The Decline of Cash Assistance and the Well-Being of Poor Households with Children

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H. Luke Shaefer
Associate Professor of Social Work and Public Policy
University of Michigan
lshaef@umich.edu

Kathryn Edin
Professor of Sociology and Public Affairs
Princeton University

Vincent Fusaro
Assistant Professor of Social Work
Boston College

Pinghui Wu
Doctoral Student in Economics and Social Work
University of Michigan

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Assistant Professor of Social Work
Boston College

Pinghui Wu
Doctoral Student in Economics and Social Work
University of Michigan

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Corresponding Author:

EMAIL:
lshaefer@umich.edu

PHONE:
(734) 615-3894

ADDRESS:
735 S. State St. #5106
Ann Arbor, MI 48109
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 increased its financial investment in the wellbeing of economically vulnerable families with children, even as it continues to lag behind other western industrialized nations (Tach and Edin, 2018; Smeeding and Thevenot 2016). Due to expansions in government-funded health insurance and tax credits benefiting 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 of this transformation of the social safety net, a shift that mirrors themes that have played out in debates about poor relief 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. Yet an important part of story of poverty among families and their children since welfare reform is the rise in inequality between those who are able to maintain work, and those who are not (Danziger 2010).

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 refundable tax credits 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.

What aid remains for the nation’s poorest families increasingly comes in the form of in-kind benefits, rather than cash (Fox et al., 2015; Edin and Shaefer, 2015). In recent years, many scholars have moved to treat cash and in-kind aid as equal resources when measuring poverty (Fox et al., 2015). Yet while in-kind benefits provide crucial support to the nation’s poorest families, the fungibility of cash aid may offer added protection against hardship, especially to the growing number of families with extreme low cash incomes (Shaefer et al., 2018).

Has the decline of cash welfare increased hardship among households with children? This question is a critically important one for social scientists, and sociologists in particular, for a number of reasons. Given the vulnerability of those most affected by these changes—children—there is an obligation to deepen our understanding of its consequences. Furthermore, it is important to more fully contextualize how the changes to the safety net in the 1990s relate to the history of government relief, seeking to understand the extent to which it reproduced structural themes of deservingness that have played out for centuries. Finally, given trends in poverty measurement that treat in-kind and cash aid as indistinguishable, it is important to more fully assess whether in-kind aid has filled the gap left by the decline of the cash assistance.

This study brings new data and new methods to these questions, using direct measures of well-being as outcomes and concentrating on years beyond the early 2000s, when declines to the cash assistance rolls were no longer matched by increases in maternal employment (Black, Schanzenbach and Breitwieser, 2017). We use data from this the post-2000 period to examine the relationship between declines in the reach of cash assistance 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 cash assistance programs—both at the outset and in the years since—there is considerable variation in the rate of decline in the cash aid 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 among households with children. This analysis deepens our understanding of the implications of a redrawing of the line that separates the deserving and undeserving poor.

II. Background and Literature Review

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 19th 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 20th 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 parenthood 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 were 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 to survive on. In what historian Linda Gordon calls a “pincer’s trap,” families engaged in in-home production to supplant low 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 demonstrated 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. Contextualized in the arc of the history of U.S. social welfare policy, it is clear that the existence of this cash aid
entitlement was anomalous, and not surprisingly, brought about as a result of judicial and administrative rather than legislative actions. And indeed, it would prove to be short-lived.

Another significant cultural change during this era challenged 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 the late 1980s. 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 (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 even if it is greater than their income tax liability. 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 would be lifted above the poverty line when refundable credits are counted (Halpern Meekin et al. 2015). 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. The program has been found to have significant positive effects on infant health and child
achievement, and is associated with little social stigma for recipient families (Halpern Meekin et al. 2015; Hoynes, Miller, Simon 2015; Strully, Rehkopf, and Xuan 2010; Sykes et al. 2015).

Then, in 1996, the landmark Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PROWRA) ended the legal entitlement to cash aid enshrined in AFDC, replacing it with Temporary Assistance for Needy Families (TANF), with federally-mandated time limits, work requirements and strict sanctions for noncompliance (Danziger 2010). Importantly, TANF came in the form of block grants to states, offering wide latitude on how states could spend money, allowing them to divert it to other purposes if they chose. Due to these factors and an exceptionally strong economy, caseloads plummeted (Danziger, 2010).

This policy shift created a new demarcation among the poor that Tach and Edin (2018) argue 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 poverty threshold (e.g. workers) grew, while cash flowing to the poorest families, those unable to find or maintain work, actually declined (Moffitt, 2015). 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. In contrast, cash welfare was increasingly 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.

Furthermore, echoing the outdoor relief of the Colonial period, what aid remained was typically no longer provided in cash, but in-kind benefits. Today the most important program for the poorest families is the Supplemental Nutrition Assistance Program (SNAP), formerly the Food Stamp Program, which provides a critical floor of support for eligible families. While poverty measurement scholars have increasingly treated cash and in-kind benefits as equal
resource, the fact that SNAP benefits are restricted to the purchase of food imposes major limits on the extent to which these benefits can provide adequate support for families, especially the growing share with extremely low cash resources (Edin and Shaefer, 2015; Shaefer et al., 2018). Paying for housing, for instance, has become increasingly challenging for families at the bottom of the distribution, yet housing assistance program currently help only about one in four eligible households (Desmond 2016).

Effects of Reform on Well-Being

It is wrong to merely envision this shift in social policy, which is often colloquially referred to as “welfare reform”, as occurring at a single point in time (Tach and Edin 2018). 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. Behind this force is a shift in public discourse and belief about poverty, enabling the steady falling of the old policy regime (Somers and Block 2005; Steensland 2008).

An extensive literature seeks to understand the effects of the welfare reform on the well-being of low-income families, women, and children. Even in the early years after reform, research indicated 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 (Danziger 2010). 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 can reduced poverty for some while increasing deep poverty for others (Freedman et al. 2000). 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 the effects of the reform on prenatal health saw breastfeeding fall and an association between caseload reduction and modest reductions in prenatal care and increased risk of low birthweight (Haider, Jacknowitz, and Schoeni 2003; Kaestner and Lee 2005). And studies documented the rise of, and difficulties facing, single mothers “disconnected” from both work and welfare (Blank and Kovak 2008; Brock et al. 2002; Corcoran et al. 2000; Loprest and Nichols 2011; Sandstrom et al. 2014; Seefeldt 2008; Turner, Danziger, and Seefeldt 2006; Wood and Rangarajan 2003; Zedlewski et al. 2003).

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. Yet the omission of data after the 1990s and the earliest years of the 2000s is significant. 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 (Ziliak 2015). Indeed, over the course of the 2000s single mothers’ employment rate began to approach to prereform levels (Black et al., 2017).
Using data from more recent years, Edin and Shaefer (2015) use both quantitative and qualitative methods to document a sharp rise in the share of households with children reporting extreme low cash incomes through the early 2010s, and Moffitt finds that the stratification in public assistance income sharpened again as of 2013 with the expiration of temporary SNAP benefits level increases during the Great Recession. Yet these—and in fact most studies in this literature—rely on family income as the primary outcome, and sociologists have long understood that income is an imperfect measure of well-being, and far from perfectly measured in household surveys (Mayer and Jencks 1989). Some have sought to account for the shortcoming of income data by making statistical adjustments, but such adjustments themselves are subject to substantial measurement error (Stevens, Fox and Heggeness 2018). Measuring expenditures might be a reasonable alternative to income, however, scholars are not in agreement as to the reliability of available consumption data or the treatment of consumption, in part due to rising debt among the poor (Seefeldt 2015).

As a result, to build confidence in extant research conclusions about the relationship between a significant policy shift and those impacted by it, we argue it is important, whenever possible, to move beyond instrumental and imperfect proxies associated with well-being to direct measures of well-being. The current study seeks to do just that by using two direct indicators of well-being among households with children. By focusing on more recent years than most studies and studying two direct measures of well-being, this study offers new evidence about the effects of the welfare reforms on the well-being of poor 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 occurred in some states during TANF’s second decade, but alterations to major rules have generally been rare (Fusaro 2017; Giannarelli et al. 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, 2012),
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 drops 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 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. If the presence of SNAP cannot protect households
from rising food insecurity associated with the decline of cash assistance, then there is good reason to think that it will not protect against non-food material hardship.

The residential instability of school children is another obvious domain that may be impacted by the declining reach of TANF. 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), and a number of studies find associations between the decline of TANF and homelessness and housing instability (Shaefer et al, 2015; Kalil, Seefeldt and Wang (2002). In the face of the stagnant reach of housing assistance and rising housing costs (Desmond 2016), we expect 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 homelessness—rather than decreased hardship. Thus, if we find a relationship between reduced caseloads and increased hardship, the results are fighting against the direction of presumed bias that 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. 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:

\[
P(y_{ijt} = 1) = \text{logit}^{-1}(\beta_u + \lambda X_{ijt} + \alpha S_{jt} + \gamma_j + \theta_t + \epsilon_{ijt})
\] (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 \(\epsilon\) 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 as a function of 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). 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 on this measure.

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. 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

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1 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.
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 whether model results primarily reflect changes in the count of TANF-receiving families or unrelated fluctuations in family poverty.

iii. Results

Full model results are shown in Table 3, both for all households with children and for subgroups defined by household composition (married head, unmarried female head with other adults present, unmarried female head with no other adults present).\(^2\) We report results as mean

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\(^2\) The pseudo R\(^2\) values are quite low for these models, suggesting they explain only a small fraction of the variation in the probability of food insecurity. These statistics are calculated using the likelihood ratio index method, 1 minus the ratio of the log likelihood of the fitted model to the log likelihood of the null model (Long 1997). It and similar statistics are subject to a range of
marginal effects, which approximate a linear relationship between a predictor and the probability of food insecurity. We also graphically present the predicted probability of experiencing food insecurity at a range of values of TANF cash assistance coverage while holding other variables constant.

Before turning to the primary point estimates of interest, the relationship between TANF coverage and food insecurity, we examine some of the other variables in the models to provide an understanding of who, in our sample, is at greater risk of food insecurity. First, age of the household head is positively and significantly related to food insecurity—households with an older head are at greater risk—in all models except those with a married household head. Black-headed households overall have an approximately 0.06 higher probability of experiencing food insecurity compared to white-headed households. The difference is similar for households with a married head but slightly weaker (0.04 higher probability) in households with an unmarried

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limitations (Long 1997), but we find low values regardless of alternative approach used (e.g., in the full sample model, approximately 65% of cases are correctly predicted with a probability cutoff of 0.5—better than chance, but not exceptional). Superficially poor fit statistics are common in other studies using the CPS-FSS and reporting measures of explained variation (e.g., Lombe, Yu and Nebbitt 2009), so our analysis is not unique in that regard. In our case, a likely explanation is that income—one of the strongest predictors of food security (Coleman-Jensen 2012)—is not included as a covariate for both practical (it is coded categorically in the raw data, and not easily adjusted for inflation in a multi-year analysis) and analytical (implicit in our argument is that more accessible cash assistance programs boost income for the most disadvantaged households; income would be entangled with our key predictor variable in the cases for which we’d most expect to observe an effect) reasons.
female head but no other adults present. Perhaps most strikingly, while an important predictor of food insecurity generally, race and ethnicity are not associated with risk of food insecurity in households headed by a single female with no other adults. Greater education progressively decreases the risk of food insecurity in all household categories, with a college education in particular being quite protective. In households where the highest level of education is a bachelor’s degree or greater, the probability of food insecurity is 0.16 lower than in a household in which no member completed high school. Both high school completion and some college are, again in the all households model, associated with an approximately 0.05 lower probability of food insecurity than households without a member that completed high school. The magnitude of the education relationship is roughly similar in all household subcategories.

Compared to having a single child, three or more children is associated with greater food insecurity in married households (0.02 higher probability), households headed by a single female with other adults present (0.04), and households headed by a single female with no other adults (0.02). Two children is associated with an elevated risk of food insecurity only for households headed by a single female with no other adults (0.02) compared to a base of one child. Households with seniors (age 65+) present are less likely to experience food insecurity (0.04 lower probability in the pooled model), but the relationship is not statistically significant for married households. Unsurprisingly, employment is a strong predictor of food insecurity, both when considered at the household level and at the state-year level. Among all households with children, those with at least one employed adult have an 0.14 lower probability of food insecurity. The reduction is 0.16 for married households and 0.12 for unmarried female headed households with other adults. It is weakest—but still statistically significant—for unmarried female headed households without other adults. At the state level, a higher unemployment rate is
associated with a greater chance of food insecurity, although the point estimate for female-headed households without other adults is not statistically significant. For households with children overall, married households, and female-headed households with other adults, a one percentage point change in the unemployment rate coincides with an approximately 0.01 increase in the probability of food insecurity.

[Insert Table 2 here]

Our primary interest is the relationship between TANF coverage and food insecurity. For households overall, TANF coverage is associated with a decreased risk of food insecurity, with a ten percentage point increase in TANF coverage coinciding with an 0.011 decrease in the probability of food insecurity. The relationship is approximately similar for married households. It is greatest in single-female headed households without other adults, with the same ten percentage point increase in cash assistance coverage associated with an 0.016 lower probability of food insecurity. Importantly, this is the group—single mothers with no other adults—for whom we would most expect to see a relationship between traditional cash benefits accessibility and hardship.

Figure 3 visually presents the predicted probabilities of food insecurity across a range of values of TANF coverage. The probabilities were predicted with a 26 year old black household head, high school graduate as the highest level of education in the household, no seniors, and no employed adults—essentially, a particularly at-risk household. All other values were held at their means. The observed relationships illustrate the previously-discussed patterns; as TANF coverage increases, the probability of food insecurity is reduced for households generally and for married households. No relationship is seen in households with an unmarried female head but other adults present. The steepest slope is seen for households with a female head and no other
adult present.

[Insert Figure 3 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. Our results run counter to the expected relationship between TANF coverage and hardship in these cases, however. Further, if there were some 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.

We conduct a second sensitivity test to address a threat to the validity of our analysis. TANF coverage has two components (TANF cases and families in poverty) that vary longitudinally, and results could be influenced by changes in either value. 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 coverage variable should produce quite different results. Mean marginal effects for models using fixed-denominator TANF coverage are presented in Table 3. In the interest of parsimony, only the coverage results are presented; patterns of sign, significance, and approximate magnitude on all other variables are otherwise identical to the baseline specification. TANF coverage is again 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 Table 3 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:

\[ Y_{jt} = \beta TANF_{jt} + \alpha P_{jt} + \gamma_j + \theta_t + \varepsilon_{jt} \]  

(2)
where Y is the total number of homeless students by state, year. Our key independent variable, 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 4 assesses the relationship between increases in the TANF caseload and the number of homeless students.

[Insert Table 4 here]

The first column of Table 4 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 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 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, it was that the poorest families with children in the United States had a short-lived “entitlement” to cash assistance for roughly three decades. Rather than legislative change, this entitlement was brought about by judicial and administrative actions 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 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 already-limited housing assistance in the U.S. (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 low-income households.

This study contributes to the literature by using more recent data, new data and new methods to more fully contextualizes how the changes to the safety net in the 1990s relate to the
history of government relief, and offering evidence that these changes reproduced structural themes of deservingness that have played out for centuries. We argue that examining direct measures of wellbeing rather than indirect measures such as income is 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), especially in light of recent trends in poverty measurement that treat cash aid and in-kind transfer equally. Despite the importance of benefits from in-kind programs as SNAP and housing assistance, we find evidence that the retrenchment of cash assistance has been associated with increased food and housing hardship. 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.

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.
REFERENCES


FIGURES

Figure 1. TANF Caseloads and Families in Poverty, 2001-2015
Figure 2. TANF-to-Poverty Ratio in Selected States

![Graph showing TANF-to-Poverty Ratio in Selected States]

Figure 3. Predicted relationship between TANF coverage and food insecurity over a range of values

![Graph showing Predicted Food Insecurity]

Predictions for two children, 26 year old black household head, high school graduate, no seniors, not a student, no employed adult. All else held at mean.
# TABLES

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

<table>
<thead>
<tr>
<th></th>
<th>All households</th>
<th>Married</th>
<th>Unmarried female, other adults</th>
<th>Unmarried female, no other adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of all Households</td>
<td>1.00</td>
<td>.492</td>
<td>.160</td>
<td>.249</td>
</tr>
<tr>
<td>Food insecure</td>
<td>0.364</td>
<td>0.300</td>
<td>0.419</td>
<td>0.456</td>
</tr>
<tr>
<td><strong>Household composition</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 child</td>
<td>0.338</td>
<td>0.256</td>
<td>0.426</td>
<td>0.389</td>
</tr>
<tr>
<td>2 children</td>
<td>0.353</td>
<td>0.377</td>
<td>0.317</td>
<td>0.343</td>
</tr>
<tr>
<td>3+ children</td>
<td>0.309</td>
<td>0.367</td>
<td>0.258</td>
<td>0.268</td>
</tr>
<tr>
<td>1+ seniors</td>
<td>0.028</td>
<td>0.033</td>
<td>0.056</td>
<td>0.000</td>
</tr>
<tr>
<td>1+ employed adults</td>
<td>0.823</td>
<td>0.924</td>
<td>0.827</td>
<td>0.624</td>
</tr>
<tr>
<td><strong>Race (household head)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>0.442</td>
<td>0.482</td>
<td>0.376</td>
<td>0.398</td>
</tr>
<tr>
<td>Black non-Hispanic</td>
<td>0.200</td>
<td>0.101</td>
<td>0.264</td>
<td>0.361</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.297</td>
<td>0.343</td>
<td>0.304</td>
<td>0.200</td>
</tr>
<tr>
<td>Other</td>
<td>0.059</td>
<td>0.071</td>
<td>0.054</td>
<td>0.040</td>
</tr>
<tr>
<td><strong>Education (highest in household)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>0.156</td>
<td>0.138</td>
<td>0.127</td>
<td>0.210</td>
</tr>
<tr>
<td>High school</td>
<td>0.355</td>
<td>0.380</td>
<td>0.366</td>
<td>0.416</td>
</tr>
<tr>
<td>Some college</td>
<td>0.356</td>
<td>0.349</td>
<td>0.403</td>
<td>0.349</td>
</tr>
<tr>
<td>Bachelor’s+</td>
<td>0.132</td>
<td>0.183</td>
<td>0.091</td>
<td>0.075</td>
</tr>
<tr>
<td><strong>Student</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household head</td>
<td>0.033</td>
<td>0.014</td>
<td>0.053</td>
<td>0.044</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household head</td>
<td>36.7</td>
<td>37.9</td>
<td>37.7</td>
<td>34.4</td>
</tr>
</tbody>
</table>


*Notes: Sample is restricted to households with children below 185 percent of poverty with household head below age 65. Estimates calculated with CPS-FSS food security scale weights.*

## Table 2. Food insecurity logistic regression estimation results (mean marginal effects).

<table>
<thead>
<tr>
<th></th>
<th>All households</th>
<th>Married head</th>
<th>Unmarried female, other adults present</th>
<th>Unmarried female, no other adults present</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household head characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.00129***</td>
<td>-0.000744</td>
<td>0.00373***</td>
<td>0.00445***</td>
</tr>
<tr>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>White non-Hispanic (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coef 1</td>
<td>Coef 2</td>
<td>Coef 3</td>
<td>Coef 4</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Black non-Hispanic</td>
<td>0.0608***</td>
<td>0.0586***</td>
<td>0.0365*</td>
<td>0.00383</td>
</tr>
<tr>
<td>(0.008)</td>
<td>(0.012)</td>
<td>(0.016)</td>
<td>(0.012)</td>
<td></td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>0.0102</td>
<td>0.0276***</td>
<td>0.00652</td>
<td>-0.0155</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.012)</td>
<td>(0.014)</td>
<td></td>
</tr>
<tr>
<td>Other non-white</td>
<td>-0.00571</td>
<td>0.0125</td>
<td>-0.0530*</td>
<td>-0.000377</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.014)</td>
<td>(0.026)</td>
<td>(0.028)</td>
<td></td>
</tr>
<tr>
<td>Currently student (age 18-24)</td>
<td>0.0546</td>
<td>-0.0144</td>
<td>0.0300</td>
<td>-0.00720</td>
</tr>
<tr>
<td>(0.015)</td>
<td>(0.029)</td>
<td>(0.029)</td>
<td>(0.020)</td>
<td></td>
</tr>
</tbody>
</table>

**Household characteristics**

Highest education

<table>
<thead>
<tr>
<th></th>
<th>Coef 1</th>
<th>Coef 2</th>
<th>Coef 3</th>
<th>Coef 4</th>
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<tbody>
<tr>
<td>high school</td>
<td>-0.0461***</td>
<td>-0.0551***</td>
<td>-0.0337*</td>
<td>-0.0414**</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.009)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td></td>
</tr>
<tr>
<td>some college</td>
<td>-0.0513***</td>
<td>-0.0602***</td>
<td>-0.0473**</td>
<td>-0.0332**</td>
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<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.018)</td>
<td>(0.012)</td>
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<tr>
<td>bachelor’s+</td>
<td>-0.157***</td>
<td>-0.145***</td>
<td>-0.127***</td>
<td>-0.153***</td>
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<tr>
<td>(0.010)</td>
<td>(0.012)</td>
<td>(0.016)</td>
<td>(0.021)</td>
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</tr>
</tbody>
</table>

1 child (base)

<table>
<thead>
<tr>
<th></th>
<th>Coef 1</th>
<th>Coef 2</th>
<th>Coef 3</th>
<th>Coef 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 children</td>
<td>-0.0104</td>
<td>-0.00882</td>
<td>0.0128</td>
<td>0.0215**</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.009)</td>
<td>(0.015)</td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td>3+ children</td>
<td>0.00812</td>
<td>0.0241**</td>
<td>0.0420***</td>
<td>0.0247**</td>
</tr>
<tr>
<td>(0.005)</td>
<td>(0.008)</td>
<td>(0.012)</td>
<td>(0.009)</td>
<td></td>
</tr>
<tr>
<td>1+ seniors</td>
<td>-0.0431***</td>
<td>-0.0157</td>
<td>-0.0658**</td>
<td></td>
</tr>
<tr>
<td>(0.011)</td>
<td>(0.015)</td>
<td>(0.020)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1+ employed adults</td>
<td>-0.143***</td>
<td>-0.160***</td>
<td>-0.121***</td>
<td>-0.0828***</td>
</tr>
<tr>
<td>(0.010)</td>
<td>(0.012)</td>
<td>(0.019)</td>
<td>(0.010)</td>
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</tbody>
</table>

**State characteristics**

<table>
<thead>
<tr>
<th></th>
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<th>Coef 2</th>
<th>Coef 3</th>
<th>Coef 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANF coverage</td>
<td>-0.112**</td>
<td>-0.110</td>
<td>0.0271</td>
<td>-0.165**</td>
</tr>
<tr>
<td>(0.040)</td>
<td>(0.057)</td>
<td>(0.080)</td>
<td>(0.058)</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>1.014***</td>
<td>0.948**</td>
<td>1.127</td>
<td>0.573</td>
</tr>
</tbody>
</table>
Table 3. Abbreviated logistic regression estimation results (mean marginal effects), static denominator TANF coverage.

<table>
<thead>
<tr>
<th>TANF coverage (static denominator)</th>
<th>All households</th>
<th>Married head</th>
<th>Unmarried female head, other adults present</th>
<th>Unmarried female head, no other adults present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TANF coverage</td>
<td>-0.185**</td>
<td>-0.180***</td>
<td>0.013</td>
<td>-0.214**</td>
</tr>
<tr>
<td></td>
<td>(0.047)</td>
<td>(0.051)</td>
<td>(0.108)</td>
<td>(0.078)</td>
</tr>
<tr>
<td>N</td>
<td>73,978</td>
<td>37,635</td>
<td>11,426</td>
<td>17,940</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.026</td>
<td>0.026</td>
<td>0.028</td>
<td>0.018</td>
</tr>
</tbody>
</table>

Notes: Models are logistic regression models with bivariate outcome food insecurity=1. Sample restricted to households with children below 185% of poverty with household head below age 65. State and year indicators included in models but not reported. Effect of household head age estimated with a quadratic term. Values are mean marginal effects. Cluster robust standard errors in parentheses. *p<0.05; **p<0.01; ***p<0.001

Table 4. TANF Caseloads and Homeless Public School Children, Estimation Results

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANF caseloads</td>
<td>-0.0122</td>
<td>-0.1216</td>
<td>-0.1494*</td>
</tr>
<tr>
<td></td>
<td>(0.1106)</td>
<td>(0.0911)</td>
<td>(0.0580)</td>
</tr>
<tr>
<td>Number of children in poverty (2-year average)</td>
<td>0.0615**</td>
<td>0.0643**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0201)</td>
<td>(0.0191)</td>
<td></td>
</tr>
<tr>
<td>Number of children (2-year average)</td>
<td>-0.0185</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0322)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>456</td>
<td>456</td>
<td>456</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.9504</td>
<td>0.9635</td>
<td>0.9642</td>
</tr>
</tbody>
</table>

Notes: Models are logistic regression models with bivariate outcome food insecurity=1. Sample restricted to households with children below 185% of poverty with household head below age 65. State and year indicators included in models but not reported. Values are mean marginal effects. Cluster robust standard errors in parentheses. *p<0.05; **p<0.01; ***p<0.001

*** p<0.001, ** p<0.01, * p<0.5