

JUDITH R. SMITH *Fordham University*

JEANNE BROOKS-GUNN, PAMELA K. KLEBANOV, AND KYUNGHEE LEE
Teachers College, Columbia University

Welfare and Work: Complementary Strategies for Low-Income Women?

We examine the effects of mothers' strategies of combining employment and welfare receipt during the first 3 years of their child's life on the child's cognitive development, behavior problems, and home learning environment at ages 5 to 6. We compare the child outcomes of those mothers who were continuously employed and received no welfare with (a) those who worked some or all of the 3 years and also received public assistance and (b) those who were totally dependent on public assistance. We studied children in single-parent families (N = 1271) living below 200% of the poverty threshold using data from the National Longitudinal Survey of Youth—Child Supplement. No negative association was found on most child outcomes with a mother's employment whether or not it was combined with public assistance. However, mothers' not working at all and receiving financial support solely from AFDC was associated with negative child outcomes. We discuss the implications of these findings for the possible effects of the new welfare laws on families and young children.

Recent welfare reform legislation, including the Personal Responsibility and Work Opportunity

Graduate School of Social Services, Fordham University,
113 W. 60th Street, New York, NY 10023 (jsmith@
fordham.edu)

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Act (PRWORA) of 1996 and the Family Support Act of 1988, aim to move welfare-dependent mothers with young children into the paid labor force. These policies express the societal expectation that welfare-dependent women with young children must engage in paid or unpaid employment outside the home in order to be eligible for income assistance. Yet emerging research demonstrates that, even prior to the new welfare reform legislation, many welfare recipients were using paid employment as part of their strategy to support themselves and their children, despite very low wages and added child-care costs (Edin & Lein, 1997; Edin & Jencks, 1992; Harris, 1992, 1996; Pavetti, 1992, 1995; Spalter-Roth, Burr, Hartmann, & Shaw, 1995). Marianne (1998) refers to the various strategies for survival used by welfare-dependent women as "income packaging." What has not yet been studied is the effect on child well-being of mothers' combining welfare receipt and employment. Will this strategy benefit or harm young children? It is possible that additional income from maternal employment will have positive effects on the child's well-being, but the mother's working might also be associated with indirect negative effects on the parent-child interaction, which in turn might be associated with negative child outcomes.

Research on welfare-to-work programs, which target poor mothers with young children, has focused on the woman as provider, rather than the

woman as parent. Most evaluations of welfare reform programs have measured success by the changes in parents' economic status (Long, Wood, & Kopp, 1994; Maynard, 1995; Wood, Bloom, Fellarath, & Long, 1995). Less attention has been paid to the possible influence on children of the employment of women in welfare-to-work programs (Collins & Aber, 1996; Haskins, 1985; Wilson, Ellwood, & Brooks-Gunn, 1995; Zaslow, Moore, Morrison, & Coiro, 1995). The association of welfare-to-work programs with the parenting of the mother, as well as the organization of the home and the mother's mental health, have been missing in most reports (see Aber, Brooks-Gunn, & Maynard, 1995; Zaslow & Emig, 1997, as exceptions). Welfare-to-work evaluations focus on the number of families who stop receiving public assistance or the number of hours these former recipients engage in paid employment. An untested implicit assumption made by some policy analysts and by the public at large is that limiting public assistance income benefits and moving welfare-dependent women to employment will have positive effects on the women themselves and on their children.

There are four approaches to studying the association between maternal employment and child well-being: investigating (a) the impact of mothers' absence from the home because of employment; (b) the effect of stressful family interaction patterns; (c) the changes in family income security; and (d) the effects of multiple roles on maternal mental health.

MOTHER AS HOME BASE

The impact of maternal employment on child well-being was initially studied by developmental psychologists in terms of the possible effects on the child's well-being of the mother's employment-related absences. Attachment theory has been used by many to examine whether the mother's employment outside the home is associated with deleterious child outcomes that can be ascribed to the mother's absence during the critical periods of early child development (Ainsworth, 1964; Barglow, Vaughn, & Molitor, 1987; Belsky & Eggebeen, 1991; Clarke-Stewart, 1989). Some early studies, using small samples of primarily middle-class children, have shown that toddlers who experienced out-of-home care were less likely to be securely attached and, in a few studies, were more aggressive with peers and less compliant with adult demands (Belsky, 1988;

Haskins, 1985; Schwartz, 1983). Recent studies with larger samples have not substantiated these claims (NICHD Child Care Study Group, 1998). Other studies have focused on child cognitive outcomes related to early maternal employment. Using secondary analysis on large samples, negative associations have been found between a child's verbal ability score at ages 4 and 5 and a mother's employment hours during the child's first year of life, but not between maternal employment and cognitive scores after this first year (Baydar & Brooks-Gunn, 1991; Blau & Grossberg, 1990; Parcel & Menaghan, 1994; Smith, Brooks-Gunn, & Jackson, 1997; but see also Harvey, 1999)

SOCIAL STRESS RESEARCH

Research has investigated how social stressors related to employment affect child outcomes through family interaction patterns (Menaghan, Jowaleski-Jones, & Mott, 1997). Findings demonstrate that jobs that encourage autonomy and self-direction influence a mother's intellectual flexibility and have positive associations with mother-child interactions at home (Menaghan & Parcel, 1991; Miller, Schooler, Kohn, & Miller, 1979; Parcel & Menaghan, 1994). Low-income working mothers are the least likely group to hold jobs that offer opportunities for autonomy or self-direction. Research on parental employment done with fathers has found that there is a negative association between a father's loss of employment and child outcomes. The negative child outcomes are associated with the fathers' increased hostile behavior toward their male children after a job loss (Conger, Ge, Elder, Lorenz, & Simons, 1994; Elder, 1974). McLoyd (1990) also found that the path from income insecurity and child outcomes was through the parent-child interaction.

MATERNAL EMPLOYMENT AND FAMILY INCOME SECURITY

A few recent studies have found negative effects of welfare receipt and nonemployment on child well-being; negative effects have been explained primarily through low family income (Zill, Moore, Smith, Sief, & Coiro, 1995). There is also a growing body of research that documents the negative effects of poverty on young children (Brooks-Gunn & Duncan, 1997; Duncan & Brooks-Gunn, 1997; Duncan, Yeung, Brooks-Gunn, & Smith, 1998). Several researchers have investigated the labor-force trajectories of welfare-

dependent women who seek employment (Maynard, 1995; Pavetti, 1995; Zill et al., 1995). Many women find jobs and stop receiving welfare, yet do not develop a secure attachment to the labor force (being employed over the course of an entire year) and recycle back onto public assistance for a period of time (Ellwood & Bane, 1994; Harris, 1992, 1996; Pavetti, 1995). Most welfare-dependent women who combine or substitute employment for public assistance enter the low-wage market, which does not provide an annual income sufficient to lift a mother and her child out of poverty. In addition, a working mother incurs additional expenses, including child care, transportation, and wardrobe costs. Finally, most low-wage jobs do not offer health insurance.

MULTIPLE ROLES AND MATERNAL MENTAL HEALTH

Conflicting views exist regarding the effects of combining work with family roles. Some researchers have found that role strain emerges when women combine family responsibilities and outside employment; others have argued that multiple roles enhance a woman's well-being by offering her new opportunities for increased status, privileges, and self-esteem (Barnett & Marshall, 1992; Baruch & Barnett, 1987). Marshall and Barnett (1991) found that the strain of combining work and family was greater among working-class women because of their limited resources for easing the workload of the double shift. A mother's level of satisfaction with her role has been the most extensively studied mediator between maternal employment and child development. Many studies have confirmed that a mother's satisfaction with her role, whether she is employed or not, has positive indirect effects on her children through the mother-child interaction (Baruch & Barnett, 1987; Hock, 1980; Hoffman, 1989; Spitze, 1988).

Poor women with young children may use several different patterns for combining employment and welfare receipt. Some people work and simultaneously receive public assistance (this can be a legal option if the income is reported to the welfare department and adjustments are made to the benefit); some people cycle between the two; and some remain primarily reliant on public assistance without any paid employment. Human capital differences have been found among the women in each of these groups (Spalter-Roth et al., 1995).

In this paper, we examine the association be-

tween child well-being and six maternal self-sufficiency strategies involving welfare or employment in a sample of low-income families with children from birth to 3 years. We ask the question: How is a mother's employment pattern, whether combined with public assistance or not, associated with a child's cognitive and achievement abilities, with the child's emotional adjustment, and with the cognitive and emotional environment the parent provides at home? Based on current research on women who are not poor, we hypothesize that a mother's employment per se will not be detrimental to young children, whether or not it is coupled with welfare receipt. We expect that the effects of combining welfare and employment will be similar to the effects of maternal employment in general—that is, we do not expect to see direct negative effects of this complementary strategy on child well-being. We also hypothesize that increases in family income will have positive effects on child well-being and will offset some of the negative effects of maternal employment on child well-being, if some negative effects are found to be associated with employment. We also expect that welfare receipt and lack of employment during the child's early years will have negative associations with child outcomes, with this effect being due in part to the loss of income experienced by the family. Finally, we do not expect that a mother's limited intellectual abilities, as measured by the Armed Forces Qualifying Test (AFQT), will fully explain the negative effects on child well-being of the mother's lack of employment and her receipt of welfare benefits.

METHOD

Design

We conduct analyses using the National Longitudinal Survey of Youth—Child Supplement (NLSY—CS), which includes information on the mother's employment pattern or welfare pattern during the child's first 3 years of life, as well as assessment data on the child's cognitive abilities, behavior problems, and Home Learning environment at age 5. We examine five maternal welfare or welfare-employment patterns during the first 3 years of their child's life and we compare these via regressions to the patterns for mothers who were employed for each of the first 3 years of their child's life and did not receive public assistance. We realize that if differences are found, these are subject to selection bias—that is, unmeasured

characteristics that differentiate the mothers in one welfare transition group from those in another. Therefore, our models include a number of pre-existing child, maternal, and family characteristics to decrease the probability that unmeasured characteristics are accounting for any group differences.

Data and Sample

The National Longitudinal Survey of Youth—Child Supplement (NLSY—CS) is a panel study of 12,000 young men and women begun in 1979. The Child Supplement of the NLSY includes detailed longitudinal demographic information on the families, as well as cognitive and socioemotional assessments of the young children administered biannually. The original NLSY sample, drawn in 1979, oversampled poor and minority youths, providing samples of disadvantaged families large enough for within-group comparative analyses (Baker & Mott, 1989; Chase-Lansdale, Mott, Brooks-Gunn, & Phillips, 1991). Data on income, employment, and welfare receipt are available for each mother for every year of the child's life. The sample consists of Black and White children who were living in families with incomes below 200% of the poverty threshold when averaged over the first 3 years of the child's life. In addition, all the children in the sample were part of a single-parent family for some of their first 3 years of life, and all were 5 or 6 years of age in 1986, 1988, 1990, or 1992. Hispanic children were excluded from analyses, because key child outcome variables were not administered in Spanish. The result was missing data in some cases and English assessments for bilingual, but primarily Spanish-speaking, children in other cases (Baydar & Brooks-Gunn, 1991). The sample consists of 1,271 children. Employment and welfare receipt are measured when the child is in the first, second, and third year of life. Parenting and child outcomes are examined with the child is 5–6 years of age. Sixty percent of the children are Black, 18% had a mother who was a teenager when they were born, 14% of the mothers changed their marital status over the child's first 5 years of life (some married, others separated or divorced; the sample excludes all families in which the mothers were consistently married for the first 3 years of the child's life). Mothers had on average 11.5 years of education by the time their children were 3 years of age. Forty-one percent did not graduate from high school, 42% were

TABLE 1. SAMPLE CHARACTERISTICS: MOTHERS AND THEIR YOUNG CHILDREN: NLSY—CS ($N = 1271$)

Variable	Range	Mean	SD
Male	0–1	0.49	—
Black	0–1	0.60	—
Low birth weight	0–1	0.13	—
Mother's education ^a	1–20	11.4	1.8
Teen mother at birth	0–1	0.18	—
AFQT	1–99	22.6	20.4
Income-to-needs (3 years)	0–1.9	0.89	0.48
Hours per week (year 1)	1–45	14	9
Hours per week (year 2)	1–57	14	11
Hours per week (year 3)	1–65	18	13
Home learning score	29–129	92.9	16.8
Home warmth score	37–132	92.0	16.6
PPVT–R	40–136	82.9	17.2
PIAT reading	65–135	103	12.7
PIAT math	65–135	95.5	13.4
Behavior problems	0–32	11.4	6.5

Note: Low birth weight <2,500 grams (yes or no).

Note: 1986–1992 cohorts used of children ages 5 and 6 years of age.

^aMother's education is highest school grade attended (continuous variable).

high-school graduates, and 17% had attended college. The average income-to-needs of the families over the first 3 years of the child's life was .90. Sixty-five percent were living below the official poverty line, 20% were living with incomes between 100% and 150% of the poverty line, and 15% were living between 150% and 200% of the poverty line. Table 1 presents means and standard deviations on the outcome variables and explanatory variables.

Measures

Welfare and employment groups. We examined mothers' patterns of employment during the first 3 years of their child's life. A woman's use of employment, whether coupled with public assistance income or not, was coded and classified her as belonging to one of 6 possible welfare-employment groups. Women reported on their employment hours each quarter of their child's life. They also reported on whether they received income from public assistance (and how much) for each month of each year. For this study, the NLSY—CS analyses defined employment as working for an average of at least one hour per week during the calendar year. Work hours per week were computed by the mean of the total number of hours the mother reported working in the last 2 quarters of each year (Baydar & Brooks-Gunn, 1991).

Child characteristics. The child's gender, race, birthweight, and age in months at assessment are included in all analyses.

Family and maternal characteristics. The mother's education is the highest grade she achieved up to the year of the child assessment. The variable for family structure compares families that were consistently single parent (female-headed) with those in which the mother was married for part of the child's first 3 years of life (families in which the mother was consistently married were omitted). The mother's age at birth of the child (teenage mother or not) is also included. To examine the effect of income, we used the family's total income from wages and public assistance for each year of the child's life. Our sample is limited to families whose incomes averaged less than 200% or below of the "official" U.S. poverty threshold over the child's first 3 years of life. The poverty threshold is based on a set of income thresholds that were developed in the 1960s and are adjusted for family size and the changes in the cost of living, using the Consumer Price Index. We computed a family income-to-needs ratio by dividing each household's income by its corresponding poverty threshold. Then, income to needs was averaged over the first 3 years of the child's life (Duncan, Brooks-Gunn, & Klebanov, 1994). We include average family income-to-needs ratios as a control variable in our analyses. Welfare receipt was measured by the respondents' reports of whether they had received public assistance (welfare) in the past year, when interviewed when their children were 1, 2, and 3 years of age. (Family income was not adjusted to include food stamps.) We used the mothers' percentile scores on the Armed Forces Qualifying Test (AFQT) to examine possible selection effects based on mothers' aptitude. Although the AFQT is not an intelligence test, per se, it is highly correlated with IQ and is a widely used measure of adult aptitude.

Child outcomes: cognitive assessments. Cognitive assessments include a receptive verbal ability test and achievement tests. The Peabody Picture Vocabulary Test-Revised (PPVT-R) was given to the children at ages 3 to 4 (or at ages 5 to 6, if for some reason they did not take the assessment at the younger age). The PPVT-R provides an estimate of the child's receptive English vocabulary and verbal ability (Dunn & Dunn, 1981). It is not an intelligence test. Scores on the PPVT-R are associated with later school performance and liter-

acy (Brooks-Gunn, Guo & Furstenberg, 1993; Guo, Brooks-Gunn, & Harris, 1996) and, along with scores of other standardized tests, with several family and environmental variables. We use the standardized score, with a mean of 100 and a standard deviation of 15 ($M = 82.9$, $SD = 17.2$). Children who took the PPVT-R prior to 1990 with standardized scores below 40 were given a score of 40 ($n = 6$; Baker & Mott, 1989). These scores were kept in these analyses. Analyses were done without these cases and the findings were parallel.

When the children were 5 to 6 years old, the Peabody Individual Achievement Test (PIAT) was given (Dunn & Markwardt, 1970). The PIAT is a wide-range measure of academic achievement for children aged 5 and over and is among the most widely used brief assessments of academic achievement. It has high test-retest reliability and concurrent validity. The PIAT Mathematics assessment consists of 84 multiple-choice items of increasing difficulty, beginning with early skills (recognizing numerals) and progressing to advanced concepts in geometry and trigonometry. The child looks at each problem and then chooses an answer by pointing to or naming one of four options. The PIAT Reading Recognition assessment measures word recognition and pronunciation ability, which are considered essential components of reading achievement. The PIAT Reading Recognition contains 84 items, which increase in difficulty. Skills assessed include matching letters, naming names, and reading single words aloud (Baker, Keck, Mott, & Quinlan, 1993). We use the standardized score on both assessments, each of which has a mean of 100 and a standard deviation of 15 (In PIAT Reading $M = 103.0$, $SD = 12.7$); In PIAT Math $M = 95.5$, $SD = 13.4$).

Child outcomes: emotional adjustment. The Behavior Problems Index (BPI) is a maternal report of her child's behavior problems. In the NLSY-CS, the BPI was administered when the children were 5 to 6 years of age and consists of 28 items (1986) or 32 items (1988-1992) drawn from several measures (Achenbach & Edelbrock, 1981; Peterson & Zill, 1986). Questions related to school attendance were used only for those enrolled in a school-based program. The BPI is scored on a 3-point scale—1 = *often true*, 2 = *sometimes true*, and 3 = *not true*. Examples of questions are: "Child has difficulty getting along with others," "Child has sudden changes of mood," "Child cheats or lies." The mean total

score for the sample at ages 5 to 6 is 11.4 ($SD = 1.8$).

Parenting behavior. The Home Observation of the Measurement of the Environment (HOME) is a widely used measure of the provision of learning experiences and maternal warmth. It is studied via observation of the home environment, an interview with the mother, and observation of the mother and child in interaction (Bradley et al., 1989; Caldwell & Bradley, 1984). The HOME is highly associated with a variety of child outcomes, often being a stronger predictor of cognitive and school academic readiness than maternal education (in regressions entering both variables; Bradley et al., 1989; Brooks-Gunn, Klebanov, & Liaw, 1994). We use a short version of HOME (Baker & Mott, 1989; 26 items—15 are maternal report and 11 are interviewer ratings; potential range is 0 to 26). Two scales are derived from the standardized scores generated by Baker and Mott (1989; Chase-Lansdale, Gordon, Brooks-Gunn, & Klebanov, 1997)—a cognitive stimulation scale ($M = 92.9$; $SD = 16.8$) and an emotional support scale ($M = 92.0$; $SD = 16.6$).

Analytic plan. We use multiple linear regressions (ordinary least square [OLS]) to examine the association between a mother's pattern of combining employment and welfare during the first 3 years of her child's life and various child outcomes and parenting behavior at 5 to 6 years. Child characteristics (age, gender, birth weight) and family characteristics (mother's education, age at birth, race/ethnicity, and marital status) are all included in the regressions to control for possible preexisting group differences.

In the first set of analyses, five of the six contrast-coded welfare–employment groups are entered into the analyses. Those who were employed during the first 3 years and never received public assistance are the omitted contrast group. In these analyses, Model 1 includes gender, age, birth weight, mother's education, race or ethnicity, and age at birth to reduce the possibility of preexisting family characteristics accounting for welfare and employment group differences. Model 2 additionally controls for family income over the first 3 years of the child's life. Model 3 additionally controls for the mother's score on the Armed Forces Qualifying Test and for family structure. (We originally ran family structure as a separate model, but this yielded no significant findings. Therefore, we present the findings for AFQT along with family

structure.) The outcomes of interest include (a) the child's cognitive test scores, (b) behavior problems score and the Home Learning environment, and (c) the emotional warmth in the home.

Coding is as follows: child's gender (0 = female; 1 = male); birth weight (1 = <2,500 g; 0 = >2,500 g), age of child in months when child took the PPVT-R assessment, mother's education (continuous variable); age at birth of child (1 = <18; 0 = >18); maternal race or ethnicity (0 = non-Black, non-Hispanic; 1 = Black); marital status (0 = consistently single parent; 1 = married for part of the child's first 3 years). Family income is a continuous variable computed as the average income-to-needs ratio of the family over the first 3 years of the child's life. For the Behavior Problem Index, we recoded all questions so that higher scores described more behavior problems. We use all 32 questions for those children who were in a formal school program; we use 28 questions for those not in school. If more than 25% of items were missing, the case was dropped. The measurement of the HOME cognitive and emotional scale are both continuous variables.

RESULTS

Intercorrelations

Mother's employment and poverty status was negatively correlated and statistically significant during each of the first 3 years of a child's life ($-.24$ in year 1, $-.28$ in year 2, and $-.33$ in year 3). Total family income was positively correlated with employment (.31 for employment all 3 years and no welfare; .13 for some employment and no welfare). Child outcomes such as PIAT Reading, PIAT Mathematics, and PPVT-R were correlated with each other, as expected (r s between .39 and .48, $p < .001$). None of these variables is used as an independent variable entered into the same equation with any other variable.

Description of Welfare and Employment Groups

Twenty-four percent of the mothers were employed for all 3 of the child's first 3 years; 39% had a pattern of some employment over the 3 years; and 37% were never employed. Of those who were employed for each of the first 3 years of the child's life, 65% did not receive any public assistance, 28% received public assistance for 1 or 2 of the 3 years, and 8% received public assistance for the entire 3 years. Of those who worked

for 1 or 2 of the first 3 years, 38% received no public assistance; 41% received it for some period of time; and 21% received it for all 3 years. Of those who had no employment during the first 3 years of their child's life, 30% received no public assistance; 36% received assistance during some of the 3 years; and 35% received public assistance for all of the 3 years.

Table 2 presents the demographics of the welfare and employment groups. Group differences were found. Those mothers who were employed during all of the first 3 years of their child's life and received no public assistance had, on average, 12.3 years of completed schooling; 17% had been married at some point; 18% were teenage mothers at the birth of their child; and the average income to needs was 1.4. In contrast, those mothers who were unemployed for the first 3 years of their child's life and received public assistance during this time had on average 10.7 years of completed education; 10% had been married for part of the 3 years; 38% were teenagers at the birth of their child; and the average income-to-needs ratio during the first 3 years of their child's life was .70.

Effects of Employment and Welfare on Child Outcomes

Cognitive assessments. Differences were found for the associations between the child's cognitive test score and the various employment and welfare groups (Table 3). Model 1 presents the findings, controlling for child's gender, birth weight, age, as well as the mother's education, age at birth of child, and race or ethnicity. Model 2 also controls for average family income-to-needs over the first 3 years of life. Model 3 also controls for family structure and the mother's AFQT score. In the text, we present the unstandardized coefficients, which represent predicted differences between the welfare-employment group and the omitted comparison group—those mothers who were continuously employed. Standardized and unstandardized beta coefficients, standard errors, and p values are included in Tables 3, 4 and 5.

In Model 1, without controlling for income, no negative associations ($p < .05$ significance) were found between the child's cognitive test score, as measured by the PIAT or PPVT-R assessments, and maternal employment patterns, whether or not combined with public assistance (as compared to the omitted category of mothers who were continuously employed). Yet, statistically significant ($p < .05$) negative associations were found for a

mother's absence of employment coupled with welfare receipt. Children whose mothers were unemployed during their first 3 years of life and also received public assistance for part or all of this time had PPVT-R scores that were on average 4.4 points lower (or one-quarter of a standard deviation) than those children whose mothers did not receive public assistance and were employed the entire 3 years. On the PIAT Reading scores, again, children whose mothers were unemployed for the first 3 years of life and received public assistance had scores that were on average 3.7 points lower ($SD = .13$) than the contrast group of children of employed mothers. On the PIAT Math test, a negative association was found between lack of employment and welfare receipt ($p = .07$).

Model 2 shows that family income accounts for much of the negative influence of nonemployment coupled with the receipt of public assistance. That is, once income is controlled, the negative association between nonemployment and receipt of public assistance on the child's cognitive score is highly reduced. On the PPVT-R, the association is no longer statistically significant, and the beta decreases by one third from Model 1 to Model 2 ($-.11$ without income, compared to $-.08$ with income controlled). On the PIAT Reading test, controlling for income decreases the beta also by approximately 33% ($-.12$ without income, compared to $-.09$ with income), but the association is statistically significant at the .05 level. On the PIAT Math score, the association of nonemployment and welfare receipt is not significant once income is controlled.

In Model 3, controlling for the mother's AFQT score, there is no change in the associations between child outcomes and mother's employment strategy, adjusting for mother's intellectual ability.

Behavior problems. Behavior problems were associated with a mother's lack of employment (Table 4). Lack of employment, with or without welfare receipt, was associated with elevated behavior problems. The effect is statistically significant for those mothers who were unemployed and not receiving public assistance ($p = .03$) and marginally significant for those who were unemployed and receiving public assistance ($p = .08$). Controlling for income as well as for mother's AFQT score did not change the association between increased behavior problems and lack of employment coupled with lack of welfare. Yet, once income was controlled for, the association between lack of employment and elevated behavior prob-

TABLE 2. MEANS AND STANDARD DEVIATIONS OF PATTERNS OF MOTHERS' EMPLOYMENT AND WELFARE RECEIPT

Characteristics	Work All 3 Years; No Welfare	Work All 3 Years; Some Welfare	Some Employment; No Welfare	Some Employment; Some Welfare	No Employment; No Welfare	No Employment; Some Welfare
Mother's education	12.3 (1.7)	12.1 (1.7)	11.6*** (1.9)	11.5*** (1.6)	10.8*** (1.7)	10.7*** (1.7)
Black ^a	.55	.72***	.49***	.64***	.40***	.70*** (.36)
<18 at birth ^b	.08	.17	.24*	.21**	.17	.17 (.38)
Divorced, married or separated ^c	.17	.22*	.15**	.15***	.09~	.10 (.30)
Family income average (3 years)	1.4 (.64)	1.0*** (.57)	1.1*** (.60)	.92*** (.49)	.98*** (.65)	.71*** (.46)
Hours mother work (year 1)	24 (13.7)	15*** (11.2)	7*** (10.9)	6*** (9.0)		
Hours mother work (year 2)	34 (13.7)	24*** (12.5)	10*** (11.5)	8*** (10.8)		
Hours mother work (year 3)	33 (12.3)	28*** (14.0)	13*** (13.6)	12*** (13.7)		
N	197	108	189	305	139	333

Note: Means, standard deviations, and significance level of contrast groups (Bonferonni posthoc comparisons used with continuous variables; Pearson R used with dichotomous variables: welfare groups with the contrast group of work 3 years and no welfare).

^aDichotomous variable; (omitted category is "non-black"). ^bDichotomous variable; (omitted category is "nonteen at birth"). ^cDichotomous variable; (omitted category is "continuously one parent family").

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

lems was no longer significant for those who were unemployed as well as receiving welfare ($p = .12$).

Effects of Employment and Welfare on Home Environment

HOME cognitive score. Table 5, Column 1, shows a trend for a negative association between a mother's pattern of some employment combined with receipt of public assistance and the cognitive home learning environment ($p < .10$). These children had home learning environments that were 2.6 points lower (one sixth of a standard deviation) than those of the continuously employed group and no welfare receipt. Model 2 shows that controlling for family income offset the marginal negative effect of employment coupled with public assistance.

Negative effects were found for lack of employment and welfare on the home learning environment ($p < .001$). The effect is still found when entering income into the equation ($p < .05$). However, the effect size is lowered by almost 50% (beta changed from -16 to $-.09$) once income is explained. Controlling for the mother's AFQT did not change the effect size of this association, but the p value dropped from $.05$ to $.06$.

HOME warmth score. In Model 1, no associations between employment-welfare patterns and home warmth were found. Controlling for income, marginally significant positive effects of some employment and lack of public assistance were found on the warmth expressed by the mother toward the child ($p = .09$). Controlling for the mother's AFQT score did not alter the findings ($p = .10$).

DISCUSSION

Many welfare-dependent women use the strategy of combining employment with welfare receipt. Several income-support strategies may be used by low-income women to compensate for low wages within the job market and public assistance that is not sufficient to cover monthly expenses. Edin and Lein's research (1997) demonstrates that only 11% of a sample of welfare recipients (drawn from three different states) came within \$50.00 of covering their monthly expenses with their welfare benefits; 79% were unable to meet their expenses without augmenting their income from welfare benefits with employment or informal financial help from family or male partners. On the other hand, Edin and Lein's study also shows that low-income women who received no public assistance and attempted to support their families sole-

TABLE 3. OLS REGRESSION ANALYSES. CHILD OUTCOMES OF PPVT, PIAT READING, EFFECTS OF EMPLOYMENT AND WELFARE RECEIPT PATTERNS

Employment/ Welfare Group	Model 1			Model 2			Model 3		
	PPVT	PIAT Read	PIAT Math	PPVT	PIAT Read	PIAT Math	PPVT	PIAT Read	PIAT Math
Work 3 years, some welfare	-.31 ^a (1.8) ^b [-.00] ^c	-2.27 (1.6) [-.05]	-.20 (1.6) [.04]	.61 (1.8) [.01]	1.69 (1.58) [-.04]	0.20 (1.6) [.00]	.22 (1.8) [.00]	-2.18 (1.6) [-.05]	-.07 (1.60) [-.00]
Some employment, some welfare	-2.12 (1.4) [-.05]	-1.79 (1.2) [-.06]	-1.8 (1.2) [-.06]	-1.01 (1.5) [-.03]	-1.02 (1.2) [-.04]	-1.36 (1.3) [-.04]	-1.23 (1.5) [-.03]	-1.2 (1.2) [-.04]	-1.48 (1.3) [-.05]
Some employment, no welfare	2.03 (1.6) [.04]	.78 (1.3) [.02]	1.79 (1.4) [.05]	2.6~ (1.6) [.05]	1.2 (1.4) [.03]	2.22 (1.4) [-.06]	2.3 (1.6) [.05]	.97 (1.3) [.03]	2.08 (1.4) [.05]
No employment, no welfare	-2.99~ (1.8) [-.05]	-1.95 (1.5) [-.05]	-1.5 (1.6) [-.04]	-2.2 (1.8) [-.04]	-1.3 (1.5) [-.03]	-1.16 (1.6) [-.03]	-2.15 (1.8) [-.04]	-1.08 (1.5) [-.03]	-1.03 (1.6) [.02]
No employment, some or all welfare	-4.4** (1.5) [-.11]	-3.7** (1.2) (-.12)	2.35~ (1.3) [-.07]	-2.9~ (1.5) [-.08]	-2.7* (1.3) [-.09]	-1.72 (1.4) [-.06]	-2.9~ (1.5) [-.08]	-2.6* (1.3) [-.09]	-1.6 (1.3) [-.05]
<i>N</i>	947	956	995	947	956	995	947	956	995
Adj. <i>R</i> ²	.28	.08	.09	.29	.08	.10	.29	.08	.10

Note: Model 1 controls for gender, age, low birth weight, mother's education, race or ethnicity, and age at birth or child. Model 2 also controls for total average family income (income-to-needs) over first 3 years of life. Model 3 also controls for family structure and mother's AFQT score.

^aUnstandardized coefficients. ^b(standard errors). ^c[standardized coefficients].

* $p < .10$. ** $p < .01$. *** $p < .001$.

TABLE 4. OLS REGRESSION ANALYSES. CHILD BEHAVIOR PROBLEMS: EFFECTS OF EMPLOYMENT AND WELFARE RECEIPT

Employment and Welfare Group	Model 1	Model 2	Model 3
Work 3 years, some welfare	1.17 ^a (.85) ^b [.05] ^c	1.11 (.87) [.05]	1.15 (.86) [.05]
Some employment, some welfare	1.07 (.67) [.07]	.98 (.69) [.07]	.98 (.69) [.07]
Some employment, no welfare	-.05 (.75) [-.00]	-.08 (.76) [-.00]	.07 (.75) [-.00]
No employment, no welfare	1.74* (.81) [.08]	1.69* (.83) [.08]	1.62* (.83) [.07]
No employment, some or all welfare	1.74~ (.81) [.08]	1.10 (.72) [.07]	1.04 (.72) [-.07]
N	891	891	891
Adj. R ²	.08	.08	.08

Note: Model 1 controls for gender, age, low birth weight, mother's education, race or ethnicity, and age at birth or child. Model 2 also controls for total average family income (income-to-needs) over first 3 years of life. Model 3 also controls for marital status and mother's AFQT score.

^aUnstandardized coefficients. ^b(standard errors). ^c[standardized coefficients].

* $p < .10$. $p < .05$. ** $p < .01$. *** $p < .001$.

ly through low-wage jobs (less than \$7.00 an hour) faced worse financial problems than the welfare-reliant mothers. Many of the employed mothers did not receive food stamps, and all had the additional expenses of transportation and child care.

In this paper we have examined the effects of mothers' various strategies for family income support and welfare receipt on child well-being in a sample of 1,271 low-income children living at or below 200% of the official poverty threshold. We had several findings. First, we found, as expected, that the mothers who used the complimentary strategy of working and receiving public assistance (either for part or all of their child's first 3 years of life) had more income than those mothers who were solely reliant on public assistance, which supports our premise that this strategy does increase income. Yoshikawa (1998) also found that the strategy of combining employment with welfare receipt was associated with higher wages for women when their children were 6 years of age.

Next, we found, among mothers who were em-

ployed for some or all of their child's first 3 years of life, that there were no negative associations of employment with several child outcomes. We did find a negative effect on the cognitive stimulation in the home to be associated with a mother's pattern of some employment over the first 3 years coupled with receipt of public assistance (compared to being employed for the first 3 years without any public assistance income), but this effect was no longer significant once we controlled for family income. These findings indicate that employment undertaken during the first 3 years of a child's life, within a sample of low-income mothers, has no negative effect on a child's cognitive test scores or behavior problems at age 5 to 6.

Third, we found that not working at all and receiving financial support solely from AFDC was associated with negative child outcomes—compared to being employed for all or some of the first 3 years of the child's life. Children in this group had, on average, lower scores on the PPVT-R test, lower PIAT Reading and Math achievement tests, higher behavior problems, and lower scores on the cognitive stimulation offered to them in their homes. To understand how continuous welfare support and no additional income from maternal employment might be detrimental to children, we looked at the family income situations of this group of mothers and children. The mothers who were solely dependent on public assistance had family incomes that were way below the official poverty threshold (.70 income-to-needs ratio), whereas those mothers who were employed for each of the first 3 years had income-to-needs ratios that were twice as high (1.4 income-to-needs ratio). An income-to-needs ratio of .70 is considered to represent deep poverty. Duncan and Brooks-Gunn (1997) have reported that living in deep poverty exerts the strongest negative effect on young children as contrasted with school-age children and adolescents. Consequently, we examined whether the welfare only effect would still be found once we entered income into the regressions. Once income was included, many associations with child outcomes were reduced, and some became insignificant. Significant effects remained, controlling for income, on the PIAT Reading score and the child's home learning environment (but the negative effect was reduced by almost half once income was controlled). Yet, because there remain statistically significant and marginally significant effects of unemployment and welfare receipt on child well-being once income and maternal ability were con-

TABLE 5. OLS REGRESSION ANALYSES. PARENTAL OUTCOMES OF THE HOME LEARNING ENVIRONMENT AND EMOTIONAL WARMTH: EFFECTS OF EMPLOYMENT/WELFARE RECEIPT PATTERNS

Employment and Welfare Group	Model 1		Model 2		Model 3	
	Home Cognitive	Home Warmth	Home Cognitive	Home Warmth	Home Cognitive	Home Warmth
Work 3 years, some welfare	-2.28 ^a (2.05) ^b [-.04] ^c	-.29 (2.1) [-.00]	-0.65 (2.06) [-.01]	.95 (2.09) [.03]	-0.85 (2.06) [-.01]	.47 (2.06) [.00]
Some employment, some welfare	-2.58~ (1.6) [-.07]	-1.51 (1.6) [-.04]	-0.53 (1.6) [-.01]	-.07 (1.6) [-.00]	-0.63 (1.6) [-.02]	-.28 (1.6) [-.00]
Some employment, no welfare	1.02 (1.8) [.02]	2.29 (1.8) [.05]	2.19 (1.8) [.05]	3.1~ (1.8) [.07]	2.13 (1.8) [.04]	3.02~ (1.8) [.06]
No employment, no welfare	-2.48 (1.9) [-.05]	0.46 (2.0) [.01]	-.91 (1.9) [-.02]	1.66 (2.06) [.03]	-.60 (1.9) [-.01]	2.16 (2.03) [.04]
No employment, all welfare	-5.91*** (1.6) [-.16]	-2.38 (1.7) [-.06]	-3.28** (1.7) [-.09]	-0.47 (1.7) [-.01]	-3.10~ (1.7) [-.08]	-.13 (1.7) [-.00]
Adj. R ²	1056 .13	1048 .11	1056 .14	1048 .12	1056 .14	1048 .12

Note: Model 1 controls for gender, age, low birth weight, mother's education, race or ethnicity, age at birth or child. Model 2 also controls for total average family income (income-to-needs) over first 3 years of life. Model 3 also controls for change in marital status and AFQT.

^aUnstandardized coefficients. ^b(Standard errors). ^c[Standardized coefficients].

* $p < .10$. $p < .05$. ** $p < .01$. *** $p < .001$.

trolled, the question remains as to what accounts for the effect. Could it be motivation or the amount of cognitive stimulation in the home? We did find that when analyzing the effects of unemployment and welfare receipt on the cognitive stimulation available in the home, the negative effects were reduced by half with controls for income and maternal ability. Finally, we cannot rule out possible selection effects—that is, that these mothers might differ on unmeasured characteristics. However, because entering income into the equation significantly lowered the effects of welfare receipt, this does suggest that income (and associated unmeasured characteristics possibly associated with income) might account in part for the effects that are operating.

Finally, we examined whether the negative associations of welfare receipt and unemployment on child well-being would be explained by the mother's intellectual capacity as measured by the AFQT score in the NLSY data. The mothers in this sample, on average, had relatively low AFQT scores (mean percentile was 23rd percentile). Nevertheless, controlling for the mother's ability score did not explain the negative associations between reduced child well-being and mother's pattern of employment or unemployment.

In considering the policy implications of these findings, it is important to remember that the women in this study were not under any mandatory work requirements. The data for the study were collected on cohorts of women who were receiving public assistance prior to the employment mandates of either the Family Support Act of 1988 or the PRWORA of 1996. Under the new law, women have reduced choices regarding combining public assistance and employment. Those low-income women who cannot find satisfactory child care or who prefer to remain at home with their infants or toddlers and who rely solely on public assistance are likely to have their income benefits cut and will only be able to use this pattern for a lifetime limit of 5 years (2 years in some states).

The PRWORA is a major shift from previous welfare policy in terms of the demands made on mothers with young children to enter the labor force. The new welfare regulations might influence the outcomes of welfare-dependent women and their children in two ways. First, we might expect to find fewer mothers in the welfare-only group—as enrollment in an employment-related program is now considered prerequisite to receipt of benefits. Each state is allowed, however, to give

exemptions to approximately 20% of their caseload regarding work requirements. The group of women who will be given exemptions and who will comprise the new welfare-only group are expected to be those women who have mental or physical health problems or very low literacy skills or who are victims of domestic violence. We would therefore expect even more pronounced differences between this group and the other groups. Such differences might not be accounted for completely by variations in income (Duncan & Brooks-Gunn, 1998). Second, we might expect the mothers in the welfare and work categories to be more heterogeneous—some will be receiving public assistance and “working off” their benefit (for no pay); some will be receiving reduced benefits because of noncompliance and working “off the books”; others will forgo public assistance and seek employment because of mandatory requirements; others will seek employment voluntarily. Variations in income will depend on which strategy a woman selects and on the wage she is able to earn. Current legislation allows welfare-dependent women who begin employment (within an income ceiling) to keep their Medicaid coverage and food stamps for the first year as they participate in welfare-to-work programs. In addition, Child Health Insurance Plus (CHIP) has been extended to low-income (nonwelfare) families. Larger income differences are expected for the newly employed group, once they lose food stamps, housing assistance, and medical coverage (see Edin & Lein, 1997). Finally, issues such as scheduling of work and child care and transportation costs might loom large for poor and welfare-dependent women entering the labor force. If welfare-to-work programs or employers offer little flexibility, child care might become an even greater issue than current research suggests (see Kisker & Moss, 1997).

These analyses provide important information on an area that has been studied too little—the effect of combining welfare receipt and employment on child well-being. Yet our analyses have several limitations. First, our sample is not truly nationally representative, as the NLSY—CS does not yet include children of older mothers. At the same time, the sample does have relatively large samples of low-income mothers, in contrast to most developmental studies (Chase-Lansdale et al., 1991). Second, we do not have information on the monthly sequencing of employment and welfare for those in the group that combined or sequenced between public assistance and employ-

ment (other developmental studies are subject to this limitation, as well). Finally, because our study is based in the context of welfare in the mid- to late 1980s, it does not capture the effects of the PWROWA. However, it provides a basis for comparison as new studies enter the field early in the 2000s.

In summary, mothers who rely exclusively on public assistance have very low incomes and often work to replace or supplement their welfare benefits. The pattern of seeking employment by low-income, welfare-dependent women was practiced by many mothers prior to recent welfare reforms. Our analyses found no negative effects on children’s test scores at ages 5 to 6 of mothers’ mixing work and welfare. Once we controlled for income, no negative effects on the child’s home learning environment were found. Combining employment with public assistance is associated with higher family incomes, as expected. Total reliance on welfare receipt is associated with lower test scores and less stimulating home learning environments, due in large part to income.

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