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## **ABSTRACT**

Since the early 1990s, the social safety net for families with children in the United States has undergone an epochal transformation. Aid to poor working families has become more generous. In contrast, assistance to the deeply poor has declined sharply, and what remains often takes the form of in-kind aid. A historical view finds that this dramatic change mirrors others. For centuries, the nature and form of poor relief has been driven in part by shifting cultural notions of which social groups constitute the “deserving” and “undeserving” poor. This line was firmly redrawn in the 1990s. Did the re-institutionalization of these categorizations in policy have material consequences? In this study, we examine the relationship between the decline of traditional cash welfare during the 2001-2015 period and two direct measures of wellbeing among households with children: household food insecurity and public school child homelessness. Using models that control for state and year trends, along with other factors, we find that the decline of cash assistance is associated with increases in these two forms of hardship.

## TEXT

### I. Introduction

Over the past two and a half decades, the United States has significantly increased its financial investment in the wellbeing of economically vulnerable families with children (Tach and Edin, 2018). Due to expansions in government-funded health insurance and tax credits benefitting low-income, working parents, the federal government now spends more on relief for such families than ever before. Yet there have been winners and losers as a result of this seismic transformation of the social safety net, a shift that mirrors themes that have played out in debates about poor relief in the United States for centuries, where new policies often codify changing notions of who among the poor is “deserving.”

As Laura Tach and Kathryn Edin have argued (2018), welfare reform firmly redrew the line between the deserving and undeserving poor, with work behavior as the litmus test. Research has shown that these policy changes improved the fortunes of those deemed “deserving”—stably employed single mothers and their families. However, non-working poor parents and their children saw a sharp withdrawal of cash aid. In the years since this suite of policy changes were implemented, the poverty rate for families with children has been remarkably steady, yet this measure obscures the stratification of the fortunes of households headed by mothers who are not steadily working, compared to those of stably employed single mothers. The real story of poverty among poor families and their children since welfare reform is the rise in inequality among them.

Not only is one group able to claim more cash aid than the other, the form of the assistance offered reinforces this divide. Stably working, low-income mothers now draw cash aid

from relatively generous programs such as the Earned Income Tax Credit, and benefits actually increase with earnings, up to a point. Such programs carry little, if any, stigma, there are no restrictions on how recipients spend the money, and few transactions costs are imposed on claimants (Halpern Meekin et al. 2015). Meanwhile, single parents who do not work or work only sporadically can get only minimal cash aid, from a stigmatizing bureaucracy with strict time limits, work requirements, sharp sanctions, and other methods of deterrence.

The aim of this analysis is to examine whether these changes have affected the wellbeing of household with children who have fallen on the undeserving side of this divide. Given the vulnerability of those most affected by these changes—children—social scientists have an obligation to deepen our understanding of the consequences of this seismic policy shift. Yet few studies examine this question using direct measures of wellbeing, and virtually none consider data from beyond the early 2000s, when declines to the TANF rolls were no longer matched by increases in maternal employment. Indeed, since 2000, the labor force participation of prime age single mothers has fallen off considerably, approaching pre-reform levels (Black, Schanzenbach and Breitwieser, 2017), and yet TANF caseloads have continued to decline.

In the current study, we use data from this vital post-2000 period to examine the relationship between declines in the reach of cash welfare and two hardships measured over multiple years: household food insecurity and student homelessness in the nation's public schools. Due to the fact that the federal welfare reform legislation gave states wide latitude to shape and administer their TANF programs—both at the outset and in the years since—there is considerable variation in the rate of decline in the TANF rolls over time. Utilizing this variation across states and time, we deploy models that control for state and year trends, along with other factors, finding that the decline of cash assistance is associated with increases in these two forms

of hardship. This analysis deepens our understanding the implications of a redrawing of the line that separates the deserving from the undeserving poor.

## **II. Background**

Throughout its history, America's system of poor relief has shifted in response to economic and demographic changes such as industrialization, urbanization, and immigration. At a number of key junctures, changing cultural notions of deservingness have also profoundly shaped the contours of aid to the poor (Gordon, 1994).

During the colonial period, destitute widows claimed meager, in-kind "outdoor relief," often in the form of bread or coal (but not both), from their "place of settlement." Widows, and their children, were expected to work for their keep. In the 19<sup>th</sup> century, relegation to a poorhouse became the policy de jour for needy families (Katz, 1996). Late in the century, advocates of "scientific charity" viewed family breakup as the solution, relegating the children of pauper mothers to orphanages or foster care while their mothers were expected to support themselves through employment.

In the early 20<sup>th</sup> century, a sea change in policy occurred as progressive reformers began to advocate for a "wage" or "pension" that would allow destitute mothers to care for their children in their homes. State-run, locally-administered Mothers' Aid programs were enacted in 46 of 48 states between 1910 and 1932. These programs reflected new cultural notions about the proper roles of mothers and children. Mothers should be dedicated to full-time motherhood rather than employment. Children, who were formerly conceived as "little adults," prized mainly for their economic value, came to be viewed as "economically worthless but emotionally priceless," (Zelizer, 1994), a social construction of childhood that meant, among other things,

that poor families could no longer supplement household income with earnings from their children's labor. Ironically, only a handful of localities offered stipends generous enough for families to survive, making maternal employment imperative. Work had to be limited to in-home labor such as laundry or piece work, however (Skocpol, 1995).

Prohibitions against maternal employment were strengthened in the first federal response to the plight of single mothers, the Aid to Dependent Children (ADC) program. ADC (later renamed AFCD, adding "families" to the title) supplanted the state Mother's Aid programs, which had been overwhelmed by the Great Depression. It provided a stipend to those deemed economically needy but also morally worthy (i.e., it was mostly limited to widows and those who were not domestic or agricultural workers—usually whites). Work of any kind among recipients was prohibited, yet once again stipends were too small for families to survive. In what historian Linda Gordon calls a "pincer's trap," families engaged in in-home production to supplant meager benefits.

By the 1970s, through a combination of legal challenges to restrictions that were often racially motivated, along with welfare-rights activism, AFDC evolved into a legally-enforceable federal entitlement program. Single mothers who could demonstrate need could not be denied benefits, regardless of perceived moral standing and other factors (i.e. marital status and race). These changes coincided with a growing number of single mothers, due mostly to increases in desertion and divorce. As a consequence, the AFDC rolls grew dramatically.

But another significant cultural change was on the horizon, one that would challenge the notion that a mother's place was at home. A rise in middle class mothers' labor force participation began in earnest in the 1970s and accelerated in the 1980s. The rise weakened the briefly-held presumption—codified in the federal entitlement to aid—that *all* mothers who could

demonstrate need *ought to* receive government support to stay home with their children. In keeping with the shift, the first meaningful work requirements were added to AFDC in 1989. But the most fundamental changes in the nation's approach to aiding single mothers and their children was yet to come. A suite of changes throughout the 1990s, often referred to as “welfare reform”, responded decisively to these changing demographic trends. Taken together, these changes firmly redrew the line between who was deserving and undeserving of assistance (Edin and Shaefer, 2015; Tach and Edin, 2017).

In 1993, the Earned Income Tax Credit (EITC) underwent a massive expansion. The EITC is a fully refundable tax credit targeting low-wage workers, so eligible income tax filers with a negative tax liability receive the credit as income. The EITC was previously a fairly tiny credit meant to compensate low-wage workers for regressive taxes. After expansion, it was large enough to ensure that, for the first time in U.S. history, single parents who worked full-time and full year at a low wage job could escape poverty. In order to claim it, mothers had to be employed. This new credit was explicitly pro-work—mothers could seldom claim maximum benefits unless they worked year-round and full time.

Then, in 1996, the landmark Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PROWRA) ended the legal entitlement to aid that had been enshrined in the AFDC program, and replaced it with Temporary Assistance for Needy Families (TANF), with federally-mandated time limits, work requirements and strict sanctions for noncompliance. Importantly, TANF came in the form of block grants to states, and offered them wide latitude on how to spend the money, allowing them to divert it to other purposes if they chose. Due to these factors and an exceptionally strong economy, caseloads plummeted.

This seismic policy shift created a new demarkation among the poor that was directly in line with new notions that work and not need should be the litmus test of deservedness. Dollars flowing to those nearest to the the poverty threshold (e.g. workers) *grew*, while cash flowing to the poorest families, those unable to find or maintain work, actually *declined* (Moffitt, 2015; Edin and Shaefer, 2015). Furthermore, echoing the outdoor relief of the Colonial period, what aid remained was typically no longer in cash, but in-kind (e.g. food stamps and Medicaid). Aid to the new deserving group was federally administered, came in the form of cash, involved little procedural burden and imposed little, if any, stigma. Meanwhile, aid to the categorically needy was devolved to the states. While time limits and work requirements were mandated at the federal level, states were free to apply additional restrictions and to enforce more stringent time and work requirements than stipulated in federal policy. Many states did so.

#### *Effects of Reform on Well-Being*

It is wrong to merely envision this epocal shift in social policy, which is often colloquially referred to as “welfare reform”, as a process that occurred at a single point in time, as Laura Tach and Kathryn Edin (2018) have argued. Rather, ongoing changes in state policies and procedures and additional declines in caseloads each year since TANF’s inception indicate that it is a living force that continually underlines new notions of work as the mark of deservingness.

As noted earlier, few studies of TANF have considered the impact of changes to the rolls after the 1990s and the early 2000s, despite the falloff in single mothers’ employment after 2000 and ongoing contraction of the caseloads. Accordingly, the studies we review here focused either on welfare waiver experiments conducted by states in the late 1980s and early 1990s—precursors to welfare reform—and TANF’s early years.

Even in the early years after reform, research shows that while some families gained from welfare reform and the waivers that preceded it, children who were especially vulnerable—the most economically needy—experienced harm (Bitler and Hoynes 2016; Edin and Shaefer 2015; Moffitt 2015; Trisi and Sherman 2016; Ziliak 2015).<sup>3</sup> Multi-site random assignment studies of state welfare-to-work programs implemented in the run-up to the 1996 welfare law produced evidence that such programs reduced poverty for some while deepening or increasing deep poverty for others (Freedman et al. 2000, see exhibit ES-10). Analyses exploiting data from both the welfare waivers under the AFDC regime, and the differential implementation of TANF across states in the mid 1990s, suggested that reductions in benefit levels and the imposition of strict policies such as family caps and full-family sanctions increased the number of children in foster care (Bitler, Gelbach, and Hoynes 2006; Paxson and Waldfogel 2002, 2003). Studies exploring national-level changes saw breastfeeding fall (Haider, Jacknowitz, and Schoeni 2003).) Others found that caseload reduction may have been associated with modest reductions in prenatal care and increased risk of low birthweight (Kaestner and Lee 2005). In addition, in the decade after TANF was implemented, studies documented the rise of, and difficulties facing single mothers “disconnected” from both work and welfare (Blank 2007; Blank and Kovak 2008; Brock et al. 2002; Loprest and Nichols 2011; Sandstrom et al. 2014; Seefeldt 2008; Wood, Rangarajan, and others 2003; Zedlewski et al. 2003).

Yet the omission of data after the 1990s and the earliest years of the 2000s is significant—important enough to reverse the early conventional wisdom that welfare reform had succeeded in improving the fortunes of poor single mothers and their children. In a comprehensive recent review of the literature, Ziliak (2015: 66-67) concluded that research using a variety of data and methods suggests “that many women were worse off financially after

welfare reform, especially at the bottom of the distribution. But this result becomes clear only if data post-2000 are brought to bear.” Ziliak’s review underscores the point that too few of these studies have assessed the impact of welfare reform using data after the early 2000s, when falling caseloads were no longer driven by rising employment among single mothers but by policy decisions, program implementation, and other factors, such as poor information flows (Edin and Shaefer 2015; Ziliak 2015; Bitler and Hoynes 2016).<sup>4</sup> Indeed, as noted earlier, over the course of the 2000s, single mothers’ employment rate began to approach to prereform levels (Black et al., 2017).

Existing research indicates that the poorest families with children had less cash income as a result of these reforms (Moffitt, 2015; Edin and Shaefer 2015; 2018). Yet income is an imperfect measure of well-being, and far from perfectly measured in household surveys (Meyer, Mok and Sullivan 2009). Measuring consumption might be a reasonable alternative to income. However, analysts are not in agreement as to the reliability of available consumption data or the treatment of consumption due to rising debt among the poor (Shaefer and Rivera, 2018; Seefeldt 2015). To build confidence in extant research conclusions about the relationship between a significant policy shift and wellbeing, our focus here is on direct indicators of well-being among households with children.

### **III. Methodology and Results**

#### **A. Using variation in caseloads to assess policy impacts**

With numerous factors driving changes in the outcomes of poor families, researchers must seek out ways to directly link changes in policy to changes in well-being. A common technique used for such analyses is a state-by-year fixed effects framework assessing whether arguably exogenous changes in certain rules such as time limits, sanctions, and benefit levels

that impact caseloads in turn affect markers of well-being. Research using such methods has found that punitive policies and declines in the values of benefits are related to some poor outcomes, such as the disconnection of single mothers from both work and cash assistance (Hetling, Kwon, and Saunders 2015) and out of home placements (Paxson and Waldfogel 2003). Unfortunately, there is very little variation in these TANF rules over the past decade and even fifteen years. States generally set their rules in the early phase of reform. Meaningful changes have occurred in some states during TANF's second decade, but have generally been rare (Fusaro 2017). Despite stability in program rules, TANF caseloads have continued to decline.

Figure 1 presents trends in TANF cases (as calculated by the Center on Budget and Policy Priorities) alongside trends in the number of children in poverty for years 2001-2015. TANF cases began at just under 2.26 million and fell steadily to nearly 1.75 million in 2008. Caseloads increased somewhat during the "Great Recession" to a high of 1.98 million in 2010, and then fell again, to a low of 1.50 million in 2015. This represents a caseload drop of about 30.5 percent from 2001 to 2015. The number of poor families with children followed a different path, with 5.31 million families in 2001, rising modestly through 2007, and then spiking up to a high of 7.37 million in 2011, then falling back to 6.48 million in 2015. The result of these trends is that the ratio of TANF cases to families in poverty ("TANF-to-Poverty ratio"), a metric developed by analysts at the Center on Budget and Policy Priorities (Trisi & Pavetti, 2017), drops from 41 in 2001 to 27 in 2009, holds steady through 2011, and then drops slightly to 23 by 2015.

[Insert Figure 1 here]

Figure 1, however, masks substantial variation across states over the study period. Figure 2 illustrates the paths taken by a variety of states over the study period. The TANF-to-poverty

ratio in California drop from 76 to 65. In contrast, the decline in Indiana is much more dramatic, falling from 62 to just under 7. In other states, the change follows a very different path, such as Colorado, where the ratio goes from 20 in 2001, down to a trough of 11 in 2008, but rebounds to 20 in 2014. Ratios for Vermont show the most instability but little trend. Our analysis takes advantage of all types of year-to-year variation.

[Insert Figure 2 here]

In this paper, we estimate the relationship between variation in the reach of cash assistance through TANF and two measures of well-being: 1) food insecurity and 2) public school student homelessness, controlling for state and year trends. We draw data from both household surveys (food insecurity) and administrative records (student homelessness). Each source brings different strengths and weaknesses, but neither suffers from bias owing to self-reported public program participation.

We hypothesize that the decline in access to cash income support will be associated with increases in the prevalence of these two measures of hardship. That is, as TANF's reach declines in a state, over time, the risk of these hardships will grow. We argue that food security is perhaps an "acid" test of sorts because of the broad reach of the Supplemental Nutrition Assistance Program (SNAP) and other nutrition assistance programs, and because SNAP benefits rise as cash income falls. However, the benefits of these nutrition assistance programs may be spread over food and non-food household needs by families reallocating resources previously spent on food to other domains in the face of targeted benefits (Shaefer and Gutierrez, 2013). Therefore, the decline of TANF could be associated with increased food insecurity despite access to SNAP.

The residential instability of school children is another obvious domain that may be impacted by the declining reach of TANF. Descriptive evidence has shown that children in

extreme poverty are more likely to be residentially unstable (Shaefer et al., 2015). Nichols and Gault (2003) argue that a review of descriptive studies across states in the years following the welfare reform “suggests that welfare reform has increased the rates of family mobility, evictions, and the likelihood of sharing housing” (p. 104). We argue that particularly in the face of the stagnant reach of housing assistance and rising housing costs (Desmond 2016), we expect that there would be a relationship between the continued decline in TANF caseloads and growing rates of child homelessness.

It is always possible that an unobserved third factor impacts both food insecurity rates and child homelessness and cash assistance caseloads. The most likely such condition is an economic downturn or natural disaster. Hardship and public program participation increase in response to these events. These conditions, however, produce a relationship precisely *opposite* of our hypotheses. If caseloads respond to economic downturns, then we would expect an increase in cash assistance caseloads to be associated with *increased* hardship—food insecurity and child homeless—rather than *decreased* hardship. Thus, if we find a relationship between reduced caseloads and increased hardship, then these results are fighting against the direction of presumed bias that we would be expected if endogeneity were a serious threat to our models.

## **B. Outcome: Food Insecurity**

In this analysis, we use state and year controls to focus on the relationship between changes within states over time in the coverage of cash assistance and household food insecurity, a primary material hardship outcome. In our primary specification, the dependent variable is binary, so we model the probability of a household experiencing food insecurity using logistic regression (‘logit’) models in the following form:

$$P(y_{ijt}=1)=\text{logit}^{-1}(\beta u_{jt}+\lambda X_{ijt}+\alpha S_{jt}+\gamma_j+\theta_t+\varepsilon_{ijt}) \quad (1)$$

Here,  $y$  is the binary indicator of food insecurity, where 1 = food insecure and 0 = food secure. The index  $i$  references the individual household,  $j$  indexes the state, and  $t$  indexes the year. We model the probability of food insecurity, as a function of TANF coverage ( $u$ ) in state  $j$  at time  $t$ , a vector of household controls  $X$ , and a vector of state-year controls  $S$ . We include state ( $j$ ) and year ( $t$ ) controls (which would be referred to as state-year fixed effects in a linear model) to account for between-state variation and year-specific shocks that are common across state, while the error term  $\varepsilon$  represents the remaining unexplained variation. The logit link ensures that predictions remain bounded by 0 and 1.

Household controls in  $X$  include household head race/ethnicity, age, and student status; highest educational attainment in the household; number of children in the household; household employment status (0 if no-one is employed and 1 if one or more household members is employed) and an indicator of whether the household includes at least one individual age 65 or older. We control for state-year unemployment rates because there remains some connection between economic cycles and caseloads, even though this appears not to be the primary driver of caseload declines in TANF. The key object of interpretation is the coefficient  $\beta$ , the marginal effect of which represents the change in the probability of a household being food insecure related to changes in TANF coverage after controlling for other relevant factors.

### **i. Data and Sample**

We draw household-level data from the Current Population Survey (CPS), particularly the annual Food Security Supplement (CPS-FSS). The CPS is a monthly survey of approximately 60,000 households collected by the U.S. Census Bureau on behalf of the Bureau of Labor Statistics. It offers a nationally representative, multistage, stratified sample of the non-institutionalized U.S. population. Detailed labor market and demographic data are collected on

all respondents age 15 years and older. Since 1995, CPS has also fielded an annual supplement to assess the incidence of food security, defined as a household having stable access to an adequate quantity and quality of food (United States Department of Agriculture Economic Research Service 2015). Household food security status is assigned based on the number of food insecure conditions experienced by a household, such as being unable to afford balanced meals or cutting the size of meals because of too little money for food (Coleman-Jensen et al. 2015).

We use the CPS data to construct the dependent variables and to identify categories of households. For the primary specification of our food security analyses, we create a binary variable coded 0 if the household scores in the food secure range and 1 if the household scores in the low or very low food security range. Employment analyses use a variable coded 1 if any adult member of the household is currently employed.

We identified three categories of households for sub-group analysis—households in which the head is married, households headed by unmarried women with other adults present, and households headed by an unmarried woman with no other adults present, the group we expect to be most affected by the decline in the reach of TANF. Note that income is imprecisely measured among households headed by unmarried women with other adults present, because the income unit only includes those related by blood or marriage. We report models estimated using the full sample of low-income households with children and models stratified by these family composition sub-groups.

Data from the CPS-FSS and the concurrent monthly core CPS were extracted from the Integrated Public Use Microdata Series (IPUMS), a dataset produced by the Minnesota Population Center harmonizing CPS files from the survey's entire history (Flood et al. 2015). The full sample ( $n = 75,799$ ) consists of households with children below 185 percent of poverty

in which the household head is below 65 years of age. We use this imperfect income threshold because the FSS includes an indicator measure at this level. Income data in the month of CPS-FSS administration is otherwise limited.<sup>7</sup> Beyond this income cut-off, we do not rely on any measures involving self-reported public program participation, which suffers from under-reporting. We restricted the sample to the December 2001 to December 2015 CPS-FSS cohorts. Prior to December 2001, the month of FSS administration and screening into the food security module were inconsistent. Including earlier FSS cohorts would lead to additional unexplained variation and the inclusion of overlapping reference frames across years for questions regarding experiences in the past 12 months. All estimates are weighted using FSS probability weights and standard errors are clustered by state. Descriptive statistics for the distribution of household types and other household-level data are provided in Table 1.

[Insert Table 1 here]

## **ii. State Variables**

We merge the household-level data with state-level data, as our hypothesis is a proposition about the relationship between state and household characteristics. The key independent variable is TANF coverage as represented by the TANF-to-poverty ratio, the count of families receiving cash benefits through TANF divided by the total number of families with children below the poverty threshold. The counts of cash assistance cases are drawn from state administrative data collected by the Center on Budget and Policy Priorities (CBPP), while the number of families with children below poverty is calculated from Current Population Survey data by the CBPP (2016).

To compensate for possible reliability issues, poverty in the varying denominator TANF-to-poverty ratio is a rolling average of the estimated count of families in poverty in state  $j$  for

years t-1 and t (that is, 2005 values are an average 2004 and 2005 data). While the varying denominator TANF-to-poverty ratio reflects changes in both the supply of and potential demand for cash assistance, it cannot discriminate between trends driven by changes in family poverty from trends driven by changes in the count of TANF cases. In a sensitivity analysis, we therefore create a second version of the TANF-to-poverty variable with a fixed denominator calculated as the average count of families in poverty in every state over the entire study period. This version is used to check the robustness of the models (i.e., to demonstrate they are primarily reflecting changes in the count of TANF-receiving families rather than unrelated fluctuations in family poverty).

### **iii. Results**

Full model results are shown in Table 2. Before turning to the primary point estimates, we examine some of the other variables in the model. We find that in the population as a whole, black households are more likely to experience food insecurity than non-Hispanic white households, although this does not hold for single mother households. We find that higher levels of education are associated with less food insecurity. Having an employed adult is associated with a large reduction in food insecurity. At the state level, unemployment is associated with more food insecurity, although the point estimate on single mother households living alone is not statistically significant. In general, these results to be in line with previous studies of the correlates of food insecurity.

[Insert Table 2 here]

We turn next to the primary point estimates of interest, the relationship between TANF coverage and food insecurity. The coefficients in a non-linear model are not easily directly interpreted, so we also present the key TANF coverage results as marginal effects. In Figure 2,

the symbols represent the point estimates of the mean marginal effects (that is, within the data, the mean effect of a one-unit change in the predictor on the probability of the outcome) of the TANF coverage measure on the probability of a household experiencing food insecurity within the given subgroup. The bars indicate the 95% confidence intervals. The relationship is statistically significant at  $\alpha = 0.05$  if the relevant confidence interval does not cross the zero line.

[Insert Figure 3 here]

Figure 3 presents the predicted effects of TANF coverage at a range of values (zero coverage up to 70% coverage) on food insecurity. For this analysis, the household head is set at 26 years of age, black, and not a student. The household is set to two children, highest level of education to high school graduate, no seniors present, and no employed adults. The mean marginal effect point estimate indicates that, on average, a ten percentage point decrease in TANF coverage is associated with an 1.1 percentage point increase in the probability of a low-income household experiencing food insecurity. The relationship is approximately similar for married households (1.1 reduction), but not statistically significant at  $\alpha = 0.05$  (it is significant at  $\alpha = 0.10$ ). We find no association between food insecurity and TANF coverage among households headed by an unmarried female with other adults present, a group for which income is imprecisely measured. The relationship is strongest among households headed by a single female living with no other adults. For these households, the same ten percentage point decrease in coverage is associated with a 1.6 percentage point increase in the probability of experiencing food insecurity, and is statistically significant at the 0.01 level. Thus, there is a statistically significant and meaningful relationship between the decline of cash assistance and the risk of food insecurity of poor families with children, and the relationship is driven by single mothers living alone, the group that we would expect to be most impacted by changes in the accessibility

of TANF.

[Insert Figure 4 here]

#### **iv. Sensitivity tests**

Our hypothesis reflects a causal argument, that TANF coverage reduces the risk of hardship for a low-income household. Conversely, we hypothesize that declines in TANF coverage would increase the risk of food insecurity. The models include state controls (which should remove the confounding influence of any unobserved, time-invariant state-level factors) and year controls (which should address within-year common shocks). The model is causally identified if—and only if—the condition of strict exogeneity is met. There cannot be a third, unobserved factor that simultaneously increases the probability of a household experiencing food insecurity and lowers TANF caseloads.

Intuitively, the strict exogeneity condition appears to be met. As previously discussed, there are reasonable scenarios in which an unobserved third factor increases food insecurity while increasing cash assistance caseloads, such as an economic downturn or natural disaster. These conditions, however, produce a relationship precisely *opposite* that would be expected if endogeneity were a serious threat to the model. That is, any endogeneity that does exist would likely *reduce*, not increase, the magnitude of observed effects. Further, if there were some third, unobserved factor both increasing the risk of food insecurity in low-income households and decreasing caseloads, then TANF coverage would likely also be predictive of changes in food insecurity for households meeting the income criteria but unaffected by TANF cash benefits policy. Re-estimating the food insecurity models in a subsample drawn from the same CPS-FSS cohort but now only including households *without* children (household head still restricted to under age 65 and income to less than 185 percent of poverty) provides no evidence of a

relationship between TANF coverage and food insecurity. The same pattern holds for a model restricted to households with incomes above the low-income threshold. The evidence, then, tends to support the exogeneity of TANF coverage.

We conduct a second sensitivity test with respect to our key independent variable in this study, TANF coverage has two components (TANF cases and families in poverty) that vary longitudinally. The empirical models therefore inherently contain a threat to validity, as they could be influenced by changes in either value. As noted previously, we generated a second version of the TANF coverage variable in which the denominator is the averaged count of families in poverty from 2001 to 2015. This version holds the number of families in poverty constant, so only the number of TANF cases changes across time. If results of the analyses presented previously were primarily a product of changes in family poverty rather than changes in TANF coverage, using the fixed denominator version of the variable should produce quite different results. Mean marginal effects for the food insecurity analysis, but this time using the fixed-denominator coverage measure, are presented in Figure 5. Patterns of sign and significance are identical to those in the baseline specification with a varying-denominator coverage variable. TANF coverage is significantly and negatively related to the probability of food insecurity for pooled households, married households, and households headed by a single female with no other adults present (by magnitude, once again the strongest relationship).

[Insert Figure 5 here]

### **C. Outcome: Homelessness among public school children**

In this analysis, we examine the relationship between changes within states, over time in the prevalence of cash assistance receipt, and counts of homeless public school children. These

counts include students who are temporarily doubled up, those in homeless shelters, and those unsheltered. We rely on the significant amount of variation in TANF caseloads in states over time to assess the associations between TANF caseload levels and this outcome, collected at the state level. Because we lack individual-level data, our estimating equation is:

$$Y_{j,t} = \beta \text{TANF}_{j,t} + \alpha P_{j,t} + \gamma_j + \theta_t + \varepsilon_{j,t} \quad (2)$$

where  $Y$  is the total number of homeless students by state, year. Our key independent variable,  $\text{TANF}$ , is the annual average of the number of TANF cases in a given state in year  $t$ . (For every year, we assign caseloads in year  $t$  to school year counts collected in school year  $t$  to  $t+1$ . For example, we assign school year 2013-2014 to TANF caseloads in year 2013).  $P_{j,t}$  is a vector of controls related to the welfare of children in the state, including a control for the total number of children in poverty, and the total number of children overall. Like model 1, we average these counts over two years to address volatility in CPS estimates. The subscripts  $j$  and  $t$  represent the state and year of each observation, while  $\gamma$  and  $\theta$  represent time-invariant state fixed effects and time fixed effects; epsilon indicates the unexplained variation. Thus  $\beta$  is the change in the total count of homeless school children associated with corresponding changes in the number of TANF cases within a state, over time.

### **i. Data and Sample**

As with our previous analysis, for our main independent variable of interest—the number of TANF cases—we extracted data from the Center on Budget and Policy Priorities' (CBPP) TANF-to-Poverty database, which compiles the annual averages of the number of cash assistance cases in each state, adjusting for accuracy across states and time. We draw estimates of the number of children in poverty, and the number of children overall, from Current

Population Survey ASEC data extracted from the Integrated Public Use Microdata Series (IPUMS-CPS ASEC) (Flood et al. 2015).

For the number of homeless students, we used annual reporting by the National Center for Homeless Education, which provides a summary of data collected by the McKinney-Vento Education for Homeless Children and Youth (EHCY) Program on the number of homeless students from pre-Kindergarten age (3 to 5 year-olds) on reported as enrolled in public school districts by state educational agencies (SEAs) for the School Year 2006-2007 to School Year 2014-2015. Analyses using data in New York and Michigan have found that this marker of homelessness is associated with a series of poor educational outcomes (Cowen, 2017; Institute for Children, Poverty and Homelessness, 2016). Students are considered homeless if they are doubled up temporarily, sheltered, or unsheltered. During the early years of the McKinney-Vento EHCY data, many schools did not fully report data. We find that as of 2006-2007, 78 percent of school districts were reporting. We control for the remaining increased reporting over the study period with state and year controls. We also run sensitivity tests to confirm that results are not sensitive to the inclusion of 2006-07.

## **ii. Results**

Table 3 assesses the relationship between increases in the TANF caseload and the number of homeless students.

[Insert Table 3 here]

The first column of Table 2 reports the estimates without controlling for the state poverty level. When child poverty increases, we would expect the number of public assistance cases to rise in response to the growth of the number of children at risk, and in fact that is what we

observe. This spurious relationship often causes an erroneous appearance of the public assistance program being the cause of the adverse outcome, with the coefficients of the public assistance programs being positive and biased upwards. The insignificant estimate of -0.012 in column 1 potentially reflects this upward bias and the effects of TANF are ambiguous in this case.

In the second and third columns, we further include controls for the number of children in poverty as a measure to control for the population of children at additional risk of being homeless in the state and controls for the overall population of children to account for overall population growth. With the inclusion of controls for changes in the number of homeless children, the upward bias in our coefficient estimate of the relationship between TANF caseloads and student homelessness decreases but remains statistically insignificant. The bias further decreases with the addition of a control for the total number of children. The coefficient estimate of -0.149 in column 3 can be interpreted as indicating that for each 100 case decrease in the number of TANF cases, there is an associated 14.9 increase in the number of homeless students. Because this estimate is still subject to upward bias, the real correlation between the number of TANF cases and homeless students may be somewhat larger.

### **iii. Sensitivity tests**

The effects of TANF cash transfers on the risk of homelessness are likely not completely contemporaneous. It takes a period of deterioration in financial well-being to destabilize affect a family's living arrangement, We test this lagged effect by regressing the number of homeless students on the average TANF caseloads in the calendar year before the school year. The result suggests that there is a strong and significant lagged effect of TANF cash assistance on the number of homeless students.

To verify that our results capture the period-specific effects of the TANF caseload, instead of some unobserved factor causing the overall rise in homeless students and the fall in TANF caseload in the long-run, we conduct a falsification test by regressing current number of homeless students on TANF caseloads in the two following calendar years. The coefficient estimates do not provide strong evidence for this alternative hypothesis. In addition, we included interaction effects with the state-level TANF benefit amount which does not show any trend of change during this period. The results conform with estimates from our main homeless students model.

To further test whether expansions of other parts of the safety net may explain our core results, we estimated a model including the number of households receiving SNAP by state year. Our results remained consistent. SNAP, being more cyclically sensitive than cash assistance under TANF, shows the endogenous relationship between SNAP caseloads and homelessness; increased caseloads are associated with increased student homelessness. However, the relationship between TANF cases and student homelessness remains substantively similar to that presented in our baseline model.

#### **IV. Conclusion**

The transformation of the safety net in the 1990s capitalized on changing cultural notions about a mothers' role in the family, and firmly redrew the line between those perceived as "deserving" and "undeserving." Put in historical perspectives, this epochal transformation fit directly into long-term themes that permeate the history of policy debates about aid to the poor. If anything is anomalous about American welfare history, in fact, it was that the poorest families with children in the United States had a short-lived "entitlement" to cash assistance for roughly three decades, an entitlement brought about by judicial action and administrative changes (rather

than legislative action) that broadened eligibility and struck down discriminatory state practices designed to neutralize access to aid by classes of families deemed undeserving. Indeed, scholars examining the long-term arc of policy making might have predicted that such a policy construct would be short lived.

In the current study, we find significant associations between cash assistance caseload reductions within a state and two measures of hardship. In the case of household food insecurity, we find that the relationship is concentrated among single mothers living independently with their children, the group we would expect to be most affected by changes in TANF coverage. We note the especially large association between caseload reductions and student homelessness, suggesting that a primary way welfare reform has impacted children is through destabilizing their living situations. This outcome is of particular concern as housing instability is strongly related to school instability, and instability in the household roster over time is associated with sharply lower rates of high school graduation (Perkins 2016). Scholars have also identified links between homelessness and substantiated cases of child maltreatment and out of home placement (Berger et al. 2014). Housing instability may be a pathway through which other deleterious outcomes flow. If cash assistance aids in stabilizing housing, the withdrawal of cash assistance is particularly concerning given the already-limited housing-specific safety net in the United States (Desmond, 2016).

We note several limitations of these analyses. For example, we cannot rule out the possibility that some concurrent policy changes that accompanied changes in TANF caseloads are driving our results. However, these shifts were much more common in the first decade of TANF's development than in its second, the period we examine here. Furthermore, caseload patterns that are responsive to aggregate need would yield a relationship exactly opposite of the

one we obtain for TANF. Both models are robust to the inclusion of annual SNAP caseloads as an additional control variable. Further, at least for the food insecurity models (for which we are able to conduct this test), the relationship between cash assistance coverage and hardship holds only for households with children. This additional test rules out spurious relationships produced by a third omitted variable—such as an unobserved policy change or a change in the state’s social, political, or economic context--affecting all households below our income threshold.

Scholars can expect that cultural notions of deservingness will weigh heavily on any policy debate concerning aid to the poor. We argue that scholars have an obligation to fully examine the material consequences of resulting policies for those deemed the least worthy. We hope others will test the utility of our approach on other measures of the wellbeing of poor households with children, such as parental stress, child development, academic achievement and behavior problems, and adult outcomes, including economic wellbeing and mobility. Examining direct measures of wellbeing is also an evidence-based way to adjudicate thorny questions about the best ways to measure poverty (an income-based measure, a consumption measure, a measure that assigns a cash value to in-kind transfers, and so on). As indicated at the outset of the conclusion to this paper, we anticipate that this approach could be used to test a broad range of opposing claims about how best to measure poverty, and whether the War on Poverty was lost or won.

## **ENDNOTES**

<sup>1</sup> See Danziger (2010) for a comprehensive description of the legislative reforms of PRWORA.

<sup>2</sup> The waiver experiments also found different effects by child age, with young children experiencing null or positive effects but adolescents sometimes experiencing worse achievement and behavioral outcomes. See Morris et al. 2009. But see also non-experimental results from Chase-Lansdale et al. 2003, suggesting the opposite. A reconciliation study (Chase-Lansdale et

al. 2005) indicated that mothers in the three-city study may have failed to take up the EITC, whereas many in the voucher experiments received wage subsidies.

<sup>3</sup> Some scholars have blamed the fact that TANF is administered as a block grant to states, set at 1994 disbursement levels. Prior to PRWORA, cash welfare was an entitlement. The amount a state drew down from the federal government depended on the number of needy families. All funds not spent on administration went directly to the needy. By 2014, states were spending only about a quarter of their block grants on cash assistance, while others went to purposes not benefiting the nonworking poor.

<sup>4</sup> A few analyses do extend into the early 1990s and a handful through the Great Recession. These studies are included in a comprehensive review by James Ziliak (2015). None examine child outcomes.

<sup>5</sup> These trends are mitigated somewhat when the Supplemental Poverty Measure (which accounts for all tax and transfer programs) is used, or when researchers account for the underreporting of government benefits (Fox et al. 2015).

<sup>6</sup> Although administrative data are not free of underreporting, it is a felony to hide income from the SNAP program, and reports are cross checked against Bureau of Labor Statistics and other records.

<sup>7</sup> Income data for the CPS-FSS sample is reported categorically, and according to USDA ERS staff not reliably, making for difficult comparisons across time. Continuous income data is collected in the Annual Social and Economic Supplement (ASEC), but only a fraction of respondents participate in both CPS-FSS and ASEC.

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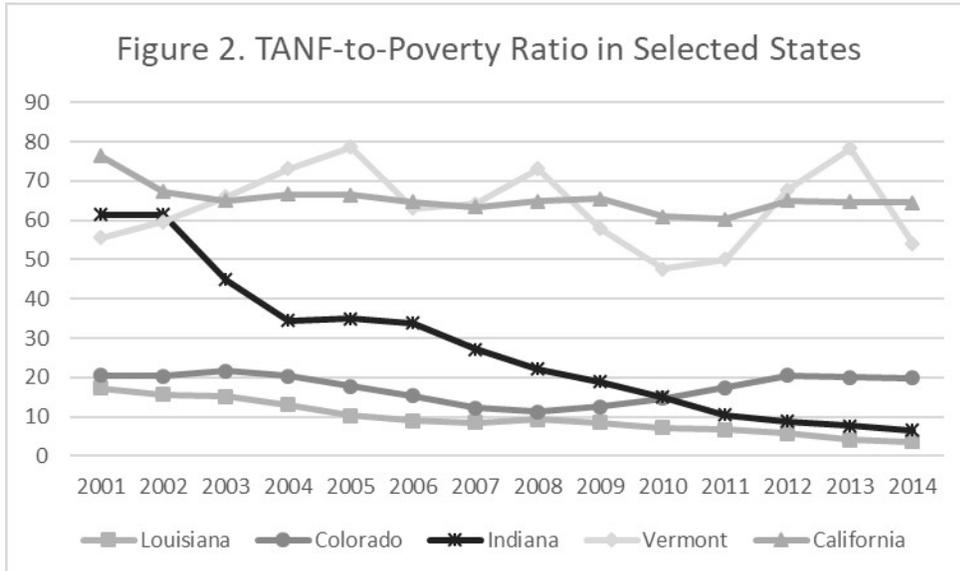
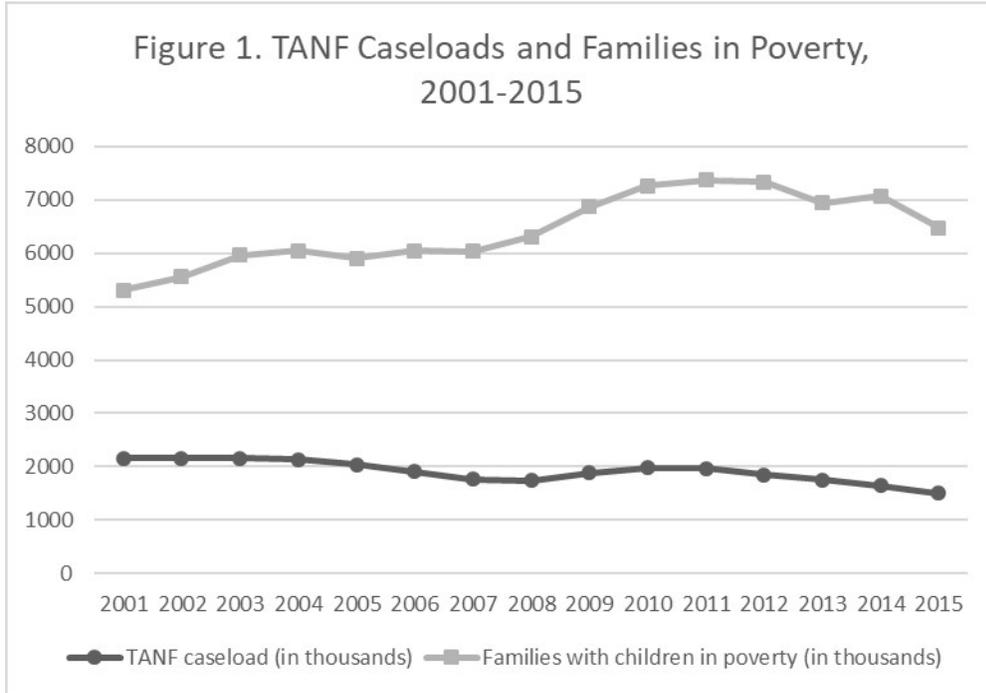
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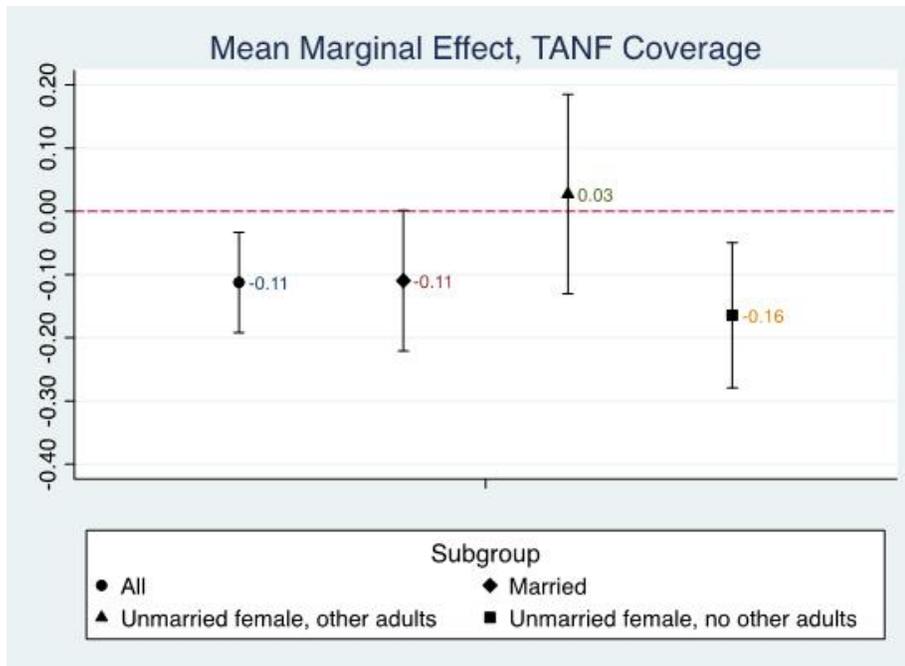
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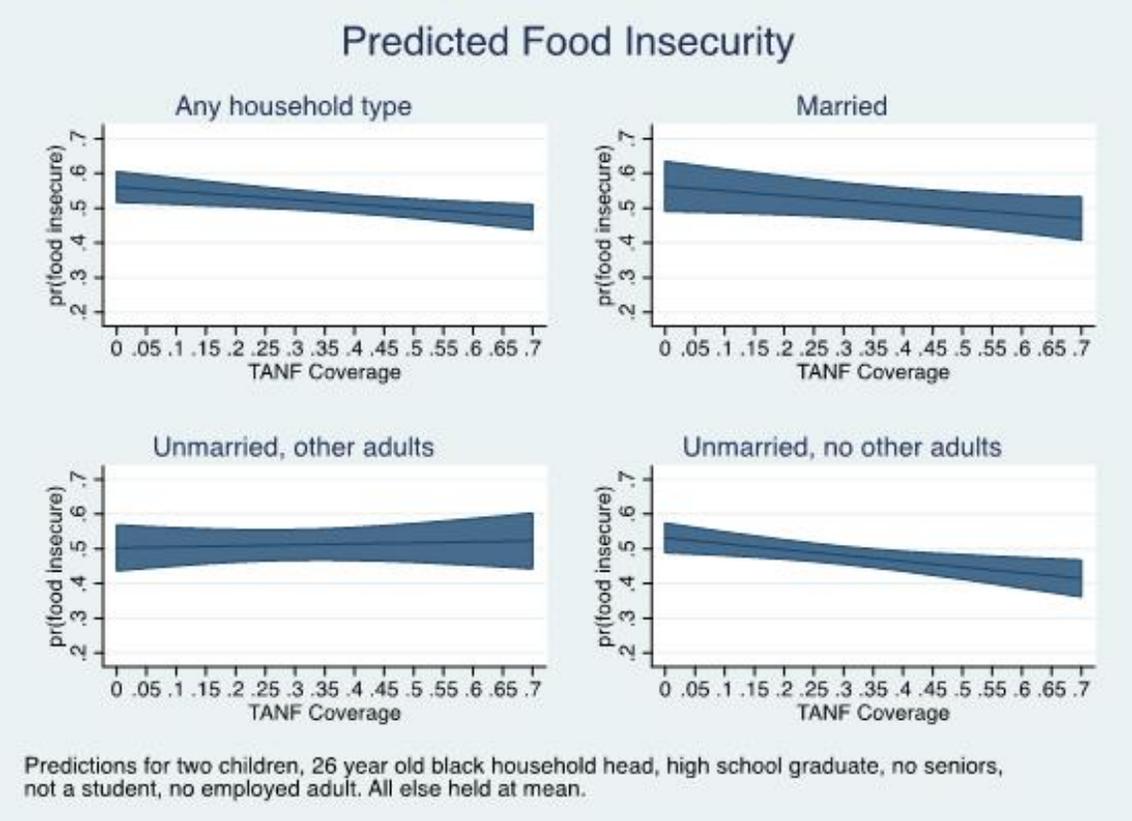
**FIGURES**



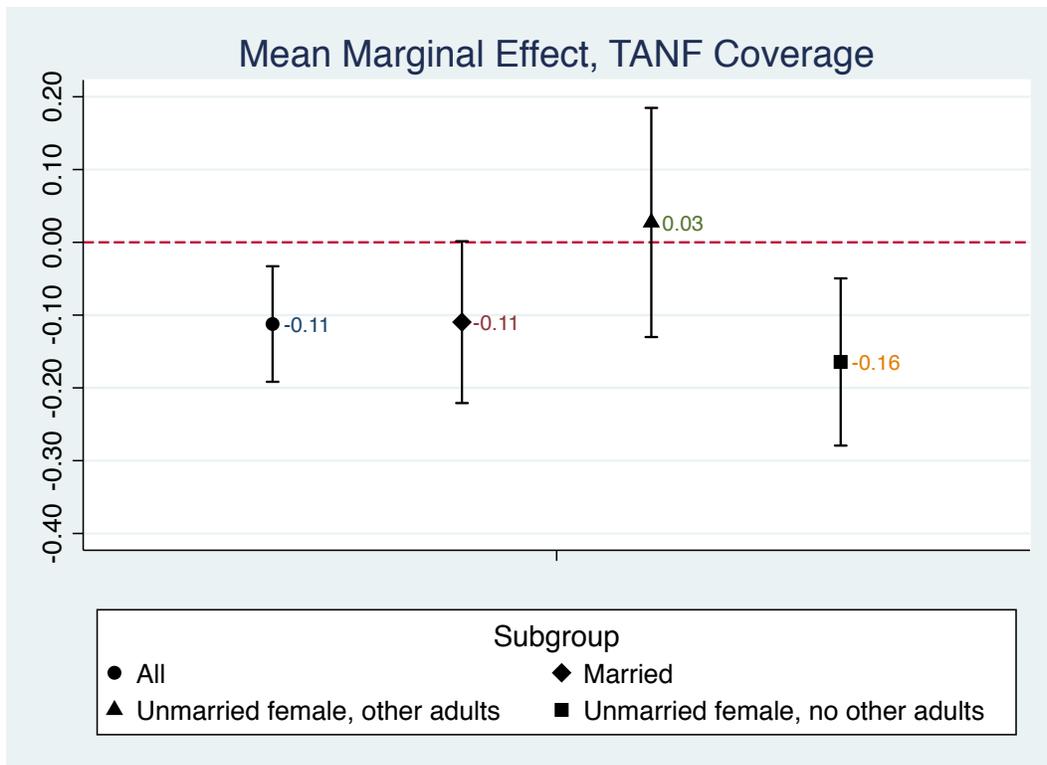
**Figure 3. Mean Marginal Effects of the relationship between TANF coverage and food insecurity**



**Figure 4. Predicted relationship between TANF coverage and food insecurity over a range of values**



**Figure 5. Food Insecurity Estimation, Mean Marginal Effects, Static Denominator**



## TABLES

**Table 1. Sample Characteristics, Low-Income Households with Children**

	All households	Married	Unmarried female, other adults	Unmarried female, no other adults
Percent of all Households	1.00	.492	.160	.249
Food insecure	0.364	0.300	0.419	0.456
<i>Household composition</i>				
1 child	0.338	0.256	0.426	0.389
2 children	0.353	0.377	0.317	0.343
3+ children	0.309	0.367	0.258	0.268
1+ seniors	0.028	0.033	0.056	0.000
1+ employed adults	0.823	0.924	0.827	0.624
<i>Race (household head)</i>				
White non-Hispanic	0.442	0.482	0.376	0.398

Black non-Hispanic	0.200	0.101	0.264	0.361
Hispanic	0.297	0.343	0.304	0.200
Other	0.059	0.071	0.054	0.040
<i>Education (highest in household)</i>				
Less than high school	0.156	0.138	0.127	0.210
High school	0.355	0.380	0.366	0.416
Some college	0.356	0.349	0.403	0.349
Bachelor's+	0.132	0.183	0.091	0.075
<i>Student</i>				
Household head	0.033	0.014	0.053	0.044
<i>Age</i>				
Household head	36.7	37.9	37.7	34.4

*Data source: Current Population Survey-Food Security Supplement, 2001-2015.*

*Notes: Sample is restricted to households with children below 185 percent of poverty with household head below age 65.*

**Table 2. Food insecurity logistic regression estimation results**

	All households	Married	Unmarried female, other adults	Unmarried female, no other adults
<i>Household head characteristics</i>				
Age	0.043*** (0.006)	0.001 (0.011)	0.086*** (0.015)	0.073*** (0.011)
Age <sup>2</sup>	-0.0005*** (0.00007)	-0.00007 (0.0001)	-0.0009*** (0.0002)	-0.0008*** (0.0001)
<i>Race and ethnicity</i>				
Black non-Hispanic	0.267*** (0.036)	0.282*** (0.057)	0.154* (0.068)	0.016 (0.048)
Hispanic	0.046 (0.034)	0.136** (0.041)	0.028 (0.051)	-0.064 (0.056)
Other non-white	-0.026 (0.057)	0.063 (0.069)	-0.232* (0.115)	-0.002 (0.115)
Student	0.024 (0.065)	-0.071 (0.143)	0.128 (0.125)	-0.030 (0.082)
<i>Highest education</i>				
High school	-0.198*** (0.025)	-0.253*** (0.039)	-0.141* (0.060)	-0.170** (0.056)
Some college	-0.221***	-0.277***	-0.199**	-0.136**

	(0.028)	(0.036)	(0.074)	(0.051)
Bachelor	-0.724***	-0.724***	-0.553***	-0.646***
	(0.048)	(0.064)	(0.071)	(0.092)
<i>Family composition</i>				
Two children	-0.046	-0.043	0.055	0.089**
	(0.025)	(0.044)	(0.062)	(0.033)
Three or more children	0.036	0.119**	0.179***	0.102**
	(0.024)	(0.041)	(0.051)	(0.036)
1+ seniors	-0.193***	-0.077	-0.281**	
	(0.049)	(0.074)	(0.086)	
1+ employed adults	-0.641***	-0.788***	-0.518***	-0.342***
	(0.044)	(0.061)	(0.083)	(0.042)
<i>State characteristics</i>				
<b>TANF coverage</b>	<b>-0.502**</b>	<b>-0.539</b>	<b>0.116</b>	<b>-0.681**</b>
	<b>(0.180)</b>	<b>(0.279)</b>	<b>(0.342)</b>	<b>(0.242)</b>
Unemployment rate	4.537***	4.666**	4.808	2.371
	(1.125)	(1.786)	(2.599)	(2.580)
n	73,978	37,635	11,426	17,940
Pseudo R <sup>2</sup>	0.026	0.026	0.028	0.018

Data source: Current Population Survey-Food Security Supplement, 2001-2015.

Notes: Models are logistic regression models with the bivariate outcome food insecurity = 1. Sample is restricted to households with children below 185 percent of poverty with household head below age 65.

State and year dummies included in models but not reported

Values are raw logistic regression coefficients

Robust standard errors in parentheses

\* p<0.05, \*\*p<0.01, \*\*\*p<0.001

**Table 3. TANF Caseloads and Homeless Public School Children, Estimation Results**

	(1)	(2)	(3)
TANF caseloads	-0.0122 (0.1106)	-0.1216 (0.0911)	-0.1494* (0.0580)
Number of children in poverty (2-year average)		0.0615** (0.0201)	0.0643** (0.0191)
Number of children (2-year average)			-0.0185 (0.0322)

Observations	456	456	456
R-squared	0.9504	0.9635	0.9642

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Data sources: McKinney-Vento Education for Homeless Children and Youth (EHCY) Program, TANF administrative caseloads and Current Population Survey ASEC data, 2006-07 to 2014-15. School year 2009-2010 and 2014-2015 for state California were dropped because of reporting errors.

Notes: Models are ordinary least squares regression models with the outcome being state-year counts of homeless children

State and year dummies included in models but not reported

Robust standard errors in parentheses

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.5$