# VARIATIONS IN MATERNAL AND CHILD WELL-BEING AMONG FINANCIALLY ELIGIBLE MOTHERS BY TANF PARTICIPATION STATUS

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The years both leading up to and following the landmark 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) legislation have been abuzz with debates about the costs and benefits of our welfare system for both the nation as a whole and for poor families. Although the legislation has been deemed by many to be a success because welfare rolls have declined by over 50 percent since their peak in 1994, it is important to know how both welfare participation and non-participation are affecting poor families within this complex new welfare environment.

We use baseline and one-year follow-up data from the national Fragile Families and Child Wellbeing Study to compare the hardships of TANF-eligible mothers and their one-year-old children across the following four groups: (1) mothers who were receiving Temporary Assistance for Needy Families (TANF) at the time of the follow-up interview; (2) those who received TANF during the past year but no longer received it, possibly because they were sanctioned or hit term limits; (3) those who received TANF during the past year but no longer received it, were not sanctioned, and could not have hit term limits; and (4) those who did not receive TANF at all during the past year. We look at a variety of outcomes including material hardship, poor physical health and poor mental health of mothers, and poor general health status and hospitalization of their children.

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Variations in outcomes across the groups could be due to differences in characteristics within those groups or to differences in the environments in which they live. We address this possibility by: (1) controlling for a wide range of observed factors that may vary across the four groups including race/ethnicity, nativity, age, education, parity, and whether the parents lived together at baseline; (2) controlling for the baseline level of the outcome; (3) incorporating state fixed effects in our models to control for variations in outcomes that may be due to state policies and other state-level factors; and (4) restricting the sample in some analyses to further equalize the comparison groups.

#### BACKGROUND

The PRWORA legislation of 1996 redefined the role of government in providing economic support for needy families. A major part of the new legislation replaced Aid for Families with Dependent Children (AFDC) with TANF block grants for states, giving states increased latitude in establishing eligibility and program rules governing the administration of cash assistance. The broad goal of PRWORA was to shift financial responsibility from government to families by: (1) emphasizing labor force attachment, expanding work requirements for those receiving or seeking assistance, and establishing term limits on the receipt of federal assistance and (2) discouraging non-marital births and ensuring that non-custodial parents (typically fathers) play a more active role in the financial support of their children. These changes have potential implications for the well-being of low-income families, both by shaping the experiences of those receiving assistance and by influencing welfare participation, labor market participation, and family structure. Blank [2002] provides an extensive review of the policy changes and studies that have evaluated their effects; below we discuss a few of the key studies within this broad literature.

Time limits on TANF receipt are perhaps the most dramatic feature of the new welfare regime. Early evidence from administrative caseload data since 1996 suggests that time limits have had little, if any, effect on welfare use [CEA, 1999; Ziliak et al., 2000]. These studies, however, generally used aggregate data and therefore could not evaluate effects for subgroups (such as first births, teens, immigrants, and welfare eligible mothers). Most also characterized states' TANF plans and assessed their effects early in the implementation of PRWORA. Finally, data limitations made it difficult to account for unobserved differences between women who hit time limits in their states and those who did not. Grogger and Michalopoulos [2003] used individual-level data from a pre-PRWORA Florida welfare demonstration (a randomized experiment) and found that time limits were associated with exits from welfare even before benefits were exhausted, suggesting that mothers "bank" their benefits for the future. They also found that time limits reduced welfare use the most among families with the youngest children. This last study did not have some of the methodological problems facing some of the recent caseload studies, but it evaluated data pre-welfare reform. Also, like most other pre-welfare reform studies, it used a sample of welfare recipients rather than a sample of recipients and non-recipients who might be affected by such policies.

Schoeni and Blank [2000] discussed the importance of looking at non-participants (or *potential* participants) as well as participants in post-welfare reform studies. They used Current Population Survey (CPS) data from 1977 to 1999 to look at the impact of state waivers in the early 1990s and the early impact of the 1996 legislation on various measures of income, employment, and household structure among women 16-54 and certain subgroups. For the latter, they used several approaches to control for unobserved heterogeneity and found that the 1996 legislation reduced welfare participation, increased income slightly, and had no effect on employment among female high school dropouts.

Grogger [2003] used CPS data between 1978 and 1999 to estimate the effects of TANF time limits and other reforms on welfare participation, employment, and income among female-headed families. He exploited state variations in TANF policies to isolate the effect of time limits, while employing a number of techniques to address the potential endogeneity of state policies themselves. He, like Grogger and Michalopoulos, found that time limits reduce welfare use but not income or earnings, suggesting that poor women are "banking" their lifetime benefits by drawing upon other sources of support and/or making financial sacrifices.

Some recent studies indicate that low-income parents may indeed be facing increased levels of hardship in the years following PRWORA. A synthesis of twelve ASPE surveys showed that between 13 and 52 percent of welfare leavers reported food hardship [ACF, 2001]. Loprest [1999] used the 1997 National Survey of America's Families (NSAF) to compare welfare leavers with mothers with children under age eighteen who had family incomes under 150 and 200 percent of the poverty level. These low-income mothers were similar to those on TANF in terms of education, disability status, and family size. She found that 15 percent of each of the three groups had either physical or mental conditions that limited work and that leavers had the most difficulty affording enough food and paying their rent and utility bills. Loprest [2002], using the NSAF, found that leavers in poor mental and physical health are more likely than other leavers to go back on TANF.

Meyer and Sullivan [2001] used data from the Consumer Expenditure Survey and the Panel Study of Income Dynamics to examine the material well-being of single mothers and their families before (1984-1990) and soon after welfare reform (1996-1998). Like Grogger (who looked at female-headed households), they looked at single mothers rather than welfare recipients because the new welfare legislation was expected to (and was designed to) deter potential recipients from receiving TANF and thus would likely affect participation among both recipients and eligible non-recipients. They looked at consumption rather than income because the former may be a more direct measure of well-being and it is likely less cyclical than income. Their measure of "total current consumption" included all household expenditures less those for education, health care, cash contributions, and retirement saving, and they also looked at certain components of total consumption (such as food) separately. To minimize potential selection bias, they focused on changes in, rather than levels of, consumption of single mothers relative to changes in consumption of both married mothers and single mothers without children. They found that material conditions

improved slightly between 1984-1990 and 1995-1996, even among the most disadvantaged mothers.

Winship and Jencks [2002] looked at food insecurity (as determined by the USDA) rather than food expenditures. They compared changes in the adequacy of food supply among married and single women using the CPS Food Security Supplement from 1995 to 1999. They found that every food-related problem was less common in 1999 than in 1995, and that although single mothers started out with more food-related problems, both groups had the same proportional decline in food insecurity between 1995 and 1999, narrowing the absolute gap between married and single mothers.

In a panel study of welfare recipients and leavers post welfare reform, Danziger et al. [2002] compared income and levels of hardship of single mothers across four groups: those who remained on welfare and worked, those who remained on welfare and did not work, those who left welfare and worked, and those who left welfare and did not work. They found that mothers who left welfare and worked had the highest incomes and the lowest levels of hardship, and that welfare-reliant mothers who did not work had the lowest incomes and greatest levels of hardship. The authors concluded that moving from welfare to work does pay in terms of income. However, they also pointed out that most of the mothers who worked were still poor and many lacked health insurance.

In another post-welfare reform study of leavers and stayers, Moffitt and Cherlin [2002] used data from 1999 to compare income levels across four groups of mothers who had been on welfare within the past two years—employed stayers, unemployed stayers, employed leavers, and unemployed leavers. Like the Danziger et al. study, they found that employed leavers had much higher incomes than unemployed stayers. They also found, however, that unemployed leavers had the lowest incomes across all four groups and that stayers were more likely than leavers to have poor health.

Some of the studies discussed above looked at hardship directly rather than (or in addition to) income or employment effects of TANF and several of them restricted their samples to assess the impact of PRWORA on potential, as well as actual, recipients. A critical set of questions not addressed by these studies is: Just how substantial is the group of eligible non-participants in the post-welfare reform era, who are they, and how are they faring relative to TANF participants? Zedlewski [2002] used 1997 and 1999 NSAF data to impute TANF eligibility status for families in their national sample in order to address these very issues. She found that only half (52 percent) of qualified families participated in TANF. The non-participant families tended to qualify for smaller benefits than participating families, had higher family and extended family incomes, had more children, were more likely to live with other adults (including partners), had lower rates of physical and mental health problems, were more likely to have worked in past three years, were older, were less likely to be black and more likely to be Hispanic, and were more likely to agree that welfare discourages people from working. Despite this favorable profile of eligible non-participants compared to TANF participants, Zedlewski found that many non-participants are quite poor and that 17-34 percent of them could gain substantially by enrolling in TANF.

For this paper, we imputed TANF eligibility for mothers in a national longitudinal study of new parents in large U.S. cities to compare the material well-being, mental health, and physical health of TANF participants and eligible non-participants several years after welfare reform. Within the former group, we distinguish between TANF stayers, TANF leavers who had been sanctioned or may have hit term limits, and TANF leavers who had not been sanctioned and could not have confronted term limits. We will examine how many financially eligible families actually receive TANF, how many have recently left the rolls, how these families are faring, and how welfare participation affects their well-being within the complex new welfare environment.

# **DATA**

The Fragile Families and Child Wellbeing Study follows a cohort of new parents and their children in twenty U.S. cities (located in fifteen states). The study was designed to take a longitudinal look at the conditions and capabilities of new (mostly unwed) parents, the nature of their relationships, factors that push them together and those that pull them apart, and the long-term consequences for parents, children, and society of new welfare regulations, stronger paternity establishment, and stricter child support enforcement. The data, when weighted, are representative of all births in U.S. cities with populations over 200,000. Both the mothers and fathers were interviewed in the hospital at the time of the birth (fathers were interviewed by telephone or in person outside of the hospital when the interview was not completed in the hospital), again when the child was one year old, and very recently, a third time when the child was three years old. A fourth follow-up interview with both parents is planned for when the child is five years old.¹ Baseline interviews were conducted with 4898 mothers and 3830 fathers from 1998 to 2000.

In this paper, we use the sample of mothers who completed both baseline and one-year follow-up interviews and were also eligible for TANF during the 12-month period preceding the follow-up interview. For each mother, we imputed eligibility for TANF based on the eligibility requirements in her state, using detailed information from the surveys on her income, household composition, and other relevant measures. The methodology for these imputations is described in the Appendix. In these imputations, we had to make some assumptions when we did not have perfect information. For this paper, we applied a strict (or exclusive) set of assumptions in order to minimize the rate of false eligibles.<sup>2</sup>

#### **MEASURES**

We are interested how welfare participation affects the hardships faced by mothers (of one-year-old children) who are eligible for TANF. We categorize eligible mothers as: receiving TANF at the time of the follow-up interview (stayers), having received TANF sometime during the past 12 months but not at the time of the follow-up interview (leavers), and never having received TANF during the past 12 months (non-participants). We also examine the conditions of TANF-ineligible families for the purposes of comparison.

We further disaggregate leavers because they represent a very heterogeneous group. Some leave of their own volition, either because they have found jobs or are substituting welfare payments with other forms of private or public support. Some are sanctioned for non-compliance with work requirements. Others see their benefits withdrawn because they have hit term or lifetime limits. While we have no direct means from the survey questions to assess who belongs to each of these groups of leavers, we do know whether mothers were sanctioned (had their benefits reduced or terminated) within the past year and whether they lived in a state in which term or lifetime limits could have taken effect.

We therefore disaggregate the leavers into two groups: (1) those who were not sanctioned and could not have hit term or lifetime limits, and (2) those who were sanctioned or lived in states in which time limits had been hit by the time of the follow-up interview. Strictly for ease of discussion, we call the first group "voluntary leavers" and the second group "involuntary leavers." It is very important to keep in mind throughout the remaining discussion that while the "voluntary leavers" categorization does a good job of including those whose benefits were not involuntarily withdrawn by the state because of sanctioning or time limits, it may include mothers who recently became financially ineligible (our imputation of eligibility is based on average income during the year and we have no way of ascertaining month-to-month fluctuations).

The "involuntary leavers" categorization is less precise, because that group is likely to include mothers who left voluntarily but happened to live in states in which time limits had taken effect or who were sanctioned but did not have their benefits eliminated (the surveys do not provide information on reasons for leaving welfare).<sup>3</sup> Consequently, differences between our "voluntary" and "involuntary" leavers are likely to underestimate actual differences between voluntary leavers and *truly involuntary* leavers.

We compare measures of material (or financial) hardship, poor maternal physical and mental health, and poor child health at one year for the following groups of eligible mothers: those on TANF, involuntary leavers, voluntary leavers, and non-participants. We consider twelve different types of material hardships (these include hunger, inability to pay rent, mortgage or utility bills, eviction, homelessness, and lack of medical care), whether the mother experienced any of the twelve hardships, and whether she experienced any of the more extreme forms of hardship (whether her children went hungry, whether she herself went hungry, whether she was evicted from her home, and whether she ever had to stay in a shelter or car during the year).

We categorize the mother's physical health as suboptimal if she reported having fair or poor health at one year (versus excellent, good, or very good). We measure depression and anxiety using a Composite International Diagnostic Interview (CIDI) scale based on responses to standardized questions in the survey about despondency, weight gain/loss, sleep patterns, ability to concentrate, and worries. The CIDI is a comprehensive standardized instrument for assessment of mental disorders according to the definitions and criteria of ICD-10 and DSM-IV. We characterize the mother's mental health as suboptimal based on the CIDI scale at one year.

We categorize the child's health as suboptimal if the mother reported at followup that the child was in fair or poor health (versus excellent, good, or very good). We also consider whether the child was hospitalized at least once during the past year.

In our analyses, we incorporate baseline measures of the mother's age, race/ethnicity, nativity (whether she was born outside of the United States), parity (whether the child was her first), educational attainment at baseline, whether she was married or cohabiting with the baby's father at baseline, and whether she was employed (whether she reported a date of last work for a regular paycheck in the 12 months prior to baseline).

As part of our estimation strategy we include measures of hardship at baseline in many of the models. For material hardship at baseline, we have the mother's report of whether or not she had enough money at the end of the month to make ends meet. For physical health at baseline, we have information from the same fivepoint overall health status question as at one year. For mental health, no direct questions were included in the baseline survey, but we do have information from the interviewers about the mother's mental state during the interview. In particular, the interviewer reported the extent to which the respondent appeared depressed or withdrawn (not at all, somewhat, or very), anxious or nervous (not at all, somewhat, or very), and psychologically adjusted—that is, emotionally mature or stable (not at all, very little, moderately, much, and very much). We also have information about drug use during pregnancy as well as whether or not the use of alcohol or drugs interfered with the mother's daily activities. We coded the mother as having poor mental health at baseline if (1) the interviewer reported that she was somewhat or very depressed/withdrawn, somewhat or very anxious/nervous, or less than moderately psychologically adjusted; (2) the mother reported any use of drugs during pregnancy; or (3) the mother reported that drinking or using drugs interfered with her work on a job or with her personal relationships in the past year.

#### DESCRIPTIVE ANALYSIS

In Table 1 we present the characteristics and baseline hardships of the TANFeligible mothers in the following groups: those on TANF at follow-up, involuntary leavers, voluntary leavers, and non-participants. The first and last groups include mothers from all states in the sample, whereas the "leavers" groups, by construction, for the most part included women in different groups of states. Specifically, the voluntary leavers all live in states where time limits had not yet taken effect, and most of the involuntary leavers live in the states where they potentially could have confronted time limits.

The most striking finding from Table 1 is the low TANF participation rate among eligible mothers: almost half (45 percent) did not receive any TANF in the past twelve months. These non-participants are likely a heterogeneous group consisting of mothers who did not choose to apply for welfare (for any number of reasons), those who had been deterred from applying or receiving welfare (possibly because they did not want to accrue time toward their lifetime limit or because they encountered difficulties

TABLE 1
Characteristics of Mothers Who Were TANF-Eligible at Follow-up by TANF Participation in Last 12 Months (percentages)

	On TANF at follow-up	$\frac{\text{Left TANF during last}}{\text{12 months}} \\ \frac{12 \text{months}}{\text{Involuntary}}  \text{Voluntary}$		Not on TANF in last 12 months	
	at follow-up				
Age					
Under 20	29	24	26	29	
20 - 29	57	67	63	54	
30 or over	13	9	11	18	
Race/Ethnicity					
White Non-Hispanic	8	11	3	12	
Black Non-Hispanic	70	57	79	53	
Hispanic	21	31	18	32	
Other	2	1	0	2	
Nativity					
Foreign-Born	5	4	18	14	
Parity					
First Birth	30	29	32	37	
Education					
Less than High School	61	49	50	50	
High School Only	30	27	32	31	
Some College	9	23	18	19	
Relationship Status					
Married or Cohabiting at Baseline	60	58	58	61	
Employment					
Worked Prior to Birth	63	78	55	65	
Baseline Hardship					
Financial Hardship	31	29	34	23	
Poor Physical Health	12	18	3	8	
Poor Mental Health	20	24	17	21	
N	321	91	38	373	

The following differ significantly across the four groups, using chi-square tests for equal distributions: race/ ethnicity (p < .01), nativity (p < .001), education (p < .01), working prior to birth (p < .05), financial hardship at baseline (p < .10), poor physical health at baseline (p < .05).

during the application process), and those who were not eligible due to their immigration status (see footnote #2).<sup>4</sup>

There are some clear differences across the four groups of eligibles, but no systematic pattern. Non-participants and involuntary leavers are more likely to be Hispanic or white than mothers in the other groups. The non-participants are the least likely to have other children, and those on TANF at the follow-up interview have the

lowest levels of education among all groups. The involuntary leavers were the most likely to have worked during the year before the child was born, but this appears to reflect differences across states rather than differences between groups. The non-participants experienced less financial hardship at baseline, and they and the voluntary leavers were in better physical health at baseline than those in the other groups. Both groups of leavers resemble the non-participants in terms of human capital (education), but those that left involuntarily had poorer baseline physical health.

Although the data in Table 1 do not give us a clear idea of what to expect in terms of differential hardships across these groups at one year, these observed characteristics do not suggest that the involuntary leavers are selectively worse off than the others.

In Table 2 we look at twelve detailed measures of material hardship, as well as poor maternal and child health. For comparison purposes, we include figures for the TANF-ineligible mothers. The high rate of eligibility in this sample (almost a quarter of the mothers were eligible) reflects the intentional over-sampling of non-marital births for the study. When we consider whether the mother faced *any* of the twelve material hardships, the involuntary leavers do not look significantly different than the other eligible groups. When we consider the subset of *extreme* material hardships of hunger and eviction or homelessness, however, the involuntary leavers, at 30 percent, have more than double the rate of every other eligible group and five times that of mothers who were not eligible for TANF. They also have the worst rates of poor maternal physical and mental health. These high rates of hardship among involuntary leavers are somewhat surprising, in light of the baseline comparisons shown in Table 1.

All groups with any level of involvement with TANF are more likely than the eligible non-participants to have children who had been hospitalized at least once during the year. However, the voluntary leavers are the healthiest group among eligibles (both mothers and their children), which is what we would expect, given that they started off in the best physical health (indeed, this may have helped them get off TANF). That group had no children in poor health. That said, the voluntary leavers are not more educated than the other eligible groups and experience hardships at one year at levels comparable to those receiving TANF. Next we will determine whether these differences across eligible groups persist within a multivariate framework that attempts to control for unobserved, as well as observed, differences between the various groups.

#### **MULTIVARIATE ANALYSIS**

Since the mothers in our four comparison groups of eligibles had such different experiences using TANF in the past year, we would expect them to differ in other ways as well, making it problematic to simply compare outcomes across groups even when we control for observed characteristics. We address the possibility of potential selection bias by: (1) controlling for a wide range of observed factors that may vary across the four groups of eligibles, including race/ethnicity, age, education, parity, and education; (2) controlling for baseline levels of the outcome; (3) incorporating

TABLE 2
Maternal Hardships of Mothers and Their Children,
by TANF Eligibility and Participation in Last 12 Months (percentages)

	On TANF at follow-up	Left TANF during last 12 months		Not on TANF in last 12 months	
	I	nvoluntary	Voluntary	y Months	
Material Hardship					
Received free food/meals	15	22	16	10	7
Children went hungry	1	1	3	2	0
Mother went hungry	5	19	3	8	3
Did not pay rent/mortgage	14	23	26	15	12
Evicted	5	14	8	4	2
Did not pay utility bill	22	35	8	23	20
Utility shut off	8	9	3	8	5
Telephone disconnected	18	33	13	14	11
Borrowed \$ to pay bills	32	42	21	31	23
Moved in with others	22	24	13	15	8
Stayed in shelter/car/other	9	8	3	3	1
Did not get medical care	3	5	3	7	5
Any Material Hardship	62	68	58	57	44
Any Extreme Hardship <sup>a</sup>	15	30	11	12	6
Mother's health					
Poor Physical Health	19	22	13	15	12
Poor Mental Health	17	23	11	15	9
Child's Health					
Poor Health	7	3	0	4	2
Hospitalized at least once	20	19	32	16	15
N	321	91	38	373	2747

Rates of all hardships differ significantly across the four groups of eligible mothers (on TANF at follow-up, involuntary leavers, voluntary leavers, not on TANF in last 12 months), using chi-square tests for equal proportions. All differ significantly at p=.001, except: children went hungry (p<.10), did not get medical care (p<.10) and poor mental health (p<.01).

state fixed effects in our models to control for variations in outcomes that may be due to state policies and other state-level factors; and (4) restricting the sample in some analyses to further equalize the comparison groups.

We have excellent controls for baseline material hardship and physical health because survey questions at baseline asked about these problems directly. The measure of mental health at baseline, on the other hand, is very weak. While we have the mother's responses to questions on a standardized scale to assess poor mental health at follow-up, we are relying at baseline on the impressions of interviewers who were not trained to diagnose such conditions and on less direct measures involv-

a. Extreme hardships include: children went hungry, evicted, stayed in shelter/car/other.

ing mother's drug use during pregnancy and whether drinking or drug use interfered with her work or personal relationships.

Table 3 shows the multivariate results for three types of maternal hardship: any extreme material hardship, poor physical health, and poor mental health at one year. Among TANF-eligible mothers, we compare the outcomes of being a voluntary leaver, an involuntary leaver, and a non-participant to those of mothers on TANF. For each outcome, Model 2 is the same as Model 1, with the addition of a control for the baseline measure corresponding to the outcome. Few socio-demographic characteristics are significant predictors of maternal hardship for this sample of TANF-eligible mothers. The strongest effects are for welfare status; the findings from Table 2 hold up in that the involuntary leavers are much worse off than any other group in terms of extreme material hardship and poor mental health. Although the effects on physical health are not significant, it may take more than one year for material and emotional hardships to translate into physical health problems.

The results for mental health must be interpreted with particular caution, because the direction of causality is unclear. It is possible, or even likely, that mothers with pre-existing mental health problems were more likely to have their benefits terminated than those without mental health problems. The baseline control for mental health that we used is weak and insignificant, making it impossible to rule out that explanation. Regardless of cause and effect, however, it is clear that involuntary leavers are more likely to have mental health problems that are cause for concern.

In Table 4 we look at poor child health and hospitalizations. <sup>10</sup> For each outcome, Model 1 includes a set of maternal characteristics and Model 2 includes the same set of characteristics plus low birthweight (whether the baby weighed less than 2500 grams at birth) as a baseline measure of poor child health. Again, the results are robust across the two different specifications. The leavers and non-participants were less likely to have had children in fair or poor health than were mothers on TANF, but the differences are not significant (p = 0.25 for involuntary leavers and p = 0.11 for non-participants). <sup>11</sup> Table 4 reveals a paradoxical finding in terms of child hospitalizations—that voluntary leavers were more likely than the other groups to have had their child hospitalized at least once during the year. Although this result is consistent with the unadjusted figures in Table 2, we cannot think of an explanation for this seemingly perverse effect. <sup>12</sup> We will revisit this issue when longer-term follow-up data become available.

Across all outcomes, the results remain virtually unchanged when we control for the baseline value of the outcome (Model 2 in Tables 3 and 4). It is possible, however, that unobserved factors are affecting both welfare status and the one-year outcome (for Model 1), and both welfare status and changes in the outcome from baseline to one year (for Model 2). Although the effects of welfare status do tell us how these different groups are doing relative to the others given the same observed characteristics and initial level of hardship, we cannot be certain that the effect of belonging to a given welfare group is a consequence of being in that group or to similar types of experiences during the past year having led mothers into the specific groups (as discussed earlier, even the direction of causation is questionable in the case of poor

TABLE 3
Effects of TANF Participation on Mothers' Hardships at One Year
(Logit Coefficients)

	Any Extreme Material Hardship		Poor Physical Health		Poor <u>Mental Health</u>	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Left TANF Voluntarily	-0.32	-0.35	-0.41	-0.19	-0.43	-0.69
Left TANF Involuntarily	$0.96^{a}$	$0.96^{a}$	0.25	0.05	0.48	$0.52^{c}$
Not on TANF	-0.32	-0.26	-0.34	-0.27	-0.15	-0.13
Age						
Under 20	$-0.70^{c}$	$-0.63^{c}$	$-0.72^{\rm b}$	$-0.72^{\rm b}$	-0.50	-0.56
20 - 29	-0.31	-0.25	-0.18	-0.17	-0.38	-0.39
Race/Ethnicity						
Black Non-Hispanic	-0.42	-0.45	-0.16	-0.24	$-0.64^{\rm b}$	$-0.66^{\rm b}$
Hispanic	-0.27	-0.30	0.24	0.16	-0.20	-0.21
Other	-1.16	-1.16	-0.22	-0.80	-1.51	-1.54
Nativity						
Foreign-Born	0.20	0.16	-0.17	-0.36	-0.31	-0.33
Parity						
First Birth	0.22	0.22	0.10	0.19	0.01	0.09
Education						
High School Only	$-0.54^{ m b}$	$-0.53^{\rm b}$	-0.25	-0.25	-0.35	-0.37
Some College	-0.26	-0.29	-0.32	-0.28	0.12	0.10
Marital Status						
Married or Cohabiting						
at Baseline	0.14	0.13	$-0.33^{c}$	-0.29	-0.21	-0.21
Employment						
Worked Prior to Birth	0.37	$0.43^{c}$	-0.21	-0.18	-0.24	-0.26
Baseline Hardship						
Financial Hardship		$0.57^{\rm b}$				
Poor Physical Health Poor Mental Health				1.51 <sup>a</sup>		-0.09
		=04				
N	787	781	789	787	786	772

a. Significant at the 1 percent level.

mental health). We investigated the possibility that differences across groups can be explained by observable psychosocial risk factors (including maternal drinking, maternal drug use, domestic abuse, and incarceration of the fathers) and found that these factors did not affect the results (results not shown).

b. Significant at the 5 percent level.

c. Significant at the 10 percent level.

To make the groups even more comparable, we ran all of the multivariate models with two restricted samples: mothers who were not on TANF or Food Stamps when their child was born and those who were on TANF or Food Stamps at baseline. Despite smaller sample sizes, we found that: (1) the effects of leaving were even greater and more highly significant among the baseline non-participants than they were for the full sample, and (2) among the baseline participants, the effects of leaving were very similar to those for the full sample (results not shown).

The models in Tables 3 and 4 do not include state fixed effects because the classification of voluntary and involuntary leavers was largely based on the states in which leaver mothers lived. We ran additional sets of models—both with and without state fixed effects—in which we collapsed the voluntary and involuntary leavers. We also estimated sets of models—both with and without state fixed effects—restricting the sample to mothers living in states in which time limits could have taken effect. <sup>14</sup> In both sets of supplemental analyses, the fixed effects did not change any of the estimates (results not shown).

Finally, we considered whether restricting the sample to mothers eligible for TANF was likely to bias our results, based on the idea that we could have classified some leavers who entered the labor force as financially ineligible based on our imputations of average monthly income and therefore excluded them from the analysis. We found that our two groups of eligible leavers look virtually indistinguishable in terms of both sample characteristics and hardships from the 221 mothers who would have been classified as involuntary leavers and the 133 who would have been classified as voluntary leavers had we not restricted to financial eligibility. Thus, it does not appear that our eligibility imputation introduced sample selection bias.

# **DISCUSSION**

One of the cornerstones of PRWORA was the establishment of time limits to welfare, which were designed to reduce the rolls by forcing some families off and encouraging families to "bank" their allotments. Many PRWORA supporters claim that "tough love" time limits will force families to become more self-sufficient through work, and that they will ultimately benefit materially and psychologically from that experience. Many PRWORA detractors, on the other hand, claim that poor mothers do not have the education, job skills or access to child care to transition off of welfare without undue hardship. Both points may contain elements of truth, and both sides agree that the new environment is likely to deter poor mothers from participating in TANF. Therefore, to assess the impact of the new TANF environment on poor families, it is important to look at not only those who have left welfare, but also those who are eligible but do not participate because they have been discouraged or for other reasons.

Perhaps what is most striking about our findings is that almost half (45 percent) of eligible families do not receive TANF. While this figure may be overestimated (some former recipients may have recently become ineligible and we do not account for immigration status in our eligibility imputation), we used strict assumptions in our eligibility imputations and our figure is in the ballpark with that found by

TABLE 4
Effects of Mother's TANF Participation on Child's Health
(Logit Coefficients)

	Child's Poor Health		Child's Hospitalization	
	Model 1	Model 2	Model 1	Model 2
Left TANF Voluntarily			$0.81^{\rm b}$	$0.84^{\rm b}$
Left TANF Involuntarily	-0.72	-0.75	-0.08	-0.01
Not on TANF	-0.57	-0.59	-0.22	-0.22
Age				
Under 20	-0.28	-0.18	0.07	0.09
20 - 29	-0.30	-0.19	-0.26	-0.22
Race/Ethnicity				
Black Non-Hispanic	0.95	0.90	-0.29	-0.36
Hispanic	$1.80^{c}$	$1.89^{c}$	-0.02	-0.04
Other	1.54	1.66	0.24	0.27
Nativity				
Foreign-Born	0.30	0.29	-0.60	-0.55
Parity				
First Birth	$-0.79^{c}$	-0.74	-0.37	-0.37
Education				
High School Only	-0.19	-0.24	0.13	0.09
Some College or More	-1.10	-1.11	$-0.54^{c}$	$-0.63^{c}$
Marital Status				
Married or Cohabiting at Baseline	-0.32	-0.38	.07	0.02
Employment				
Worked Prior to Birth	-0.11	-0.10	0.17	0.16
Baseline Health Status of Child				
Low Birthweight		$0.96^{\rm b}$		$0.83^{a}$
N	751	738	783	768

a. Significant at the 1 percent level.

Zedlewski [2002] using the NSAF. The low participation rate makes it very clear that many, if not most, poor families are disconnected from the welfare system.

Our second important finding is that none of these groups is faring particularly well.<sup>15</sup> The non-participants and voluntary leavers are not managing much better than those on welfare, underscoring the need for income supports for poor working families (and education or training for those not ready to work, as suggested by

b. Significant at the 5 percent level.

c. Significant at the 10 percent level.

Michalopolous in this issue). Of course, the most dramatic effects are for the group we call involuntary leavers, who disproportionately experience poor health and hardship and will need more than income supports to cope in the post welfare reform era. Although we find no evidence of immediate adverse impacts on child health, these families were disconnected from TANF only within the past twelve months and it may take longer than that for their high levels of maternal hardship to translate into adverse child outcomes. Indeed, findings reported by Gennetian in this issue indicate that work requirements and sanctions can negatively affect adolescent children's schooling outcomes. Although we will not be able to look that far out in the Fragile Families children's lives, data to help us analyze effects of time limits, sanctions, and other restrictions on the well-being of preschoolers will soon be available from the three and five year waves of the survey.

# APPENDIX IMPUTATION OF TANF ELIGIBILITY IN THE FRAGILE FAMILIES STUDY

We were able to determine TANF eligibility of mothers in 18 of the 20 Fragile Families cities. In the other two cities, a different version of the survey instrument was used and our methodology could not be applied.

We applied the appropriate state categorical and financial eligibility criteria to determine each mother's eligibility during the 12 months prior to the one-year follow-up interview. We obtained state TANF eligibility rules from the State Policy Documentation Project (a project from the Center on Budget and Policy Priorities) and the Welfare State Databook (from the Urban Institute). When the survey data did not provide complete information on a given criterion, we applied two different sets of assumptions. Our lenient (inclusive) set of assumptions favored making the mother eligible and our strict (exclusive) set of assumptions was designed to favor ineligibility. The following table summarizes the assumptions that we made when it was necessary:

# Lenient Assumptions

Total household income excludes TANF, SSI, food stamps, other cash assistance (e.g. unemployment compensation) and EITC.

The unit is considered two-parent only if the parents were cohabiting or married both at baseline and one year (otherwise, the unit is considered one-parent). This assumption affects the number of adults, total earnings, and the work test.

### Strict Assumptions

Total household income excludes TANF, SSI, food stamps, and other cash assistance (for example, unemployment compensation).

The unit is considered two-parent if the parents are cohabiting or married at one year, regardless of their relationship status at baseline. This assumption affects number adults, total earnings, and the work test.

Lenient Assumptions	Strict Assumptions
Includes children ages 18 or younger in assistance unit.	Includes children ages 17 or younger in assistance unit.
Average earnings OR monthly earnings are used for income tests.	Average earnings AND monthly earnings are applied.
Grandparents and stepfathers in household have one dependent.	Grandparents and stepfathers in household have no dependents.
Informal child support income is excluded from total income.	Informal child support income is included in total income when not missing (if missing, a zero is assumed).
Income limits are increased by $10\%$	Strict income limits are applied

#### **NOTES**

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- Additional background about the sample and design of the Fragile Families and Child Wellbeing Study is available in Reichman et al. [2001].
- 2. The one exception to this strategy involves immigration status. Since we do not have data on legal status of immigrant mothers (or, for those who are here legally, the type of visa they had, date of entry, country of origin, and circumstances leading to migration), we are unable to determine whether noncitizen mothers were categorically eligible for TANF. Under both sets of assumptions, we treated all immigrant mothers as citizens and imputed financial and categorical eligibility from there.
- 3. Of the involuntary leavers, 37% had their benefits reduced or eliminated due to sanctioning and 87% lived in states where time limits could have hit.
- 4. Unfortunately, we do not have data on reasons for non-participation.
- 5. In separate analyses not shown, we found that employment levels were very similar across all four groups when we looked only at states in which time limits could have hit. Across all groups, employment levels were higher in these states than in states in which time limits had not yet taken effect.
- 6. Findings by Chernick and Reimers [in this issue] indicate that the effects of welfare status are likely to vary by race/ethnicity. Unfortunately, sample size limitations preclude subgroup analyses in our study.
- 7. Sociodemographics are much weaker predictors of maternal hardship for this relatively homogeneous sample of TANF-eligible mothers than they are for the Fragile Families sample overall. In corresponding models that do not limit the sample to TANF-eligible mothers (results not shown), education was significant.
- 8. When involuntary leavers are used as the omitted category, the coefficients of voluntary leavers and non-participants are negative and statistically significant at p=.03 and p=.001, respectively, in the full model for extreme material hardship, and negative and statistically significant at p=0.07 and p=0.03, respectively, in the full model for poor mental health (not shown).

- 9. We explored this issue in supplementary analyses that incorporated preliminary three-year data from seven cities (results not shown). Comparing mothers' CIDI scores from the one- and three-year waves, we found that among those who left TANF involuntarily (within 12 months preceding the 30-month interview) and did not have poor mental health at one year, only 16% had poor mental health at three years. We also looked at the mean numbers of symptoms of depression and anxiety of the different groups across the two waves and found that poor mental health characterized this way did not increase more for the involuntary leavers than the other groups. Taken together, these analyses reveal no evidence that leaving TANF involuntarily causes poor mental health.
- 10. It is important to keep in mind that since poor child health is based on mothers' reports, it is possible that some mothers who may be at risk of losing their children to the foster care system may tend to underreport their children's problems.
- 11. None of the voluntary leavers had children in poor health, so although the effect of voluntarily leaving could not be computed, that group clearly had better outcomes than the others.
- 12. We investigated whether this effect was due to mothers "voluntarily" leaving TANF in order to obtain child SSI. All states in the sample (except Wisconsin) exclude children on SSI from the assistance unit, which would make families with children on SSI less eligible for TANF and those with only one child (who was on SSI) ineligible. In all states in the sample, adult SSI recipients are not eligible for TANF. Supplementary models (not shown) excluding cases with any child SSI receipt produced results virtually identical to those in Table 4.
- 13. Baseline participation in the TANF and Food Stamp programs, separately, is not available from the data.
- 14. In these models, we contrasted involuntary leavers and non-participants to stayers. Voluntary leavers are not included in these analyses because they all reside in the omitted states.
- 15. Furthermore, findings from Weber et al. [this issue] suggest that mothers in rural areas may be facing even higher levels of hardship than those in our urban sample.
- 16. Using preliminary three-year data from seven cities, we still find no effects on child health.

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