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RUNNING HEAD: Predictors of TANF and Food Stamp Receipt

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Abstract

Two of the primary programs through which the federal government provides benefits to low income families are the Temporary Assistance for Needy Families (TANF) program and the Food Stamp program. However, many eligible low income families do not actually receive these benefits. We combined state-level policy data with rich data on a national sample of low income families to investigate family and state-level predictors of TANF and Food Stamp receipt. Our findings indicate: 1) families experiencing more economic hardship and health challenges are more likely to receive benefits, and 2) states' coverage is associated with families' receipt of TANF, but not Food Stamps. Implications for policy and research are discussed.

Keywords: safety net; low income families; TANF; Food Stamps.

1. Introduction

The U.S. offers a number of "safety net" programs designed to assist low-income families in meeting their basic needs. Temporary Assistance for Needy Families (TANF), a cash assistance program, and the Supplemental Nutritional Assistance Program (SNAP, commonly referred to as Food Stamps), an in-kind benefit, are two critical pieces of the federal safety net. However, prior research has shown that a large number of eligible low income families do not utilize these programs (Meyers, Gornick & Peck, 2001). Understanding which families do and do not receive benefits can provide insights into how to state and local agencies can increase receipt of benefits among the needy families. Most prior research answering this question examined these benefits prior to the welfare reform era of the mid-1990's, which created TANF and changed regulations surrounding Food Stamps. The current study combines nationally representative family data and data on state policies in the post-welfare reform era to examine how family factors, including sociodemographic characteristics, experiences with material hardship, and health challenges, and state variations in the TANF and Food Stamp programs predict which eligible families actually receive these two benefits.

2. Literature Review

2.1 Safety Net Programs for Low Income Families

The federally-sponsored programs collectively referred to as the "safety net" or "welfare" for low income families include a variety of benefits, including cash assistance, health care coverage, and food access. The base of the safety net, TANF, was created through the passage of the Personal Responsibility and Work Opportunity Act of 1996 (PRWORA; U.S. Public Law 104-193) to replace its predecessor Aid to Families with Dependent Children (AFDC). TANF provides monthly cash benefits to eligible low-income families with children. A hallmark of

TANF is the control given to states over program implementation. States have flexibility in the design of many program features, including benefit levels, eligibility criteria, time limits, and sanctions. The goal of TANF is to move people into full-time work through features such as time limits on benefit use (typically 2 years per benefit period and 5 years across a recipient's lifetime) and strict work requirements (Greenberg et al., 2002; McLoyd, Aikens, & Burton, 2006).

The Food Stamp Program, recently renamed the Supplemental Nutrition Assistance Program (SNAP), was created in 1964 and is administered by the U.S. Department of Agriculture (USDA). The Food Stamp Program provides eligible low-income families with monthly grants on a debit card that can be used only to purchase food items. Families are automatically eligible for food stamps if they are also receiving TANF benefits, and non-TANF families are eligible if their income is less than 130% of the poverty line and the total value of their assets is less than $2,000 (Gibson-Davis & Foster, 2006). Although many aspects of the Food Stamp program are set at the federal level, states' variation in TANF earning deduction rates (the rate at which benefits are decreased as income and other benefits increase) have resulted in varying Food Stamp benefit levels across states (Hanson & Andrews, 2009).

2.2 Utilization of Benefits among Low-Income Families

In 2000, approximately 2.2 million families received cash assistance from TANF, while 17 million households received Food Stamps (Greenberg et al., 2002). TANF consistently serves fewer households than Food Stamps because it has stricter eligibility requirements (i.e., lower income thresholds, limited to families with children) and time limits. However, a challenge for both programs is reaching all families that are eligible for benefits. In 2005, only 40% of eligible families were served by TANF, down from the 84% served by AFDC in the mid 1990s (Pavetti

& Rosenbaum, 2010). Although Food Stamps reach more eligible families, estimates indicate that only 50%-60% of eligible families receive benefits (Rank & Hirschl, 2003).

Attempts to understand why eligible low income families do not receive the benefits for which they are eligible have primarily focused on identifying individual- or family-level characteristics that differentiate those who receive benefits from those who do not. Unfortunately, many of these studies have focused on data prior to welfare reform and thus are of limited relevance to the current federal and state policies (e.g., Blank & Ruggles, 1996) or they have relied on data that has limited information on families (Acs, Phillips, & Nelson, 2005). The few studies that have examined differences among families that participate in TANF and those that do not have found a number of family level differences. Teitler and colleagues (2007) used data from the Fragile Families and Child Wellbeing Study, a longitudinal sample of parents and their newborn children in 20 large U.S. cities, to understand factors predictive of TANF receipt among unmarried mothers. They found that among single mothers, Black mothers and non-White non-Hispanic mothers were more likely to receive benefits than White mothers. Mothers with lower levels of education were more likely to use TANF and those who worked prior to giving birth were less likely. They also found that mothers who were cohabitating with the fathers of their children were less likely to use benefits, except when fathers reported spending any time in jail, in which case mothers were more likely to receive TANF (Teitler, Reichman, & Nepomnyaschy, 2007). While these results are somewhat revealing, the study was restricted to unmarried mothers and did not account for family income in analyses, two drawbacks that make it difficult to determine whether the predictive relations found would be found if married parents were included and if family income was included as a covariate in the models. Additionally, Fragile Families was limited to major urban areas and thus the relations

noted above may not generalize to suburban or rural families.

A second study to examine individual- or family-level predictors TANF receipt among single-parent families used the 1997 and 1999 waves of the National Surveys of America's Families (Zedlowski, 2002). TANF participants were found to be less likely to live with a partner or other adults, were more likely to have three or more children, and were more likely to report being in very poor health. In a finding that hints at the role benefit levels may play in whether families apply for benefits in the first place, families who participated qualified for larger benefit amounts and were eligible for more months of benefits than non-participating families (Zedlowski, 2002).

Acs and colleagues (2005) found differences between single-mother families that participated in TANF and those that did not in their investigation of changes in welfare entry patterns throughout the 1990s using the national Survey of Income and Program Participation. African American women were more likely to use TANF than white women and women living with other adults were less likely to use TANF than those living only with children. Women with a disability were more likely to use TANF than non-disabled women and women who had received AFDC or Food Stamp benefits in the past were more likely to be using TANF. Interestingly, the one study that examined other types of personal characteristics found few differences between mothers that used welfare and other low income working mothers (Duncan, Dunifon, Doran, &Yeung, 2001). The only consistent difference was in time use, with working mothers reporting fewer hours spent on housework and television watching. There were no differences between the two groups on time spent reading to children and helping them with their homework. Although the low income working mothers reported less tense families relations than those receiving welfare, there were no differences in mother's sense of control or

depression.

Prior research has also examined characteristics that distinguish between families that use Food Stamps and families that do not, although results are mostly limited to demographic predictors. For example, Rank & Hirschl (2003) used national data from the Panel Study of Income Dynamics to estimate the odds that children would be in a household that receives Food Stamps and found that Black children were more likely to receive Food Stamps than White children. Additionally, children whose parents had less than 12 years of education and children whose parents were not married had higher probabilities of receiving Food Stamps. Another study collected data from a sample of low income urban families in 1999 and was able to capture other differences between families that used Food Stamps and families that did not (Martin, Cook, Rogers, & Johnson, 2004). In addition to replicating the demographic predictors of other studies, they found that aspects of material hardship were predictive of benefit receipt. Specifically, families that did not own cars were more likely to use Food Stamps than families that did own cars and that families reporting food insecurity were more likely to use Food Stamps than families that did not report experiences with food insecurity (Martin et al., 2004).

Taken together, these studies suggest that there are identifiable characteristics that distinguish between TANF-using and Food Stamp-using families and families that do not receive these benefits, an important one being that families who are more in need or at-risk are indeed more likely to receive benefits. However, as noted above, these studies are limited in that several are restricted to single mothers (Acs et al., 2005; Teitler et al., 2007; Zedlowski, 2002), the studies have generally been confined to demographic individual- and family-level predictors, and none of the studies have looked at TANF and Food Stamp receipt in the same study. In the present study, we improve upon our current knowledge of predictors of benefit receipt by using a

nationally representative sample of families with school-aged children of all potential marital statuses, by including multiple aspects of financial hardship and family health challenges as predictors of receipt, and by examining receipt of both TANF and Food Stamps among the same sample of families.

2.3 State differences

A key piece of welfare reform in 1996 was the devolution of administration of and requirements to safety net programs to the 50 states. Under TANF, the federal government provides block grants to states which then have the authority to use the money in a number of ways. States have flexibility in the eligibility criteria they use to determine who can receive benefits, the work restrictions they place on TANF users, and the limits on the lengths of time that families can receive TANF. States also have flexibility in TANF benefit levels coupled with larger pre-TANF differences in state policy regimes. These multiple aspects of flexibility have led to dramatically different TANF programs across states. For example, the maximum monthly benefit offered to a family of three with no income ranges from $170 in Mississippi to $923 in Alaska (Pavetti & Rosenbaum, 2010). In light of the dramatic program changes that accompanied welfare reform, many studies have examined how welfare reform affects overall caseloads (see Blank, 2002, for a review) or specific child and family outcomes, such as family structure and child well-being (Bitler, Gelbach, & Hoynes, 2006; Dunifon, Hynes, & Peters, 2006). Far less research has examined how state variations are related to individual families' likelihood of receiving TANF benefits. In general, the studies that have examined state TANF characteristics and family TANF receipt have found small relations. For example, in their examination of Fragile Families data, Teitler and colleagues (2007) found that unmarried mothers were more likely to receive TANF if they lived in states that provided some TANF

benefits before requiring the recipient to work, but that a number of other state policy characteristics were not associated with mothers' benefit receipt.

In contrast to examining specific policy components, we focus on two comprehensive indicators of states' policy choices: coverage and generosity (Meyers et al., 2001). States' coverage reflects the proportion of low income families that are utilizing benefits (in this study, TANF or Food Stamps) and is influenced by a number of state policy decisions, including eligibility criteria and outreach efforts. States' generosity reflects the average size of benefits (either cash assistance or food assistance) given to families utilizing the benefits. We hypothesize that these indicators are more likely to be associated with individuals' likelihood of benefit receipt because they capture a more complete picture of states' TANF and Food Stamp policies.

Welfare reform also produced small changes in the Food Stamp program. Benefit levels were reduced slightly and many restrictions on immigrants' eligibility for benefits were imposed. Although Food Stamp eligibility criteria and benefit levels are mandated at the federal level, the ways in which states implement the program produce variations in application procedures and ease of enrollment. This has led to large differences in states' coverage. For example, Castner and Schirm (2005) estimate that 2002 state Food Stamp participation rates, defined as the number of people participating in the program dividing by the number of people eligible, ranged from 39% in Massachusetts to 81% in Oregon. State variations in Food Stamp benefits have also been observed after welfare reform. States vary in the ways they calculate TANF earning deductions, which is the portion of earnings not counted as income. This in turn affects the net household income on which food stamp benefits are based. Thus, the control given to states over the TANF program has also created variation in the benefits families receive from other safety

net programs, including Food Stamps (Hanson & Andrews, 2009). Because of this flexibility, the amounts of actual Food Stamp benefits received by families vary across states. This state-level variability in benefit levels has been linked with food insecurity among families (Gunderson, Jolliffe, & Tiehen, 2009), but we are unaware of any studies that have linked state variability in Food Stamp generosity to whether individual eligible families receive the benefit at all.

2.4 Present Study

In this study, we used data from the late 1990s on a nationally representative sample of elementary school-aged children and their families to expand upon prior studies of benefit receipt. It is important to note that data from this study was collected on families during a time of economic growth in the U.S., and that the number of families using safety net benefits has risen in recent years due to the current economic crisis (Pavetti & Rosenbaum, 2010). We examine how family-level and state-level characteristics predicted receipt of both TANF and Food Stamp benefits among a sample of low income families with children that ranged in the marital status of the parents. The use of rich survey data allowed us to examine a wealth of family characteristics, including multiple forms of economic hardship and multiple measures of family health, not commonly measured in other studies of benefit receipt. Additionally, we examined two broad state policy measures, coverage and generosity, as predictors of TANF and Food Stamp receipt. We also utilized a number a state-level covariates designed to reduce bias due to state-to-state differences in other support policies (i.e., Medicaid), demographic composition, economic conditions, and political climate. We defined our sample using family income and examined benefit receipt among families whose annual income-to-needs is within 200% of the family poverty line. Although we recognize not all of these families are eligible for benefits, we chose to examine families that are likely at risk of needing financial assistance as they are the targets of

federal "safety net" policies.

3. Methods

3.1 Sample

Data for this study was drawn from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), a nationally representative sample of 21,260 children enrolled in 944 Kindergarten programs during the 1998-1999 school year (West, Denton, & Reaney, 2000). The current study utilizes a subsample determined by the following inclusion criteria: (1) families were among the 7,850 families that reported income-to-needs ratios below 200% of the Federal Poverty Line (e.g., $26,266 for a family with 1 adult and 2 children in 1998) ; (2) families resided in a state that was represented in the ECLS-K sample by at least 20 low-income families (40 states); (3) families did not reside in Alaska and Hawaii, states whose data were excluded due to extreme values on state measures (per Meyers et al., 2001). This left a sample of 6,200 families from 38 states for analysis. The reported sample sizes are rounded to the nearest 10 per NCES restrictions regarding disclosure of restricted use data. Family data were collected during both the fall (1998) and spring (1999) waves of Kindergarten. Desciptives and correlations for family and state data are provided in Tables 1 through 3.

These family-level data were supplemented with state-level data from a longitudinal database that documents individual states' coverage and generosity of both TANF and Food Stamps, and a number of additional state-level variables to be utilized as controls (see Meyers et al., 2001 for more detail). State-level data are used from year 1998, meaning they either overlap with (fall wave) or precede (spring wave) the collection of family data.

3.2 Measures

3.2.1 Outcome variables

The focal outcome variables were dichotomous parent responses at the spring wave data collection to two questions: “Since (date of fall interview), have you or anyone in your household received Aid to Families with Dependent Children-sometimes called AFDC or ADC, Temporary Assistance for Needy Families, sometimes called TANF or (state AFDC program name)?” and “In the past year, have you or anyone in your household received food stamps?”. Parents responded either “yes” or “no”. As shown in Table 1, 15% of low income families reported receipt of TANF benefits, while 36% reported receipt of food stamps.

3.2.2 Family-level predictor variables

Parents provided information on family sociodemographic characteristics, experiences with material hardship, and family health challenges. Sociodemographic variables include *family income-to-needs* (created using 1998 Federal Poverty Line, family income, and household composition), *family race/ethnicity* (as indicated by child race/ethnicity), *marital status*, *maternal employment*, *whether the child was born in the U.S.*, and what the *primary language spoken at home* was. Additionally, data were geocoded by NCES and indicators for whether the family lived in an *urban* or *rural* area were created.

During the fall, parents reported on the number of places the child has lived since birth. To indicate number of moves since birth, we subtracted 1 from the total number of places lived. Thus, high values indicate high levels of *residential instability*. Parents also reported on whether there was any time since the child’s birth, when the family had serious financial problems or was unable to pay the monthly bills. Parents additionally reported on how long these problems lasted. From these questions, two variables were created: *financial troubles for 1 year or less* and *financial troubles for more than 1 year*.

In the spring, parents completed the 18-item U.S. Household Standard Food-Security

Module created by the U.S. Department of Agriculture (USDA: Bickel, Nord, Price, Hamilton, & Cook, 2000). Parents reported how often each item was true for their family in the last 12 months (e.g., “Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?”). Following USDA guidelines, families were coded as low food secure if they had 3-7 affirmative responses and very low food secure if they had 8 or more affirmative responses. These categories were combined to create the *low or very low food security* indicator variable. We also created a *marginal food security* indicator for families reporting 1 or 2 affirmative responses, since prior research has shown these households to be more similar to food-insecure households than households responding affirmatively to zero questions (Fiese, Gundersen, Koester, & Washington, 2011).

Three variables were created to indicate family health challenges. Child physical health is a dichotomous variable indicating whether a parent reported their children’s as being in fair or poor health as opposed to excellent, very good, or good health at the fall wave. In the spring, parents also reported their own physical health on the same scale. They also responded to twelve items from the CES-D depressive symptoms scale (Radloff, 1977) using a scale from 1 (never) to 4 (most of the time). A logged version of this variable was used to reduce skewness; high scores reflect high levels of depressive symptoms (α=.86).

3.2.3 State-level predictor variables

Because the family-level data were collected in the 1998-1999 school year, we utilized state-level data from 1998. Two state-level descriptive variables were created for TANF and Food Stamps: coverage, a measure of the ratio of program participants to those potentially eligible, and generosity, the average benefit level per person qualified for the benefit . *TANF coverage* was calculated by dividing the monthly average number of families receiving

assistance by the number of pre-tax and transfer poor single parent families with children under age 18. Coverage reflects the extent to which benefits reach needy populations. *TANF generosity* was the average federal and state benefit of a recipient family. *Food Stamps coverage* was calculated by dividing the number of families with children receiving benefits by the number of pre-tax and transfer poor families with children under age 18. *Food Stamps generosity* was calculated by dividing the annual federal benefit expenditures for families with children by the number of families with children on the caseload. Food Stamp benefits are completely funded through the federal government, while state and federal funds are used for administrative costs. Approximately 90% of federal Food Stamp funds are spent on program benefits (Wight, Thampi, & Briggs, 2010).

3.2.4 Additional state-level covariates

A number of state-level covariates measured in 1998 were also utilized in models to reduce the likelihood that observed relations between the policy of interest and family receipt are biased or are confounded with other state policies directed at low income families. First, in TANF models, Food Stamps coverage and generosity were included as covariates. Conversely, TANF coverage and generosity were included as covariates in Food Stamps models. Medicaid/SCHIP coverage and generosity were also included because they are directed at low-income families with children. *Medicaid/SCHIP coverage* was calculated by dividing the number of children eligible for Medicaid and SCHIP enrollees by the number of pre-transfer poor children under age 21. *Medicaid/SCHIP generosity* was calculated by dividing the federal and state Medicaid and SCHIP expenditures for child benefits by the number of eligible children to Medicaid and SCHIP enrollees.

A number of indicators of state government political climate in 1998 were also included

in the models. To account for the potential influence of state political parties on safety net policies, the models included indicators for whether the *governor was a member of the Democratic Party*, whether the State House of Representatives and Senate both had a *Democratic majority*, and whether the State House of Representatives and Senate both had a *Republican majority*. The reference group for these latter two variables included states where the House of Representatives and Senate had majorities from different political parties (e.g, the House was majority Republican while the Senate was majority Democrat). A number of state-level demographic variables were utilized including the proportion of Black residents and the proportion of immigrants in state population, and the proportion of female-headed families among all families with children. Economic indicators such as female wages (logged), and pre-transfer child poverty rates were included because they also may influence families' program participation (Aratani, Lu, & Aber, 2011; Garrett & Glied, 2000).

4. Results

To examine predictors of family benefit receipt, we conducted a series of logistic regression models with adjusted standard errors to account for the nesting of families within states. We entered the family-level predictors in three steps: sociodemographic variables, family experiences with material hardship, and family health challenges. Next, we added the focal state predictor variables, and lastly, we added the full set of state control variables. The discussion of results focuses on the full models, where spurious relations are most likely to have been eliminated.

4.1 Predictors of TANF receipt

As shown in the last column of Table 4, a number of family sociodemographic characteristics unequally predicted TANF benefit receipt (over and above the influence of other

sociodemographic, family experience and state policy characteristics). Lower family income-to-needs ratios were associated with higher odds of TANF receipt. Black families, single parent families, and families in which the mother was not employed all had higher odds of TANF receipt. Families in which the primary language spoken in the household was English also had higher odds of TANF receipt, as did families living in urban, as opposed to suburban, areas.

Family experiences with material hardship were also predictive of TANF receipt. Families who reported more residential moves were more likely to receive TANF. Families whose financial troubles lasted more than one year had higher odds of receiving TANF than families who did not report having financial troubles. However, families reporting financial troubles of one year or less did not have significantly different odds of TANF receipt than families with no financial troubles. Families reporting marginal food security and low/very low food security both had higher odds of TANF receipt than families who reported being food secure. In terms of family health, both parental and child physical health were not predictive of TANF receipt. However, families in which the parent reported higher levels of depressive symptoms had higher odds of TANF receipt.

In terms of state-level predictors of family TANF receipt, families residing in states with higher levels of TANF coverage had higher odds of receiving TANF. Importantly, this finding remained significant even after other state-level controls were included in the model. Although TANF generosity was predictive in the model without state controls, it was not significant once other potential state-level confounds were entered in the model. However, state Food Stamp generosity and state Medicaid/SCHIP generosity (but not coverage) predicted lower likelihoods of TANF receipt.

4.2 Predictors of Food Stamp receipt

As shown in the last column of Table 5, a wealth of family sociodemographic characteristics predicted receipt of Food Stamp benefits. Lower family income-to-needs ratios were associated with higher odds of Food Stamp receipt. Families in which the highest level of parent education was a high school degree or less, Black families, single parent families, and families in which the mother was not employed all had higher odds of receiving Food Stamp benefits. Families in which the focal study child was born in the U.S. and families in which the primary language spoken was English both had higher odds of Food Stamp receipt as compared to families in which the focal child was born outside the U.S. and families in which the primary language spoken was not English, respectively. Families living in urban areas had higher odds of Food Stamp receipt than families in suburban areas; there was not a significant difference in the odds of receipt between rural and suburban areas.

Regarding family experiences, higher levels of residential instability were associated with a higher likelihood of Food Stamp receipt. Families that reported financial troubles for one year or less and families that reported financial troubles for a year or more both had higher odds of Food Stamp receipt as compared to families that did not report experiences with financial troubles. Families that reported marginal levels of food security were more likely to receive Food Stamps than families that reported food security. Interestingly, the odds of Food Stamp receipt for families that reported low or very low food security was not significantly different from the odds of families that reported food security. In terms of family health challenges, families in which parents reported poor or fair physical health were more likely to receive Food Stamps than families in which parents reported good health. Child physical health was not predictive of Food Stamp receipt. Higher levels of parental depressive symptoms were associated with higher odds of Food Stamp receipt.

Neither states' Food Stamp coverage nor generosity were associated with families' likelihood of receiving benefits. This was true both in models with and without state-level covariates. Additionally, none of the other state-level policy and demographic covariates were associated with receipt of Food Stamps.

4.3 Variance explained in Receipt variables

Because logistic regression models were utilized (as opposed to linear regression), the standard R^2 measurement of variance explained in the dependent variable was not available. However, the pseudo-R^2 provides an estimate of the proportion of change from the intercept-only model (with no predictors) to the current model and can be useful when comparing models run on the same data with the same outcome (Chen, Ender, Mitchell, & Wells, 2011). As shown in Table 4, the addition of material hardship variables, but not the family health variables, increased the pseudo-R^2. Similarly, the addition of state TANF variables increased the pseudo-R^2, but the inclusion of the other state covariates did not. Table 5 shows that the addition of both sets of family predictors (material hardship and family health challenges) increased the pseudo-$R^{2,}$ but the inclusion of state variables did not. The models explain about 23% (TANF) and 29% (Food Stamps) of the variance in which low-income families receive these benefits.

4.4 Combinations of state policy predictors

Because states' coverage and generosity may work in conjunction with one another to predict families' likelihood of benefit receipt, combination variables were created and used as predictors in logistic models. These combinations were created using median splits (to maintain an adequate number of states in each category) of coverage and generosity to create four groups each for TANF and Food Stamps: high coverage, high generosity; high coverage, low generosity; low coverage, high generosity; low coverage; high generosity. A series of logistic

models rotating the reference group were conducted separately for both TANF and Food Stamps. Rotating the reference group allowed us to examine differences between each pair of coverage-generosity groups. As shown in Table 6, results from the TANF models largely replicated the earlier findings that coverage, but not generosity, is predictive of individual family receipt of benefits. Families in states in the low coverage-low generosity group were less likely to receive benefits than families in either the high coverage-high generosity group or families in the high coverage-low generosity group. Combinations of Food Stamp coverage and generosity were not predictive of family receipt of Food Stamps (Table 7).

4.5 Robustness Checks

As a check on the robustness of our results, parallel models were conducted to predict TANF and Food Stamp benefit use during the child's 1st grade year from family characteristics during the 1st grade year and state variables from 1999. Because of data limitations, some measures of family experiences with material hardship (financial troubles, food security) and family health challenges (parent health, parent depression) were not available. Results from these models largely replicated findings from the kindergarten models. Specifically, TANF coverage was predictive of TANF receipt (Odds Ratio=5.60; $p<.01$) while Food Stamp coverage was not predictive of Food Stamp receipt (Odds Ratio=1.67; $p=.30$). For the model predicting TANF benefits, the only differences were that in 1st grade families in the Other ethnicity group were significantly more likely to receive TANF than White families (this association was not significant in kindergarten) and residential instability did not predict likelihood of TANF receipt. In the model predicting Food Stamp receipt, the only difference was that in 1st grade whether or not the focal child was born in the U.S. did not significantly predict Food Stamp receipt (Tables available from 1st author).

We also ran our primary kindergarten models on two alternate samples. First, we limited our sample to only unmarried parent families, who are more likely to qualify for TANF than married couples (Acs et al., 2005). In these analyses, TANF coverage was again predictive TANF receipt (Odds Ratio=3.53; $p<.01$) but Food Stamps generosity and Medicaid/SCHIP generosity were no longer significant predictors. In the model predicting Food Stamp receipt, Food Stamp coverage did not predict receipt (Odds Ratio=.96; $p=.96$). Family-level predictors of benefit receipt were similar to those found in the sample all low income families. We also conducted models using a more restrictive income criteria, namely that families earned less than 100% of the Federal Poverty Line, and again found results that mirrored the findings in the sample of all low income families.

5. Discussion & Conclusions

5.1 Summary of Findings

In this study, we examined an expansive set of household demographic and experiential predictors of both TANF and Food Stamps in low income families across the country. Additionally, we examined relations between state policies and uptake of these benefits, utilizing data from a more recent policy era (i.e. post-welfare reform) than most other studies. Our findings reveal that families in greatest need of assistance are generally more likely to receive TANF and Food Stamps. In particular, families experiencing severe economic hardships, such as frequent moves and food insecurity are more likely to receive both benefits than families not experiencing these hardships. Interestingly, families in which parents reported higher levels of depressive symptoms were more likely to receive both TANF and Food Stamps. While we do not know directionality of this relation, it is plausible that parents with depressive symptoms face more challenges in the world of work, which creates a need for public benefit use. However, it is

also possible that the stress of needing and receiving these benefits takes a toll on adults' mental health. Families in which the parent reported fair or poor physical health were more likely to receive Food Stamps, which again may be a signal that families with greater need are receiving benefits. Although other studies (Zedlowski, 2002) have documented similar relations between mental health and benefit use, more research is needed to understand it. With regard to the finding that Black families are more likely to receive benefits that families of other races and ethnicities, it is important to remember that this is a difference among families that are all potentially eligible for benefits and that the analyses include controls for a large number of possible explanations regarding depth of deprivation among Black families (i.e., income, unemployment, hardship). Why they are more likely to receive benefits is unclear. It may be that there is less stigma about receiving benefits among Black families than there is among families of other race and ethnic groups and thus they are more willing to apply in the first place. It may also be that local agencies are doing a better job reaching eligible families in traditionally Black neighborhoods. Alternatively, it may be that unmeasured racial differences in family wealth and assets provide White families with a financial buffer during times of economic need, while Black families may need to reach out to other sources of financial support (Conley, 1999).

In terms of states' policy characteristics, we find that states' TANF coverage (but not generosity) is predictive of individual families' receipt of benefit. In addition, we found that states' Food Stamp generosity and Medicaid/SCHIP generosity also predicted TANF receipt. We did not find a parallel set of relations for Food Stamps. It may be that the relative lack of variability in Food Stamp policies across states, especially compared to TANF, is the explaining factor. Put another way, the similarity across states in Food Stamp programs created by federal regulations prevents differences in low income families' likelihood of benefit receipt across

states. Generosity of benefits did not matter for TANF or Food Stamps benefits within program. It may be that families do not take the size of the benefit into account when deciding on whether or not to apply for a program, although other work has shown that within TANF-eligible families, those that enroll are eligible for larger benefits (Zedlowski, 2002). Our study may not have captured this because we examined benefit levels at the state level, while Zedlowski estimated how much cash assistance an individual family was likely to receive. Alternatively, it may be that the multiple household financial hardship variables in our analyses accounted for this relation. Interestingly, states' Food Stamp and Medicaid/SCHIP generosity both predicted lower odds of receiving TANF. These relations may be driven by family-level or state-level processes. When families receive larger benefits from some programs (such as Food Stamps and Medicaid/SCHIP), they may not experience the same level of need for additional cash assistance from TANF. It may also be that some states focus on providing a safety net through specific programs and invest more in certain programs at the expense of others. States may choose to funnel their resources to Food Stamps and health benefits but choose not focus on increasing enrollment of families in TANF. Understanding these cross-policy interactions is an important topic for future research.

5.2 Study Limitations

One limitation of this study is our reliance on self-reported annual household income and benefit use. While benefit use is typically underreported in survey data, many studies rely on it because administrative data is largely unavailable to researchers (Zedlowski, 2002). However, the possibility for reporting error does need to be considered when interpreting and extrapolating from our results. Additionally, monthly income data would be ideal but was unavailable for this study.

Another limitation is our reliance on cross-sectional data. While longitudinal data provide more insights into the ordering of family situations and their benefit use, we deliberately chose to rely solely on data collected during the focal child's kindergarten year. We made this choice because the current state policy and family circumstances are most likely to be related to current benefit use, not state and family characteristics from years past. Other research has clearly shown that families cycle in and out of benefit use (Cancian, Meyer, & Wu, 2005; Rank & Hirschl, 2003; Yoshikawa, 1999), and the use of lagged predictors may not capture this. However, it is important to note that while the predictor variables overlapped with the time period for which families were reporting on benefit use, in no case was a predictor variable reported on time periods taking place after benefit use.

5.3 Implications for Policy and Future Research

Despite the finding that families facing financial hardships were more likely to be receiving benefits, many low income families were not receiving benefits despite their likely eligibility. In our low income sample, only 15% of families were reporting TANF use and 36% reported Food Stamp use. Even among families whose income fell below the Federal Poverty Line, take-up rates were only 25% and 56%, respectively. These low rates make clear that there is an important need to understand how to connect low income families to benefits that can help buffer them from the effects of financial strain. Our results point to specific populations of low income families that would likely benefit from outreach designed to provide them access to TANF and Food Stamps. For example, non-English speaking households were less likely to receive both benefits than English speaking households. This finding was present even after controlling for whether or not the children were born in the U.S., as children who are citizens are eligible for federal benefits even if their parents are not. These families face additional barriers to

enrollment, such as language challenges and fear of providing information that could lead to deportation (Skinner, 2011). Reducing these barriers could increase the number of non-English speaking families that participate. We also find that low income families living in urban areas are more likely to receive benefits than their counterparts in suburban areas. This suggests that making information about and access to enrollment procedures available to non-urban areas may be an important outreach activity for states to consider.

Our coverage measure, found to significantly predict individual families' take-up of TANF, was a broad measure of how well a state does at providing cash and food assistance to low income families. It included a number of policy choices, including eligibility requirements, sanctions and time limits, and actual implementation of enrollment procedures. In contrast to our findings, many studies that have examined specific state policy choices related to TANF, such as sanctions or requirements, did not find strong relations between state policy characteristics and individual family outcomes (Dunifon et al., 2006; Teitler et al., 2007). In addition, we found that non-TANF state policies, specifically Food Stamp generosity and Medicaid/SCHIP generosity, also predicted TANF receipt. Together, these findings suggest that states need to think holistically about the design of their welfare programs and consider multiple avenues of change to increase enrollment among low income families. That is, when addressing the challenges of providing benefits to low income families, states need to address multiple policy levers that can increase access to available benefits. These levers occur in multiple domains and at multiple levels, including state-level decisions on eligibility, work requirements, and benefit levels, and each influences who is eligible and who will apply for benefits. Additionally, local-level implementation choices, such as providing outreach to different communities and ethnic groups, need to be considered. Increasing program coverage will require avowed commitments and

concerted efforts by states across multiple policy choices and practices.

Interestingly, rates of TANF and Food Stamp utilization have responded differently to the current economic recession. Although the number of families eligible for both programs has increased, due in large part to high levels of unemployment, enrollment in the two programs has varied. While Food Stamp receipt has drastically increased in recent years, rates of TANF receipt have grown at a much slower pace, and in some states, have remained steady or actually declined (Pavetti & Rosenbaum, 2010). Pavetti and Rosenbaum (2010) provided a number of insights into why Food Stamps responded so effectively, namely that because Food Stamps a is federally funded program, the state budget crises of recent years did not impact it, and that because the eligibility procedures are straightforward and standard across states, low income families were able to access benefits easily and quickly. The authors also provided suggestions for improving TANF's ability to respond to the economic crisis. In particular, easing the job requirements in the TANF program would make it easier for more families to participate. For example, allowing vocational education as a substitute for work beyond the one-year time limit and extending the time allowed for job searches would both help families in this time of scarce job opportunities (Pavetti & Rosenbaum, 2010). In sum, it is important to consider how program characteristics can enable safety net programs to provide high coverage in times of greater need.

5.4 Conclusions

This study has demonstrated that relatively few low income families (with incomes below 200% of the Federal poverty line) receive the "safety net"' benefits that are targeted to them, but also that families with more health and economic hardships are most likely to receive benefits. Our state-level findings suggest that families in states that have higher TANF coverage rates are more likely to receive TANF benefits. In light of the low number of families that utilize benefits

and the current economic downturn, states should consider policy solutions that will provide a safety net that reaches a much larger portion of the families in need.

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Table 1
Descriptive statistics for key model variables for families with incomes below 200% of FPL.

	Mean/Proportion	SD
Focal Outcomes		
TANF Receipt	.15	--
Food Stamps Receipt	.36	--
Family-Level Predictors		
Income less than 50% FPL	.18	--
Income between 50% & 100% FPL	.33	
Income between 100% & 150% FPL	.25	
Income between 150% & 200% FPL	.24	
Parent Education (1=HS or less)	.60	--
Black	.24	--
Hispanic	.28	--
Asian	.05	--
Other	.06	--
White	.37	--
Marital Status (1=married)	.51	--
Maternal Emp. (1=not employed)	.42	--
Child born in U.S.	.96	--
Primary language spoken is English	.96	--
Urban	.50	--
Rural	.14	--
Suburban	.36	--
Maternal Health (1=excellent/good/fair)	.85	--
Maternal Depression (logged)	.39	.30
Child Health (1=excellent/good/fair)	.95	--
Residential Instability (# of moves)	1.41	1.57
Financial troubles less than 1 year	.20	--
Financial troubles more than 1 year	.15	--
Marginal Food Security	.15	--
Low/Very Low Food Security	.18	--
Food Secure	.67	--
State-Level Predictors		
TANF Coverage	.78	.37
TANF Generosity (in thousands of $)	4.14	1.71
FS Coverage	.79	.13
FS Generosity (in thousands of $)	2.25	.23
State-Level Covariates		
Medicaid Coverage	1.42	.32
Medicaid Generosity (in thousands of $)	1.70	1.63
Democrat Governor	.23	--
Democrat-controlled House & Senate	.47	--
Republican-controlled House & Senate	.28	--
Percent Black	.13	.09
Percent Female Head of Household	.25	.04
Percent Children in Poverty	.19	.05
Percent Immigrants	.002	.0017
Log of female employment wages	7.99	.23

Note: FPL = federal poverty line; TANF = Temporary Assistance to Needy Families.

Table 2
Correlations among model variables on families with income below 200% of FPL

	TANF Receipt	Food Stamp Receipt	Income Less than 50%	Income between 100% & 150%	Income between 150% & 200%	Parent Education	Black	Hispanic	Asian	Other	Marital Status	Maternal Employment
TANF Rec.	1.00											
FS Receipt	.50*	1.00										
Inc.< 50%	.25*	.33*	1.00									
100- 150%	-.11*	-.17*	-.27*	1.00								
150 - 200%	-.19*	-.33*	-.26*	-.32*	1.00							
Par. Educ.	.09*	.18*	.14*	-.05*	-.18*	1.00						
Black	.10*	.22*	.14*	-.05*	-.09*	.06*	1.00					
Hisp.	-.02	-.07*	.00	.00	-.10*	.16*	-.35*	1.00				
Asian	.00	-.02	.00	-.02	-.01	-.07*	-.13*	-.14*	1.00			
Other	.04*	.03*	.07*	-.02	-.02	-.06*	-.14*	-.15*	-.06*	1.00		
Marital	-.22*	-.32*	-.21*	.09*	.21*	-.13*	-.30*	.10*	.13*	-.06*	1.00	
Employ.	.15*	.15*	.13*	-.03*	-.10*	.11*	-.08*	.10*	.01	.02	.13*	1.00
Child U.S.	.04*	.07*	-.01	.01	.03*	.00	.08*	-.17*	-.07*	.04*	-.10*	-.07*
Eng. Lang.	.04*	.09*	-.02	.02	.10*	-.12*	.29*	-.58*	-.31*	.10*	-.21	-.14*
Urban	.08*	.07*	.04*	-.02	-.07*	.03*	.11*	.21*	.09*	-.07*	-.06*	.02*
Rural	-.02	.01	.02	-.01	.01	.01	-.05*	-.18*	-.08*	.16*	.02	.01
Par. Health	-.09*	-.14*	-.10*	.04*	.10*	-.10*	-.04*	-.05*	.01	.01	.07*	-.07*
Parent Dep.	.11*	.17*	.07*	-.02	-.07*	.06*	.10*	-.11*	-.04*	.00	-.15*	-.03*
Ch. Health	-.02	-.03*	-.06*	.01	.05*	-.04*	-.05*	-.01	.00	.01	.04*	-.04*
Res. Ins.	.07*	.10*	.01	.00	-.02*	-.03*	-.06*	-.05*	-.05*	.02	-.10*	.00
FT <1yr.	.00	.03*	-.01	.00	-.01	.00	.00	-.03*	-.08*	.03*	-.03*	-.03*
FT >1 yr.	.07*	.07*	.04*	-.01	-.01	-.05*	.00	-.09*	-.07*	.00	-.08*	-.04*
Marg. FS	.07*	.10*	.04*	-.01	-.07*	.03*	.04*	.00	-.01	.02	-.06*	.00
Low FS	.10*	.11*	.12*	-.04*	-.12*	.06*	-.01	.06*	.01	-.01	-.05*	.03*

*p<.05

Note: TANF Rec.= TANF Receipt; Inc. < 50% = Income below 50% of Federal Poverty Line, 100-150% = Income between 100% and 150% of Federal Poverty Line; 150-200% = Income between 150% and 200% of Federal Poverty Line; Par. Educ. = Highest parent education is more than high school degree; Hisp. = Hispanic; Marital= parent is married; Employ.=Mother is not employed; Child U.S. = Child is born in U.S.; Eng. Lang. = English is primary language spoken in the home; Par. Health= Parent Health; Parent Dep. = Parent Depression; Ch. Health= Child Health; Res. Ins. = Residential Instability; FT = Financial Troubles; FS= Food Security

Table 2 *continued*

	Child born in U.S.	English Primary Language	Urban	Rural	Parent Health	Parent Depression	Child Health	Residential Instability	Financial Troubles Less than 1 yr.	Financial Troubles More than 1 yr.	Marginal Food Security	Low/Very Low Food Security
TANF Rec.												
FS Receipt												
Inc.< 50%												
100- 150%												
150 - 200%												
Par. Educ.												
Black												
Hisp.												
Asian												
Other												
Marital												
Employ.												
Child U.S.	1.00											
Eng. Lang.	.26*	1.00										
Urban	-.06*	-.20*	1.00									
Rural	.06*	.17*	-.40*	1.00								
Par. Health	.01	.04*	-.02	.01	1.00							
Parent Dep.	.03*	.14*	.00	-.01	-.22*	1.00						
Ch. Health	.01	.03*	.00	.01	.15*	-.09*	1.00					
Res. Ins.	-.03*	.11*	.00	-.05*	-.06*	.11*	-.01	1.00				
FT <1yr.	.03*	.07*	-.01	.02	-.05*	.10*	-.02	.11*	1.00			
FT >1 yr.	.04*	.13*	-.04*	.03	-.07*	.12*	-.02	.16*	-.21*	1.00		
Marg. FS	.03*	.01	.02*	.00	-.06*	.09*	-.02	.02	.04*	.05*	1.00	
Low FS	-.03*	-.07*	.03*	-.04*	-.13*	.25*	-.05*	.08*	.09*	.15*	-.20*	1.00

*p<.05

Note: TANF Rec.= TANF Receipt; Inc. < 50% = Income below 50% of Federal Poverty Line, 100-150% = Income between 100% and 150% of Federal Poverty Line; 150-200% = Income between 150% and 200% of Federal Poverty Line; Par. Educ. = Highest parent education is more than high school degree; Hisp. = Hispanic; Marital= parent is married; Employ.=Mother is not employed; Child U.S. = Child is born in U.S.; Eng. Lang. = English is primary language spoken in the home; Par. Health= Parent Health; Parent Dep. = Parent Depression; Ch. Health= Child Health; Res. Ins. = Residential Instability; FT = Financial Troubles; FS= Food Security.

Table 3
Correlations among State Policy Variables(n=38)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. TANF Coverage	1.00													
2. TANF Generosity	.52*	1.00												
3. FS Coverage	.59*	.02	1.00											
4. FS Generosity	-.16	-.41*	-.03	1.00										
5. Medicaid Coverage	.40*	.26	.46	-.36*	1.00									
6. Medicaid Generosity	-.08	-.08	-.03	-.05	-.61*	1.00								
7. Democrat Governor	.00	-.18	.23	.00	.30	-.11	1.00							
8. House & Senate Dem.	.20	-.04	.33*	.02	.01	.17	-.07	1.00						
9. House & Senate Rep.	-.17	.04	-.33*	-.01	-.11	-.11	.03	-.62*	1.00					
10. % Black	-.12	-.51*	.24	.15	.00	-.11	.15	.24	-.43*	1.00				
11. % Fem. Head Hshld.	-.24	-.24	-.19	.05	.09	-.17	-.15	.21	-.31	.49*	1.00			
12. % Children in Poverty	-.25	-.24	-.34*	.46*	-.38*	.04	-.10	.24	-.15	.28	.56*	1.00		
13. % Immig.	.51*	.46*	.15	.05	.11	-.11	.04	-.13	.02	.01	-.10	-.04	1.00	
14. Log Female Wages	.24	.04	.18	.04	.23	-.26	.30	.05	-.18	.49*	.30	.14	.36*	1.00

* $p < .05$

Table 4
Summary of Logistic Models Predicting TANF Benefit Use among Low-Income Families (Below 200% of FPL) at Kindergarten

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Family Socio-demographic characteristics					
Income-to-Needs less than 50% FPL	1.70**	1.65**	1.65**	1.82**	1.86**
	(.17)	(.16)	(.17)	(.19)	(.20)
Income-to-Needs 100%-150% of FPL	.38**	.40**	.41**	.39**	.39**
	(.06)	(.06)	(.06)	(.07)	(.06)
Income-to-Needs 150%-200% of FPL	.16**	.18**	.18**	.16**	.16**
	(.02)	(.03)	(.03)	(.02)	(.03)
Parent Education (1=HS degree or less)	1.07	1.08	1.05	1.05	1.07
	(.11)	(.11)	(.11)	(.11)	(.11)
Black	.96	1.05	1.04	1.27	1.43*
	(.18)	(.18)	(.18)	(.17)	(.20)
Hispanic	.98	1.04	1.05	.83	.94
	(.28)	(.30)	(.30)	(.12)	(.13)
Asian	1.78	1.93*	1.69	1.22	1.23
	(.58)	(.59)	(.54)	(.40)	(.31)
Other	1.05	1.04	1.07	1.03	1.12
	(.17)	(.18)	(.18)	(.16)	(.18)
Marital Status (1=married)	.36**	.38**	.38**	.39**	.39**
	(.04)	(.04)	(.04)	(.03)	(.03)
Maternal Employment (1=not employed)	2.36**	2.40**	2.45**	2.39**	2.39**
	(.24)	(.25)	(.26)	(.26)	(.27)
Child Born in U.S.	1.60*	1.66*	1.57*	1.47	1.40
	(.35)	(.39)	(.35)	(.35)	(.33)
Primary Language Spoken in Home (1=English)	1.61*	1.57*	1.52*	1.88**	1.87**
	(.31)	(.30)	(.28)	(.43)	(.42)
City	1.47**	1.46**	1.45**	1.44**	1.36**
	(.17)	(.18)	(.18)	(.15)	(.14)
Rural	.86	.90	.92	1.22	1.07
	(.20)	(.22)	(.22)	(.22)	(.20)

Table 4 *continued*

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Family Experiences with Material Hardship					
Residential Instability (# of moves)		1.09** (.02)	1.09** (.02)	1.10** (.02)	1.09** (.02)
Financial Troubles for 1 year or less		.92 (.11)	.90 (.11)	.93 (.11)	.93 (.11)
Financial Troubles for more than 1 year		1.33* (.15)	1.29* (.14)	1.38** (.14)	1.41** (.15)
Marginal Food Security		1.60** (.19)	1.56** (.20)	1.57** (.21)	1.55** (.20)
Low or Very Low Food Security		1.55** (.13)	1.46** (.12)	1.41** (.11)	1.42** (.12)
Family Health Challenges					
Parental Health (1=fair/poor)			1.05 (.13)	1.06 (.14)	1.06 (.14)
Parental Depression (logged)			1.45** (.20)	1.55** (.21)	1.52** (.20)
Child Health (1=fair/poor)			.84 (.15)	.90 (.16)	.89 (.15)
State-level predictors					
TANF Coverage (Inclusion)				2.28** (.35)	2.82** (.73)
TANF Generosity (Adequacy)				1.22** (.04)	1.09 (.07)
State-level controls					
Food Stamp Coverage (Inclusion)					1.28 (.83)
Food Stamp Generosity (Adequacy)					.29** (.13)
Medicaid/SCHIP Coverage (Inclusion)					.57 (.23)
Medicaid/SCHIP Generosity (Adequacy)					.92* (.04)
Governor is a Democrat					.95 (.18)

Table 4 *continued*

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Democrat Controlled Senate & House					1.12 (.13)
Republican Controlled Senate & House					.63** (.11)
Proportion of Blacks in State Population					.07* (.08)
Percent Female Headed Households					8.61 (24.08)
Percent Children in Families below FPL					1.10 (2.20)
Proportion of Immigrants in State Population					.00 (.12)
Log of 10^{th} percentile female wage					.72 (.24)
Pseudo R^2	.17	.19	.19	.23	.23
N (rounded to nearest 10)	6200	6130	6020	6020	6020

Note: Standard errors are adjusted for clustering of families within states and are presented in parentheses. Coefficients are reported in Odd Ratios.
Note: Sample sizes are rounded to nearest ten per NCES regulations.
* $p < .05$;** $p < .01$.

Table 5
Summary of Logistic Models Predicting Food Stamp Benefit Use among Low-Income Families (Below 200% of FPL) at Kindergarten

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Family Socio-demographic characteristics					
Income-to-Needs less than 50% FPL	1.89** (.17)	1.86** (.17)	1.86** (.17)	1.87** (.17)	1.87** (.18)
Income-to-Needs 100%-150% of FPL	.29** (.03)	.29** (.03)	.29** (.03)	.29** (.03)	.30** (.03)
Income-to-Needs 150%-200% of FPL	.10** (.01)	.11** (.01)	.11** (.01)	.11** (.01)	.11** (.01)
Parent Education (1=HS degree or less)	1.50** (.11)	1.52** (.11)	1.48** (.11)	1.48** (.11)	1.48** (.11)
Black	1.72** (.17)	1.92** (.17)	1.95** (.18)	1.96** (.18)	2.15** (.25)
Hispanic	.85 (.08)	.91 (.09)	.92 (.09)	.94 (.10)	.97 (.10)
Asian	1.43 (.39)	1.67* (.43)	1.54 (.44)	1.55 (.45)	1.53 (.45)
Other	.95 (.13)	.96 (.14)	.98 (.15)	.99 (.16)	1.07 (.19)
Marital Status (1=married)	.37** (.03)	.38** (.03)	.39** (.03)	.39** (.03)	.38** (.03)
Maternal Employment (1=not employed)	2.31** (.20)	2.38** (.20)	2.40** (.21)	2.39** (.21)	2.38** (.21)
Child Born in U.S.	2.32** (.58)	2.63** (.69)	2.50** (.63)	2.49** (.63)	2.46** (.64)
Primary Language Spoken in Home (1=English)	1.79** (.25)	1.71** (.24)	1.62** (.22)	1.62** (.22)	1.62** (.23)
City	1.29** (.11)	1.28** (.10)	1.29** (.11)	1.29** (.11)	1.28** (.10)
Rural	1.10 (.14)	1.18 (.14)	1.22 (.15)	1.21 (.15)	1.16 (.19)

Table 5 *continued*

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Family Experiences with Material Hardship					
Residential Instability (# of moves)		1.14** (.03)	1.14** (.03)	1.14** (.03)	1.12** (.03)
Financial Troubles for 1 year or less		1.23** (.09)	1.19* (.09)	1.19* (.09)	1.21* (.09)
Financial Troubles for more than 1 year		1.31* (.15)	1.28* (.14)	1.28* (.14)	1.31* (.15)
Marginal Food Security		1.57** (.16)	1.51** (.16)	1.52** (.16)	1.47** (.15)
Low or Very Low Food Security		1.36** (.12)	1.20* (.11)	1.21* (.11)	1.19 (.11)
Family Health					
Parental Health (1=fair/poor)			1.39 ** (.13)	1.39** (.13)	1.39** (.13)
Parental Depression (logged)			1.59** (.18)	1.59** (.18)	1.57** (.19)
Child Health (1=fair/poor)			.77 (.14)	.77 (.14)	.76 (.14)
State-level predictors					
Food Stamp Coverage (Inclusion)				1.22 (.64)	1.14 (1.14)
Food Stamp Generosity (Adequacy)				.94 (.24)	.60 (.34)
State-level controls					
TANF Coverage (Inclusion)					1.16 (.26)
TANF Generosity (Adequacy)					.94 (.05)
Medicaid/SCHIP Coverage (Inclusion)					.84 (.47)
Medicaid/SCHIP Generosity (Adequacy)					.99 (.06)
Governor is a Democrat					.99 (.15)

Table 5 *continued*

	Socio-demographics	Material Hardship	Family Health	State Predictors	State Controls
Democrat Controlled Senate & House					1.20 (.21)
Republican Controlled Senate & House					.86 (.15)
Proportion of Blacks in State Population					.14 (.16)
Percent Female Headed Households					.23 (.40)
Percent Children in Families below FPL					8.94 (13.24)
Proportion of Immigrants in State Population					.00 (.00)
Log of 10^{th} percentile female wage					1.28 (.46)
Pseudo R^2	.26	.28	.29	.29	.29
N (rounded to nearest 10)	6210	6130	6020	6020	6020

Note: Standard errors are adjusted for clustering of families within states and are presented in parentheses. Coefficients are reported in Odd Ratios.
Note: Sample sizes are rounded to nearest ten per NCES regulations.
* $p < .05$;** $p < .01$.

Table 6

Summary of Logistic Models Predicting TANF Benefit Use from State TANF Policy Groups among Low-Income Families (Below 200% of FPL) at Kindergarten

	High Coverage High Generosity	High Coverage Low Generosity	Low Coverage High Generosity
High Coverage High Generosity	--		
High Coverage Low Generosity	.81	--	
	(.23)		
Low Coverage High Generosity	.59	.73	
	(.17)	(.23)	--
Low Coverage Low Generosity	.47**	.58*	.79
	(.10)	(.12)	(.19)

Note: Standard errors are adjusted for clustering of families within states. Coefficients are reported in Odd Ratios. Columns represent different reference groups.

* p <.05;** p < .01.

Table 7
Summary of Logistic Models Predicting Food stamp Benefit Use from State Food Stamp Policy Groups among Low-Income Families (Below 200% of FPL) at Kindergarten

	High Coverage High Generosity	High Coverage Low Generosity	Low Coverage High Generosity
High Coverage High Generosity	--		
High Coverage Low Generosity	1.16	--	
	(.29)		
Low Coverage High Generosity	1.05	.90	
	(.17)	(.29)	--
Low Coverage Low Generosity	1.35	1.16	1.29
	(.26)	(.31)	(.33)

Note: Standard errors are adjusted for clustering of families within states. Coefficients are reported in Odd Ratios. Columns represent different reference groups.
* $p < .05$;** $p < .01$.