned these very low wages were similar to the outcomes for children with nonworking mothers.

These findings indicate that maternal employment, even at very low wages, is not associated with negative cognitive and academic outcomes for children. Instead, simple associations between work and higher wages and children's outcomes are quite positive. These positive relationships are tem-

<table>
<thead>
<tr>
<th>Maternal Employment</th>
<th>Behavioral Problems</th>
<th>Reading Recognition</th>
<th>Reading Comprehension</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple Effect</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Fewer problems if mothers earn over $7.50/hour</td>
<td>Higher scores if mothers earn over $5.00/hour</td>
<td>Higher scores if mothers earn over $7.50/hour</td>
<td>Higher scores if mothers earn over $5.00/hour</td>
</tr>
<tr>
<td><strong>Net Effects</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Overall sample</td>
<td>Fewer problems at over $7.50/hour</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Separating boys from girls</td>
<td>Girls: Fewer problems at over $5.00/hour</td>
<td>None</td>
<td>None</td>
<td>Girls: Higher scores at over $7.50/hour</td>
</tr>
<tr>
<td></td>
<td>Boys: Mixed, no clear pattern</td>
<td>None</td>
<td>None</td>
<td>Boys: Lower scores at under $5.00/hour</td>
</tr>
</tbody>
</table>

<sup>a</sup> All effects listed were statistically significant, that is, would occur by chance no more than 5 times in 100.

<sup>b</sup> The simple effects analysis links the employment variable directly to the outcome without taking into account the possible influences of background factors.

<sup>c</sup> The net effects analysis takes into account the influence on outcomes of the following factors: the child’s sex, age, birth order, health, and birth weight; the mother’s race, number of siblings, childhood family structure, education, cognitive test score, and attitudes toward welfare and sex roles; the family’s 1986–1990 months on AFDC, months working, and father presence; and the family’s 1991 AFDC receipt and marital status.

Source: Authors' tabulations based on data from the National Longitudinal Survey of Youth (CD-ROM) Ohio State University, 1979–92. Available from NLS User Services, 921 Chatham Lane, Suite 200, Columbus, OH 43221. Interested readers can contact the authors to receive a version of this article with full methodological detail.
pered when the factors that predict whether mothers will be employed are controlled; but even these results suggest a picture of no effects or of positive implications, with the single exception of lower math scores for boys whose mothers work at low wages.

This study indicates that behavioral problems diminish as maternal wages increase. Because the measure of behavioral problems is based on the mother's report, the ratings she gives may reflect her overall positive or negative outlook. If employment is welcomed, the mother's perception of her child may be bright, while a mother who is depressed staying at home may give a negative slant to ratings. Of course, it may be the case that children's behavioral problems are less common in employed-mother families. Related studies suggest that when family circumstances change, children's behavior problem scores change more quickly than do cognitive outcomes, so the positive effects of employment on social behavior may be a harbinger of later benefits in other child outcomes. Regardless of interpretation, these findings suggest that in low-income families, maternal employment does not, on average, harm children. Rather, it may be that a lack of employment, even among mothers, is more stressful and dam-

aging. Of course, hours of work and child care quality may also be crucial factors, and they are not measured in this study.

Other recent research looking at younger children bolsters this conclusion. For example, a study that used the NLSY data set to examine the effects of welfare and maternal employment during the first three years of life found no evidence that maternal employment harmed the cognitive abilities of children in poor and near-poor families. Also, early findings from a national study of infants showed that maternal employment and child care participation do not damage the quality of the infant's attachment to the mother.

In sum, these findings justify a cautious optimism with regard to employment among single mothers who have received welfare, at least under conditions of self-selection into employment. As noted earlier, however, these results cannot be extrapolated to circumstances in which maternal employment is mandated by law. Understanding child development under these circumstances must await the results of experimental studies of welfare policies and programs that examine child outcomes as well as effects on employment and welfare receipt.

3. The 15 respondents with wages of more than $12.00 per hour were dropped from the sample.