

MATERNAL WELFARE AND WORK COMBINATIONS AND
ADOLESCENTS' SCHOOL PROGRESS

Rachel E. Dunifon

Cornell University

Department of Policy Analysis and Management

295 MVR Hall

Ithaca, NY 14853

red26@cornell.edu

Ariel Kalil

University of Chicago

Harris School of Public Policy Studies

1155 East 60th St.

Chicago, IL 60637

a-kalil@uchicago.edu

May 1, 2003

We are grateful for the helpful comments and assistance of Sandra Danziger, Sheldon Danziger, Jane Dokko, Sarah Marsh, Kristin Seefeldt and Hui-Chen Wang and we thank the research staff at the University of Michigan's Poverty Research and Training Center. Support for this research was provided in part by grants from the Charles Stewart Mott and Joyce Foundations and the National Institute of Mental Health (R24-MH51363) to the Social Work Research Development Center on Poverty, Risk, and Mental Health, the Office of the Vice-President for Research at the University of Michigan to the Program on Poverty and Social Welfare Policy, and by grants from the National Institute of Child Health and Human Development to the first (F32 HD08627-01) and second authors (F32 HD08145-01). Special thanks are due to survey manager Bruce Medbury and the interviewing staff.

A previous version of this paper was presented at the 9th Biennial Meeting of the Society for Research on Adolescence, New Orleans, LA, April 2002.

MATERNAL WELFARE AND WORK COMBINATIONS AND
ADOLESCENTS' SCHOOL PROGRESS

Abstract

Using longitudinal data from a sample of 187 mothers who transitioned from welfare to work under welfare reform in Michigan, we examine the correlations between combinations of maternal work and welfare use and the school progress of these mothers' teenage children. Results suggest that, relative to remaining on welfare, teenagers whose mothers left welfare completely or combined welfare and work were less likely to have been suspended or expelled from school. Wage-reliant mothers also reported higher levels of monitoring and greater teen participation in extracurricular activities, although levels of monitoring and participation in extracurricular activities do not account for the reduced likelihood of school suspensions and expulsions.

Key words: welfare reform, school progress, maternal employment.

MATERNAL WELFARE AND WORK COMBINATIONS AND ADOLESCENTS' SCHOOL PROGRESS

In 1996, President Clinton signed a new welfare policy into law, resulting in dramatic changes in cash assistance programs for low-income single mothers. 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.

As the welfare rolls have plunged dramatically in most states, and single mothers have moved in the labor force, many political leaders have proclaimed welfare reform a success (Thompson, 2001; Weaver, 2000). Between 1994 and 2001, the number of families receiving welfare fell from 5 million to 2.1 million, and most of those who have left welfare are working on average about 30 hours per week (Greenberg & Rahmanou, 2003). Since this time, a new and growing body of research has sought to understand how welfare reform influences the well-being of children and teenagers whose mothers are moving from welfare to work.

While most research on the impact of welfare reform on younger children has consistently shown no, or small positive, effects, research on the impact of welfare reform on teenagers has produced mixed results. Additionally, this research has generated several as yet untested hypotheses about how welfare reform may influence teenagers' adjustment. Using a unique longitudinal dataset of women transitioning from welfare to work in the post-reform era, we examine the influence of maternal employment and welfare use on the school progress of teenagers and advance the research in this area by testing several potential pathways through

which maternal employment may influence this important dimension of teenagers' academic adjustment.

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). There are 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 are more pronounced when mothers report a low sense of personal efficacy and perceive multiple barriers to their own employment (Moore et al., 1995).

Increased parental work effort may affect family processes and children's well-being among welfare families. Any major life transition, such as moving from welfare to work, could affect mothers' well being, their relationships with their children, and their children's adjustment. 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 the social, academic, or emotional adjustment of their children. Increased economic resources from earnings could also benefit children (Wilson, Ellwood, & Brooks-Gunn, 1995). Parental employment could bring a

sense of stability and routine to family life, which could also benefit children (Wilson, 1996). On the other hand, transitions from welfare to work might increase psychological stresses or exposure to ecological stresses that can be harmful to children. And, if employment is unstable or erratic, material hardships could ensue and family routines could be disrupted, thus diminishing child well being.

In general, maternal employment is associated with better maternal mental health (Hoffman & Youngblade, 1999) and can benefit children in low-income families through additional income and the social and cognitive stimulation it provides the mother, which may lead to more positive interactions with children (Parcel & Menaghan, 1990; Klebanov et al., 1994). In national samples, more extensive maternal employment is linked to more positive outcomes for children in middle childhood (Menaghan et al., 1998). This may be due to the stability underlying continuous employment, to the quality of jobs that tend to be long-term, or to the characteristics of mothers who are able to remain employed for extended lengths of time.

Other evidence points to some negative effects of maternal employment on children in low-income families. Researchers have found that parents employed in low-wage, repetitive, unstimulating jobs provide less nurturing home environments than do parents with jobs that pay more or offer more complexity and autonomy (Menaghan & Parcel, 1995; Moore & Driscoll, 1997). Similarly, children of parents employed in low-wage jobs show less favorable outcomes than their counterparts in families with higher-paying jobs (Menaghan & Parcel, 1995; Moore & Driscoll, 1997).

Since the passage of welfare reform, research has focused specifically on how the movement of low-income mothers from welfare to work influences children. Many of these studies have drawn on data gathered before welfare reform to generate hypotheses about low-

income mothers' experiences post-PRWORA. Two such studies suggested that child and maternal well-being might be positively affected by mothers' strategies of combining work and welfare (Brooks-Gunn, Klebanov, Smith, & Lee, 2001; Smith, Brooks-Gunn, Klebanov, & Lee, 2000). In particular, children of mothers who were employed but also received welfare over a multi-year period as well as those who worked exclusively and did not receive welfare at all during that time had comparable outcomes, both of which were better than those of mothers who received welfare exclusively and did not work. These studies examined low-income families in the pre-welfare reform era, however, and did not focus specifically on mothers transitioning from welfare to work. In addition, the data used in these studies did not provide information on the monthly sequencing of employment and welfare use; thus, it is not known if employment and welfare use occurred simultaneously or whether these "combiners" cycled between the two income sources. Finally, both of these studies assessed the development of young children. It is not known if strategies of combining welfare and work would benefit teenage children of single mothers.

Recent evidence on maternal work in the post-reform era shows generally neutral or small positive effects of welfare recipients' transitions to work on family and child well-being. Kalil, Dunifon, and Danziger (2002) used data from the Women's Employment Survey, a longitudinal survey of current and former welfare recipients in Michigan, to examine the association between maternal work and school-aged children's behavior problems. Maternal work 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 child behavior. In

contrast, the number of transitions between working and not working increased children's anxious and depressed behavior, net of other factors.

In a related study, Dunifon, Kalil, & Danziger (2003) used the same data and examined the associations between welfare to work transitions, parenting, and child behavior problems using a fixed-effects regression design to control for all time-invariant characteristics of mothers and children. This study found that families who moved from welfare-reliance to a combination of welfare and work evidenced a decrease in harsh parenting, an increase in positive parenting, and decreases in both internalizing and externalizing behavior problems among children. New evidence from the Three Cities Study of Welfare Reform and Families offers a neutral view of the influence of maternal work and welfare use on children – among low income preschool children, neither mothers' employment transitions nor their welfare transitions over a two-year period had any effect on change over time in children's behavior problems although, similar to the findings of Kalil et al (2002), mothers' job losses were linked with teenagers' increased behavioral problems (Chase-Lansdale et al., 2003).

A related set of experimental evaluations of welfare programs that include work requirements has identified more consistently positive aspects of mandated work programs on children, 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 welfare recipients who were required to work 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. 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.

On the whole, this body of research suggests that, in the short term, the movement of mothers from welfare to work may not lead to detrimental outcomes among young (pre-school) and school-age children, as opponents of welfare reform had feared, and may even benefit children. However, the evidence for welfare and employment transition effects on teenage children is more mixed. On one hand, results from the Three Cities Study show that mothers' transitions into employment predict modest improvements in adolescents' mental health (Chase-Lansdale et al., 2003). Further, adolescents whose mothers transitioned off welfare reported modest increases in reading skills and lower rates of drug and alcohol use. But other studies have reported evidence that teenage children in families where parents are leaving welfare and increasing their employment under mandatory conditions are at increased risk of problem behavior and school difficulties (Brooks, Hair, & Zaslow, 2001; Morris & Duncan, 2001). These negative findings have surprised researchers, who anticipated seeing more negative effects on young children who would presumably be spending more time in child care (of potentially low quality) as their mothers went to work.

Evidence of negative influences of work-promoting welfare programs on teenage children come from three recent experimental evaluations of welfare-to-work programs, MFIP, the Canadian Self-Sufficiency Project (SSP), and the Florida Family Transition Program (FTP). Despite positive impacts on family income and favorable results for young children, teenagers in

the SSP whose mothers were required to become employed showed higher levels of smoking, drinking, drug use, and delinquency, and lower school achievement (relative to the control group families); experimental group teens in MFIP also showed lower school achievement than controls; and experimental group teens in FTP showed lower school achievement and higher school suspensions than those in the control group (Brooks et al., 2001). At the same time, it is important to note that these negative effects were, on average, fairly small and did not appear to be long-lasting in the one study that re-surveyed the teens at a later point in time (Morris, Knox, & Gennetian, 2002).

Brooks et al. (2001) suggest that these negative effects of welfare-to-work transitions on teenagers might derive from an erosion in the quality of adolescent-parent relationships, a decline in parental monitoring, or an increased (and potentially stressful) assumption of family responsibilities on the part of the teenager when mothers move from welfare to work. For example, having a parent mandated to work increased rates of suspensions or expulsions and dropping out of school only among teens with younger siblings, suggesting that perhaps these teens incurred increased childcare responsibilities that interfered with their education progress (Morris et al., 2002).

Support for this hypothesis also comes from a qualitative assessment of the well-being of mothers and their young adolescent children in the New Hope program (Romich, 2002), which suggested that single mothers' transitions from welfare to work were associated with poor outcomes for early adolescents when mothers' work schedules interfered with effective parental monitoring. For example, mothers whose job required them to leave the house in the early morning hours were unable to ensure that their children woke up for school on time, and the children's attendance record suffered accordingly. Some mothers in this study put older siblings

in charge of caring for younger siblings in the mothers' absence, but Romich (2002) suggests that too much of this sort of responsibility is potentially developmentally inappropriate and harmful to the teenagers' well-being.

It is unclear why the experimental studies of welfare reform have shown somewhat negative effects on teenagers' well-being, while the Three Cities study (the only non-experimental study, to our knowledge, to have examined the effects of maternal welfare and employment transitions on teenagers' well-being) did not. Experimental studies are not designed to examine mediating processes; in other words, to test the proposition that the negative effects of maternal transitions from welfare-to-work on adolescents' school progress can be explained by a decrease in parental monitoring or an increase in responsibility for the care of younger siblings. More research on this important question is needed. The present study, which provides in-depth longitudinal assessments of welfare leavers' work behavior, teenagers' school progress, and assessments of maternal monitoring and teenagers' participation in the care of younger children, is particularly well-suited to address these questions.

We draw on three waves of data from the University of Michigan's Women's Employment Survey to examine how mothers' work and welfare status, measured over a multi-year period, predicts teenagers' school progress. We focus on school progress given that behavior in this realm appears to be particularly negatively affected in the experimental programs (Morris et al., 2002). We test the hypothesis that, should we observe negative associations between increased maternal employment and poor academic outcomes among teenagers, they can be explained by levels of parental monitoring or by the teenagers' responsibilities in caring for younger children in the household that result from increased maternal employment. This hypothesis is guided by the research of Brooks et al. (2002), Morris

et al. (2002), and Romich (2002). At the same time, we test the hypothesis that, should we find positive effects of maternal employment on academic behavior, they can be explained by teenagers' increased participation in extracurricular activities. This hypothesis is guided by evidence provided from the New Hope experiment.

It should be noted, however, that mothers' work and welfare status over time may be shaped by unobserved characteristics that lead them to avoid welfare reliance and report improved parenting of and behavior from their teenage children. Because we do not have repeated measures of teenagers' school progress, we are not able to control for time-invariant characteristics of mothers through a change analysis. However, the unusually broad set of control variables used here (including clinical diagnoses of mental health problems) alleviates some of the typical concerns about the biasing effects of omitted variables.

The Sample

We use three waves of 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 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 (28 percent were under age twenty-five, 47 percent were between the ages of twenty-five and thirty-four, and 26 percent were thirty-five years old or older). 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 between November 1999 and March with 632 respondents. A small amount of information about a focal teenager was collected at Wave 3 if the mother had at least one child between the ages of 13 and 18. Of the mothers interviewed at wave 1, 28 percent (N = 209) had a focal teen at Wave 3. The present study uses the sample of mothers with a focal teen at Wave 3.

One advantage of the WES compared to a typical welfare “leavers” study is that it follows both welfare leavers and stayers. Work participation increased substantially between the waves of data collection, however: 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. Thus, women in this sample decreased their welfare use and increased their employment over the study period. We seek to relate mothers’ work and welfare status over the period between February 1997 (when the sample was drawn) and October 1999 (before the third-wave interviews began) to the Wave 3 measures of teenagers’ school progress, maternal monitoring, teenagers’ care of younger siblings, and teenagers’ participation in extracurricular activities.

Measures

Our main dependent variable of interest represents teenagers’ school progress with a single item indicating whether the teen had been *suspended or expelled* from school since the Wave 1 interview, based on a maternal report at Wave 3. We rely on this measure of academic well-being because recent studies suggest that the negative effects of transitions

from welfare to work may be concentrated on outcomes related to teens' progress and achievement in school (Morris et al., 2002). School expulsion or suspension has clear implications for teenagers' well-being in later adolescence and young adulthood.

Mediators.

To measure mothers' parenting behavior regarding their teens we use two items, described below, combined into one average measure of maternal monitoring. The first item taps maternal knowledge of the teen's friends by asking mothers how many of the teen's friends they know by sight and first name. The responses range from "none of them" (1) to "all of them" (5).

The second item taps maternal knowledge of who the teen spends time with. This single-item measure asks mothers how often they know who the teen is with when they are not at home. Mothers respond "only rarely" (1), or "all of the time" (4).

These two measures are averaged for all women, giving us an average measure of *maternal monitoring*.

Our measure of teens' *taking care of younger children* is based on a single item maternal response to the question: "thinking of a typical week during the school year, how often does your teenager babysit for siblings or others," with responses ranging from almost never (1) to almost every day (6).

Finally, our measure of teens' *participation in extra-curricular activities* comes from maternal responses to the question: "thinking of a typical week during the school year, how often does your teenager take part in team sports, music groups, art lessons, or other organized activities," with responses ranging from almost never (1) to almost every day (6).

Maternal Work Measures.

Our key independent variables of interest capture mothers' work and welfare status over the multi-year period prior to Wave 3, using monthly data. In an improvement over past studies, our data allow us to identify the simultaneous behaviors of working and receiving cash assistance to yield more accurate inferences about the nature of "combining work and welfare." Moreover, our method of categorizing work and welfare use represents an improvement over previous studies that have relied on point-in-time measures of work and welfare status. Data on point-in-time employment status tend to overstate employment because many low-income women who are working at a specific point in time do not sustain employment over a multi-month period; conversely, a point-in-time measure would understate employment of non-working recipients because many have worked in at least some months in any given year (Danziger et al., 2002). To address this issue, we classify women by the work and welfare category that best categorizes their situation during "most" of the observation period between February 1997 (the start of the study) and October 1999 (the month immediately prior to the Wave 3 survey). A woman was classified into a work or welfare category only if she was in that category for at least 7/12th of the time. We also considered a classification that required a respondent to be in category for ¾ of the months. Our results were not sensitive to this choice of a cut-off.

Wage-reliant: Wage-reliant mothers worked but, according to the state agency, did not at the same time receive any cash assistance for at least 7/12th of the time between February 1997 and October 1999.

Welfare-reliant: Welfare-reliant women received welfare (i.e., TANF) without simultaneously working for at least 7/12th of the time between February 1997 and October 1999.

Combining work and welfare: Combining women worked and received welfare payments simultaneously for at least 7/12th of the time between February 1997 and October 1999.

No work/no welfare: Women in this group spent at least 7/12th of the time between February 1997 and October 1999 neither working nor receiving welfare.

Mixers: Women in this category were not in any of the above categories for at least 7/12th of the time between February 1997 and October 1999; instead, they were moving between multiple categories and could not be easily classified.

Previous work using these data has examined relationships between these same work and welfare categories and other characteristics of women in the WES, using data on women's work and welfare categories in the year prior to Wave 3. This research found that wage-reliant women are the best-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 fare the worst (Danziger et al., 2002).

Demographic Control Measures.

To relate maternal work to teenagers' school progress and to the proposed mediators, we controlled for several factors specific to the mother and her child. All analyses include a series of demographic controls measured at the third-wave interview: age, sex and race of the teen, whether the mother has a high school degree, and the percent of time that the mother was living with a husband or cohabiting partner between wave 1 and wave 3.

Barriers to Employment.

A major strength of the WES is that it collects extensive information on a series of measures that represent potential barriers to employment. These measures are mothers' mental health, substance abuse, physical health, experience of domestic violence, and pregnancy. These measures (see Table 1 for the means) may be correlated both with maternal work patterns and with mothers' reports of their own and their child's behavior. It is important to control for these measures in a study like ours so as not to misattribute any observed effects on teenagers to maternal work behavior when in fact, for example, they are due to a characteristic such as maternal mental health.

Maternal Mental Health and Substance Abuse. At each wave, mothers' mental health and substance dependence were assessed 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). All respondents who met the diagnostic screening criteria for a disorder were defined as having that disorder. We created three indicator variables, one for mothers who met the diagnostic criteria for any mental health measure at any wave (PTSD, general anxiety, or depression), one for mothers reporting any drug use at any wave, and another indicating mothers who met any criteria of alcohol dependence at any of the three waves.

Physical health. Also at each wave, the women were asked about physical limitations and to rate their general health using questions taken from the SF-36 Health Survey (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 at any wave 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 at any wave were defined as having a child with a health problem.

Domestic violence. Domestic violence was measured by the Conflict Tactics Scale (CTS), a widely used measure of family violence (Strauss & Gelles, 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 control for a measure indicating that a woman had experienced severe domestic violence at any of the three waves.

Pregnancy. Analyses also control for whether the mother was pregnant at any time between waves.

Maternal learning disability. We control for a measure of whether the mother has a learning disability, taken from Wave 3.

Maternal conviction history. Finally, we control for a measure of whether the mother had ever been convicted of a crime, also taken at Wave 3.

Family Economic Well-Being.

All analyses control for the family's income-to-needs ratio measured at Wave 3 (and reflecting family income for the calendar year 1998). This measure uses a family's total income (net of taxes) and compares it to the Federal Need Standard for a family of that size. Families with an income-to-needs ratio less than 1.0 are considered to be below the poverty line.

Analyses also control for two other measures of family economic well-being, measured at each wave. 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). We use the average of this measure across all three waves. We also control for a measure of whether the mother reported being hassled by a bill collection agency in the past year at any wave.

Method

When predicting whether a teen has been suspended or expelled in the past year, a dichotomous variable, we use a logistic regression and present the resulting odds ratios and z-scores.

Our proposed mediating variables: maternal monitoring, how often a teen takes care of younger children, and how often a teen participates in extra-curricular activities, are measured on discrete scales in which higher scores indicate a greater level of the behavior of interest. For dependent variables such as these, an ordered logistic regression is appropriate. A logistic regression would not take account of the full range of the dependent variable, while an ordinary least squares regression would incorrectly assume that the difference between scores (i.e., for the teen activities measure, a score of 1, meaning almost never, and a score of 2, meaning less than once a month) is equal, rather than a ranking on an ordered scale (Greene, 1997). For these analyses, we present regression coefficients and standard errors. For ease of interpretation, we take the results from the logistic and ordered logistic regressions and transform them to predicted probabilities for each dependent variable for women in the various work and welfare categories.

Results

Table 1 presents the means and standard deviations of the variables used in our analyses. The first row shows descriptive statistics for the main outcome measure and indicates that 45% of teenagers had been suspended or expelled since the first WES interview. In contrast, in a national sample of 8th grade youth (the National Educational Longitudinal Survey; NELS:88), which asked parents whether their child had ever been suspended or expelled by the 12th grade, 10.5% of children of single mothers had been suspended and 2.2% had been expelled (authors' calculations).

The next three rows show the descriptive statistics for the hypothesized mediators. The average maternal monitoring measure, which ranges from 1 to 4.5, has a mean of 3.57. Comparatively, the average score on an identically-constructed measure from same-aged youth from a national sample (the Mother-Child file of the National Longitudinal Survey of Youth, NLSY), is 3.82, where higher scores indicate greater maternal monitoring. The average frequency of teens taking care of younger children is 3.53, falling between 1-3 times a month and about once a week. The average score for frequency of participation in extra-curricular activities is 3.57, again falling between 1-3 times a month and about once a week.

Looking at our key independent variables, the measures of maternal work and welfare status, we see that on average, 11% of mothers were welfare-reliant a majority of the time between February 1997 and October 1999, while 31% were wage-reliant, 14% combined welfare and work, 5% did not rely on welfare or work, and 39% were in the mixers category during this period.

Table 1 also shows that the average age of the teens is 15.42 years, and 56% of the teens are Black. In terms of financial status, families' average incomes are just below the Federal

Poverty Line, with an income-to-needs ratio of .97. Fifty-five percent of the mothers met the criteria for a mental health diagnosis between Wave 1 and Wave 3, and 29% report using any drugs. Finally, 25% of the mothers report experiencing severe domestic violence over the study period, and 26% of the mothers do not have a High School degree.

Table 2 presents the results of analyses using the work and welfare categories measured over the period between February 1997 and Wave 3 to predict whether the teen was suspended or expelled. We also present results from analyses relating maternal work and welfare use to our three hypothesized mediators: maternal monitoring, frequency teen takes care of younger children, and frequency of teen participation in extra-curricular activities. The demographic, family income, and barriers to employment measures are used as controls in these analyses.

Column 1 presents results from the logistic regression analysis predicting teen suspension and expulsion. The omitted group in these analyses is mothers who were welfare-reliant for a majority of time before Wave 3. Teens whose mothers were wage reliant are 20% less likely to have been suspended or expelled, compared to those who were welfare reliant; those whose mothers combined work and welfare are 25% less likely to be suspended or expelled. Black and male teens are more likely to be suspended or expelled.

The next set of columns presents the results of ordered logistic regression analyses predicting maternal monitoring. Mothers who are wage reliant are slightly more likely to monitor their teens, and mothers who do not rely on either work or welfare report more monitoring, both compared to welfare-reliant women. Next, we present the results of the analysis predicting the frequency that teens take care of younger children. Here, none of the maternal work and welfare measures are associated with this outcome. Age is associated with increased frequency of caring for a younger child, while male teens care for younger children less frequently. Additionally

teens whose mothers report being hassled by bill collectors have a marginally higher frequency of caring for a younger child.

The final set of columns in Table 2 show the frequency of teen participation in extra-curricular activities. Women who are wage-reliant report that their teens take part in such activities more frequently than do welfare-reliant mothers. Older teens participate in activities less frequently, while boys have a greater frequency of participation. Teens whose mothers have lived with a male spouse or partner have a lower frequency of participation in extra-curricular activities.

Table 3 takes the regression results from Table 2 and transforms them into predicted probabilities. Here, probabilities are presented for mothers in each of the work and welfare groups, assuming that each woman is at the mean on all other characteristics in the model. In column one, it is predicted that 72% of children of welfare-reliant have been suspended or expelled, much higher than teens whose mothers are in any of the other categories. Teens of wage-reliant women have a 33% predicted probability of having been suspended or expelled.

Column two presents the probability that a mother is in the highest category of the maternal monitoring scale. Here, wage-reliant women have a 19% likelihood of being in the highest monitoring category, while it is predicted that 45% of the teens of non-working/non-welfare receiving women are in this group.

The probability that a teen takes care of a younger child almost daily (the highest category) is presented in column three. As suggested by the regression results, there are very few differences between the groups on this measure. Finally, the probability that a teen takes part in extra-curricular activities almost daily is presented in column four. Here, it is predicted that 33%

of teens of wage-reliant mothers are in this category, compared to 14% of teens of welfare-reliant mothers.

Table 4 presents results of analyses in which the three hypothesized mediators are included in a logistic regression predicting whether the teen had been suspended or expelled. Here, frequency of teen participation in extra-curricular activities is associated with a reduction in the likelihood of suspension/expulsion. The frequency with which a teen takes care of younger children is not associated with the likelihood of suspension or expulsion.

However, the inclusion of the potential mediators does not meaningfully change the associations between maternal work and welfare patterns and teens' school progress, compared to the results presented in Column 1 of Table 2. Teens whose mothers are wage-reliant are still less likely to have been suspended or expelled (odds ratio of .27), although the association is now only marginally significant. The association between mothers' combining work and welfare and teen suspension/expulsion drops from just above to just below significance in this model ($p = .10$). Overall, however, strong evidence of mediation is not found.

It is possible that mothers' work/welfare behavior may affect boys and girls differently. For example, the New Hope study found significant impacts of the program on boys, but not girls (Huston et al., 2001). In analyses not shown here, we tested for, but did not find any significant gender differences in the influence of maternal work and welfare use on teens' school progress or on the three mediators. We also tested for, and did not find, any significant race differences (results not shown here). Finally, in order to further test the hypothesis that a key pathway through which maternal employment may influence teens is through increased childcare responsibilities, we examined whether our results differed for teens who had a child younger

than age 11 in the household (63% of the sample). We did not find any differences in our main results for this sub-group.

Discussion

In all, the results from this research suggest that mothers' work and welfare status over a multi-year period is associated with teenagers' school progress, assessed with a measure of suspensions or expulsions from school, as well as measures of maternal parenting focusing on monitoring of the teen. Mothers' work patterns also predict the extent to which the teen participates in extracurricular activities, but maternal work and welfare patterns are not associated with the amount of time the teen spends caring for younger siblings.

We use measures of mothers' work and welfare status that are identical to those examined in previous research (Danziger et al., 2002). These measures are gathered over a multi-year period prior to the assessment of teen outcomes, and represent the work and welfare categories that mothers were in for at least 7/12 of the months during this period. This is an innovation over previous research, which has measured mothers' employment and welfare use at a point in time, rather than over a multi-month period. In addition, our measure of combining work and welfare explicitly measures the simultaneous participation in both work and welfare, rather than simply indicating whether a woman had both work and welfare in a specific time period, but not necessarily occurring at the same time. Finally, we use post-PRWORA data representing families' experiences under the new welfare regime.

Our results show benefits to teenagers when mothers are not welfare-reliant over the 3-year period. Specifically, we find that, compared to teenagers of welfare-reliant mothers, teens of mothers who are wage-reliant or combine welfare and work are less likely to have been suspended or expelled from school. Additionally, results show that mothers in the wage-reliant

group more frequently monitor their teens than welfare-reliant women, and teens of wage-reliant mothers are twice as likely to participate in extracurricular activities compared to teens of welfare-reliant mothers. Higher levels of teen participation in extracurricular activities, in turn, is an important negative correlate of suspensions and expulsions. Overall, the measure of maternal wage-reliance was more consistently associated with beneficial outcomes than any other measure in the analysis. Given the large number of control variables used, this suggests the importance and robustness of this measure in influencing teen well-being.

These beneficial effects are unlikely to be due to the fact that women in the other groups have more income than women in the welfare-reliant category, since income, along with several more subjective measures of financial strain, are controlled in our analysis. However, we also failed to find support suggesting a role for any of our hypothesized mediators. Our results indicate that the beneficial effect for teens of having a working, compared to a welfare-reliant mother, is not due to differences in mothers' knowledge of the teen's friends or who the teen is with, nor is it due to the teens' participation in the set of extracurricular activities we measured. It is possible that other parenting factors may differentiate working mothers from those in the welfare-reliant group. For example, working mothers may have warmer parenting styles or more appropriate disciplinary strategies than welfare-reliant women in this sample. Our data do not contain measures of this type of parenting behavior, so we are not able to test these hypotheses. Additionally, it is possible that compared to being reliant on welfare, working is associated with improved self-esteem or efficacy among mothers, which could lead to improved outcomes for teens. It is also possible that a different set of extracurricular experiences or activities would help to explain the association between maternal work and teens' lesser

probability of suspensions and expulsions. Unfortunately, we do not have any additional information about teens' school or peer experiences.

We also found that mothers who do not rely on work *or* welfare are more likely to know their teen's friends than welfare-reliant, wage-reliant, or combining women. Because we know very little about the women in the no work/no welfare group, it is difficult to place this finding in context. However, it is possible that these women may have more time to spend with their teen and his/her friends, compared to women in the other categories. Interestingly, however, teens of mothers in this group are not doing better than others on the measure of suspension/expulsion.

Prior research finding negative influences of maternal work participation on teenagers' adjustment has suggested that such findings may be due to increased child care responsibilities incurred by low-income teens (Morris et al., 2002). Ours is the first study to our knowledge that is able to empirically test the hypothesis that teens' childcare responsibilities increase when mothers move from welfare to work. We do not find any association between maternal work participation and the extent to which the teenagers in our sample cared for their younger siblings or other children.

It should be noted that our inability to control for all factors differentiating mothers in the various work and welfare categories could impart bias to our results. Specifically, mothers who are wage-reliant or those who combine welfare and work may have unobserved characteristics that lead them to both avoid welfare reliance and to report improved behavior from and monitoring of their teens. Because we do not have repeated measures of our teen outcomes, we are not able to control for time-invariant characteristics of mothers through a change analysis. However, the unusually broad set of control variables used here (including clinical diagnoses of

mental health problems) alleviates some of the typical concerns about the biasing effects of omitted variables.

Overall, these results are consistent with our other work (Dunifon et al., 2003), which finds that both wage-reliant women and “combiners” have increased positive parenting and reduced harsh parenting toward their school aged children, compared to welfare-reliant women. Similarly, our previous work with these data generally found no negative effects of participation in work activities on children’s behavior problems (Kalil et al., 2002). Taken together, these results are consistent with other post-PRWORA research (e.g. Chase-Lansdale et al., 2003), in suggesting that moving from welfare to work may not be associated with detrimental outcomes among children and teens, but could in fact be predictive of improved parenting toward teens and improved teen outcomes. Interestingly, the results suggest that the beneficial effects of being wage-reliant are no stronger than the benefits of combining welfare and work, indicating that the less positive outcomes among the welfare-reliant group may not be attributable to welfare itself, but instead may be due to a lack of work.

Our results differ from those of the experimental studies, which found a negative impact of maternal work participation on teenagers’ rates of school suspensions and expulsions if the teenagers had a younger sibling. Separate analyses performed for the sub-group of teens with a younger child in the household did not differ from our main results. It should be noted, however, that our analysis does not ask the same question as that asked by the experimental studies. Whereas the experimental programs contrasted the effect of welfare reform with that of remaining on AFDC, the current paper focuses on a group of women, all of whom are subject to the TANF requirements. Our results suggests that the teens of mothers who are successful at meeting TANF requirements fare better than those who are less successful. This does not

necessarily contradict the findings of the experimental studies, which suggest that the teens may have been better off still under AFDC instead of TANF.

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. 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 terminating 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 correlated with negative behaviors on the part of the teenage children of these mothers. In contrast, wage-reliance or combining welfare and work may be associated with improvements in children's behavior, and in their own parenting.

References

Brooks, J., Hair, E., & Zaslow, M. (2001). Welfare reform's impact on adolescents: Early warning signs. Washington DC: Child Trends. [On-line]. Available: www.childtrends.org

Brooks-Gunn, J., Klebanov, P., Smith, J., & Kee, K. (2001). Effects of combining public assistance and employment on mothers and their young children. Women and Health, 32, 179-192.

Chase-Lansdale, P. L., Moffitt, R., Lohman, B., Cherlin, A., Coley, R. L., Pittman, L., Roff, J., & Votruba-Drzal, E. (2003). Mothers' transitions from welfare to work and the well-being of preschoolers and adolescents. Science, 299, 1548-1552.

Danziger, S., Heflin, C., Corcoran, M., Oltmans, E., & Wang, H. (2002). Does it pay to move from welfare to work? Journal of Policy Analysis and Management, 21, 671-692.

Duncan, G., Dunifon, R., Doran, M. & Yeung, J. (2002). How different are welfare and working families? And do those differences matter for children's achievement? In G. Duncan & P.L. Chase-Lansdale (Eds.), For Better and For Worse: Welfare Reform and the Well-being of Children and Families. New York: Russell Sage Foundation.

Dunifon, R., Kalil, A. & Danziger, S.K. (2003). Does maternal employment mandated by welfare reform affect parenting behavior? Children and Youth Services Review, 25(1/2), 55-82.

Greenberg, M. & Rahmanou, H. (2003, February). Imposing a 40-Hour Requirement Would Hurt State Welfare Reform Efforts. Washington, D.C.: Center for Law and Social Policy.

Hoffman, L., & Youngblade, L. (1999). Mothers at Work. Cambridge: Cambridge University Press.

Huston, A., Duncan, G., Granger, R., Bos, J., McLoyd, V., Mistry, R., Crosby, D., Gibson, C., Magnuson, K., Romich, J., & Ventura, A. (2001). Work-based anti-poverty programs

for parents can enhance the school performance and social behavior of children. Child Development, 72, 318-336.

Kalil, A., Dunifon, R., & Danziger, S. K. (2002). Are children's behavior problems affected by their mothers' work participation since welfare reform? In G. Duncan & P.L. Chase-Lansdale (Eds.), For better and for worse: Welfare reform and the well-being of children and families (pp. 154-178). New York: Russell Sage Foundation.

Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H.-U., & Kendler, K. S. (1994). "Lifetime and 12-month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results from the National Comorbidity Survey." Archives of General Psychiatry, 51, 8-19.

Klebanov, P., Brooks-Gunn, J., & Duncan, G. (1994). Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? Journal of Marriage and the Family, 56, 412-455.

Knox, V., Miller, C., & Gennetian, L. (2000). Reforming welfare and rewarding work: A summary of the final report on the Minnesota Family Investment Program. New York: Manpower Demonstration Research Corporation. [On-line]. Available: <http://www.mdr.org>

Menaghan, E., Jekielek, S., Mott, F., & Cooksey, E. (1998, May). Work and family circumstances and child trajectories: When (and for what) does AFDC receipt matter? Paper presented at the Joint Center for Poverty Research Pre-conference on Family Process and Child Development in Low Income Families. Chicago, IL.

Menaghan, E. G. & T. L. Parcel. (1995). "Social Sources of Change in Children's Home Environments: The Effects of Parental Occupational Experiences and Family Conditions." Journal of Marriage & the Family, 57, 69-84.

Moore, K., & Driscoll, A. (1997). Low-wage maternal employment and outcomes for children: A study. The Future of Children, 7, 122-127.

Moore, K., Zaslow, M., Coiro, M., Miller, S., & Magenheim, E. (1995). The JOBS evaluation: How well are they faring? AFDC families with preschool-aged children in Atlanta at the outset of the JOBS evaluation. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

Morris, P. & Duncan, G. (2001, September). Which welfare reforms are best for children? Washington, D.C.: The Brookings Institution. [On-line]. Available: www.brookings.edu/wrb

Morris, P., Knox, V., & Gennetian, L. (2002). Welfare policies matter for children and youth: Lessons for TANF Reauthorization. New York, NY: Manpower Demonstration Research Corporation. [On-line]. Available: www/mdrc.org/Next Generation.

Olson, K., & Pavetti, L. (1996). Personal and family challenges to the successful transition from welfare to work. Washington, DC: The Urban Institute.

Parcel, T. & Menaghan, E. (1990). Maternal working conditions and children's verbal facility: Studying the intergenerational transmission of inequality from mothers to young children. Social Psychology Quarterly, 53, 132-147.

Romich, J. (2002, November). Time and trust: Mother's work and young adolescents' lives in low-income working families. Paper presented at the Annual Meetings of the Association for Public Policy Analysis and Management, Dallas TX.

Smith, J., Brooks-Gunn, J., Klebanov, P., & Lee, K. (2000). Welfare and work: Complementary strategies for low-income women? Journal of Marriage and the Family, 62, 808-821.

Strauss, M. A., & Gelles R. J. (Eds.). (1990). Physical Violence in American Families: Risk Factors and Adaptations to Violence in 8,145 Families. New Brunswick, NJ: Transaction Books.

Thompson, T. G. (2001). Welfare reform's next step. Brookings Review, Summer, 2001, 2-3.

U.S. Department of Health and Human Services, Administration for Children and Families. (1999). Temporary assistance for needy families (TANF) 1936-1999. U.S. Welfare Caseload Data. [On-line]. Available: [//www.acf.dhhs.gov/news/tables.htm](http://www.acf.dhhs.gov/news/tables.htm).

Ware, J. E., Snow, K. K., Kosinski, M. & Gardek, B. (1993). SF-36 Health Survey: Manual and Interpretation Guide. Boston: The Health Institute, New England Medical Center.

Weaver, R. K. (2000). Ending Welfare As We Know It. Washington, D.C. Brookings Institution.

Wilson, W. J. (1996). When work disappears: The world of the new urban poor. New York: Vintage Books.

Wilson, J., Ellwood, D., & Brooks-Gunn, J. (1995). Welfare to work through the eyes of children: The impact on parenting of movement from AFDC to employment. In P.L. Chase-Lansdale & J. Brooks-Gunn (Eds.), Escape from poverty: What makes a difference for children? New York: Cambridge University Press.

Zill, N., Moore, K., Smith, E., Stief, T., & Coiro, M. (1991). The life circumstances and development of children in welfare families: A profile based on national survey data. Washington DC: Child Trends.

Table 1: Means and Standard Deviations

| | Whole Sample | | Welfare-reliant (N = 21) | | Wage-reliant (N = 58) | | Combining (N = 26) | | No work welfare (N = 10) | | Mixers (N = 72) | |
|---|--------------|-----------|-----------------------------|-----------|--------------------------|-----------|-----------------------|-----------|--------------------------------|-----------|--------------------|-----------|
| | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> |
| <i>Dependent Variable</i> | | | | | | | | | | | | |
| Whether teen suspended/expelled since wave 1 | .45 | .50 | .76 | .44 | .40 | 0.49 | .35 | .49 | .40 | .52 | .45 | .50 |
| <i>Potential Mediators</i> | | | | | | | | | | | | |
| Average maternal monitoring | 3.57 | .75 | 3.26 | 1.00 | 3.61 | 0.68 | 3.42 | .82 | 3.90 | .61 | 3.65 | .69 |
| Freq. teen cares for young children (range 1-6) | 3.53 | 1.93 | 3.05 | 1.91 | 3.66 | 1.89 | 3.38 | 1.96 | 2.90 | 1.91 | 3.71 | 1.97 |
| Freq. teen does extra-curricular activities (range 1-6) | 3.57 | 1.04 | 3.14 | 2.13 | 3.81 | 1.98 | 3.54 | 1.98 | 3.50 | 1.72 | 3.53 | 2.16 |
| <i>Independent Variables</i> | | | | | | | | | | | | |
| Mother was welfare-reliant | .11 | .32 | | | | | | | | | | |
| Mother was wage-reliant | .31 | .46 | | | | | | | | | | |
| Mother combined work and welfare | .14 | .35 | | | | | | | | | | |
| Mother had no work and no welfare | .05 | .23 | | | | | | | | | | |
| Mother was a mixer | .39 | .49 | | | | | | | | | | |
| Teen age wave 3 | 15.42 | 1.60 | 14.90 | 1.37 | 15.71 | 1.63 | 15.35 | 1.62 | 14.20 | 1.23 | 15.53 | 1.59 |

| | | | | | | | | | | | | |
|---|------|-----|------|-----|------|------|------|-----|------|-----|------|-----|
| Teen is male | .48 | .50 | .52 | .51 | .52 | 0.50 | .42 | .50 | .40 | .52 | .46 | .50 |
| Teen is black | .56 | .50 | .71 | .46 | .69 | 0.47 | .35 | .49 | .20 | .42 | .54 | .50 |
| Percent time mother lived with a male W1-W3 | .30 | .40 | .30 | .41 | .30 | .41 | .22 | .38 | .77 | .32 | .27 | .38 |
| Family income/needs wave 3 | .97 | .68 | .60 | .59 | 1.29 | 0.82 | .84 | .36 | 1.51 | .84 | .79 | .48 |
| Financial strain | 2.51 | .81 | 2.36 | .75 | 2.27 | .74 | 2.59 | .80 | 2.35 | .67 | 2.74 | .84 |
| Any reports of hassles | .58 | .50 | .38 | .50 | .53 | .50 | .50 | .51 | .80 | .42 | .67 | .47 |
| Mom met mental health diagnosis criteria | .55 | .50 | .43 | .51 | .41 | 0.50 | .54 | .51 | .50 | .53 | .69 | .46 |
| Mom met any of alcohol dependence criteria | .09 | .28 | .10 | .30 | .05 | 0.22 | .12 | .33 | .10 | .32 | .10 | .30 |
| Mom reports any drug use | .29 | .46 | .29 | .46 | .26 | 0.44 | .27 | .45 | .20 | .42 | .35 | .48 |
| Mother has health barrier | .39 | .49 | .71 | .46 | .22 | 0.42 | .31 | .47 | .50 | .53 | .43 | .50 |
| Any child has health barrier | .35 | .48 | .48 | .51 | .22 | 0.42 | .42 | .50 | .40 | .52 | .39 | .49 |
| Mom reports domestic violence | .25 | .43 | .24 | .44 | .17 | 0.38 | .23 | .43 | .30 | .48 | .31 | .46 |
| Mom pregnant anytime before wave 3 | .05 | .21 | 0 | 0 | .03 | 0.18 | .08 | .27 | .20 | .42 | .04 | .20 |
| Mom no HS degree | .26 | .44 | .33 | .48 | .24 | 0.43 | .19 | .40 | .00 | .00 | .31 | .46 |
| Mother has learning disability | .13 | .34 | .24 | .44 | .05 | 0.22 | .04 | .20 | .10 | .32 | .21 | .41 |
| Mother has been convicted | .06 | .24 | .24 | .44 | .05 | 0.22 | 0 | 0 | 0 | 0 | .04 | .20 |

NOTE: Work/welfare categories are based on the category in which a mother spent at least 7/12 of the time between Feb. 1997 and October 1999.

The response categories for taking care of younger children and extra-curricular activities are almost never (1), less than once a month (2), 1-3 times a month (3), about once a week (4), a few times a week (5), almost every day (6).

Table 2. Predicting teen school progress and potential mediators

| Variables | Whether teen suspended/expelled (logistic regression) | | Maternal Monitoring (ordered logit) | | Taking Care of Younger Children (ordered logit) | | Extra- curricular Activities (ordered logit) | |
|-------------------------------------|---|---------|---|-----|--|-----|---|-----|
| | Odds ratio | Z Score | Coeff. | SE | Coeff. | SE | Coeff. | SE |
| Wage-reliant | .20** | -2.36 | 1.03* | .56 | .37 | .52 | 1.08** | .54 |
| Combine work/welfare | .25* | -1.83 | .52 | .62 | .02 | .59 | .67 | .61 |
| No work/no welfare | .30 | -1.18 | 2.30*** | .84 | -.33 | .81 | 1.03 | .78 |
| Mixers | .39 | -1.43 | .83 | .52 | .31 | .49 | .58 | .51 |
| Family income/needs | 1.06 | 0.22 | -.34 | .23 | -.12 | .22 | .01 | .23 |
| Teen age | .84 | -1.64 | -.06 | .09 | .18** | .09 | -.21** | .09 |
| Teen is male | 2.33** | 2.49 | -.07 | .27 | -.61** | .28 | .55* | .28 |
| Teen is Black | 2.51** | 2.43 | .24 | .31 | -.09 | .30 | .12 | .32 |
| Financial strain | 1.13 | 0.5 | .17 | .20 | -.11 | .20 | .35* | .20 |
| Percent time mother lived with male | 1.57 | 0.99 | .14 | .37 | -.11 | .36 | -.89** | .38 |
| Any reports of hassles | .80 | -0.59 | -.81** | .33 | .63** | .31 | -.37 | .32 |
| Any mental health diagnosis | .55 | -1.6 | .29 | .30 | .02 | .30 | .25 | .30 |

| | | | | | | | | |
|--|---------|-------|---------|-----|---------|-----|---------|-----|
| Met any of alcohol dependence criteria | 1.13 | 0.17 | .27 | .55 | .10 | .57 | -.10 | .60 |
| Any drug use | .80 | -0.52 | .44 | .35 | .28 | .34 | -.25 | .36 |
| Mother health barrier | .77 | -0.68 | -.36 | .31 | -.23 | .31 | .11 | .31 |
| Child health barrier | .89 | -0.3 | .03 | .31 | -.16 | .30 | -.22 | .32 |
| Domestic violence | 1.37 | 0.74 | -.20 | .34 | .14 | .34 | .44 | .34 |
| Mom pregnant before wave 3 | .52 | -0.77 | -.88 | .58 | .63 | .66 | -.56 | .64 |
| Mom no HS degree | 1.29 | 0.64 | -.13 | .33 | -.21 | .33 | .24 | .34 |
| Mom has learning disability | .60 | -0.97 | 1.02** | .43 | .00 | .44 | .22 | .41 |
| Mom has been convicted | 3.17 | 1.35 | -.45 | .62 | .55 | .60 | .18 | .67 |
| Log likelihood | -113.05 | | -309.03 | | -308.58 | | -299.71 | |
| N | 188 | | 189 | | 189 | | 189 | |

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

NOTE: Omitted category is welfare-reliant between W1 and W3.

In monitoring regression, coefficients on combining and no work/no welfare are significantly different a p<.05. Coefficients on combining and transitioning are significantly different at p<.10.

Table 3: Predicted Probabilities

| | <i>Probability of being suspended/expelled</i> | <i>Probability of being in highest monitoring category</i> | <i>Probability of taking care of younger children almost daily</i> | <i>Probability of extra- curricular activities almost daily</i> |
|--------------------|--|--|--|---|
| Welfare-reliant | .72 | .08 | .16 | .14 |
| Wage-reliant | .33 | .19 | .22 | .33 |
| Combining | .38 | .12 | .16 | .25 |
| No work/no welfare | .42 | .45 | .12 | .32 |
| Mixers | .50 | .16 | .21 | .23 |

NOTE: probabilities derived from models presented in Table 3. Assumes is that mother is at the mean on all other covariates.

Table 4. Predicting school progress including potential mediators

| Variables | Whether teen suspended/expelled (logistic regression) | |
|--|---|----------------|
| | <u>Odds ratio</u> | <u>Z Score</u> |
| Maternal monitoring | 0.66 | -1.66 |
| Frequency taking care of younger children | 0.98 | -0.19 |
| Participation in extra-curricular activities | 0.83** | -2.06 |
| Wage-reliant | 0.27* | -1.85 |
| Combine work/welfare | 0.28 | -1.63 |
| No work/no welfare | 0.46 | -0.73 |
| Mixers | 0.48 | -1.1 |
| Family income/needs | 1.02 | 0.07 |
| Teen age | 0.80* | -1.92 |
| Teen is male | 2.63*** | 2.7 |
| Teen is Black | 2.74** | 2.58 |
| Financial strain | 1.26 | 0.92 |

| | | |
|--|---------|-------|
| Percent time mother lived with male | 1.34 | 0.63 |
| Any reports of hassles | 0.66 | -1.03 |
| Any mental health diagnosis | 0.60 | -1.33 |
| Met any of alcohol dependence criteria | 1.26 | 0.32 |
| Any drug use | 0.84 | -0.4 |
| Mother health barrier | 0.71 | -0.87 |
| Child health barrier | 0.85 | -0.43 |
| Domestic violence | 1.45 | 0.85 |
| Mom pregnant before wave 3 | 0.47 | -0.89 |
| Mom no HS degree | 1.25 | 0.56 |
| Mom has learning disability | 0.77 | -0.5 |
| Mom has been convicted | 2.96 | 1.22 |
| Log likelihood | -108.95 | |
| N | 188 | |

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

NOTE: Omitted category is welfare-reliant between W1 and W3.