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A Protective Association between SNAP Participation and Educational Outcomes Among Children of Economically Strained Households

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Abstract

With the recent cuts to the Supplemental Nutrition Assistance Program (SNAP), more information is needed to assess the impact these policies have on vulnerable children. As such, this study assesses the potential moderating effect of SNAP participation on the association between material deprivation and educational outcomes among children living in poverty ($n = 10\,971$, and $n = 14\,928$). SNAP participation was found to moderate the association between material deprivation and grade retention, indicating that SNAP may be contributing to grade retention among children living in poverty, which can have positive lifelong consequences.

Keywords

Food insecurity; SNAP; education

Introduction

Prevalence of poverty and food insecurity in the United States

The government of the United States currently measures and defines poverty using the federal *Poverty Guidelines*, which take into account household income and number of household members. This equated to a household income threshold of \$23 850 for a family of 4¹ in 2014, and 14.8% of the US population (or approximately 47 million people) lived below the federal poverty line (FPL) according to these guidelines.² Children in particular tend to be disproportionately affected by poverty. For example, in 2014, the National Center for Children in Poverty reported that 45% of children were living in low-income households, and 22% were living below the poverty line. This was approximately 29% and 6% higher, respectively, than the national average.³

Broadly speaking, living in poverty is associated with material deprivation and the inability to afford basic necessities including food.^{4–7} The inability to afford sufficient quantities of food for the household has been referred to as *food insecurity* and defined as a deficit of

nutritious food or an inability to access food in ways that are considered socially acceptable.⁸ Current data reveal that poverty and food insecurity are not only directly linked but have also risen steadily since the beginning of the great recession.^{1,2,9} In addition, families with children are among the most vulnerable to food insecurity and poverty nationally as shown by the disproportionately higher prevalence of food insecurity and poverty compared to households without children.^{3,8} More specifically, approximately 20.9% of children experienced food security in 2014, whereas the prevalence of food insecurity among adults was 13.7% during the same year.⁹

The negative effects of childhood poverty and food insecurity

Research to date has revealed the serious negative effects of childhood poverty and food insecurity on a child's physical health, as well as their cognitive and emotional development.¹⁰ Food insecurity has also been shown to affect academic performance including poor math and reading scores^{11,12} and being less likely to graduate from high school and to pursue higher education.^{13,14} In addition, food insecurity itself has been linked to repeating a grade, as well as higher rates of school absenteeism when compared to children who are in food secure households.¹⁵ Winicki and Jemison also revealed that the negative effects of food insecurity on educational outcomes occurs as early as kindergarten, with food insecurity leading to lower test scores and less knowledge acquisition throughout the school year.¹⁶

These negative effects on educational outcomes are of great importance given their detrimental impact on a child's life trajectory.¹⁷ One educational outcome in particular, namely, repeating a grade, has the highest economic and social costs because it leads to increases in rates of school dropout and incarceration, which, in turn, are linked to a myriad of other risk factors.^{18,19} For example, incarceration has been shown to lead to underemployment and lower wages well into adulthood,^{20,21} and dropping out of school is associated with an increased risk for school-age pregnancy.²² Thus, poverty and food insecurity among children significantly impact their lives well into adulthood and have the potential to contribute to the cycle of poverty for future generations.

Recent changes to the Supplemental Nutrition Assistance Program

One of the most significant ways in which the United States attempts to combat poverty and food insecurity is through the Supplemental Nutrition Assistance Program (SNAP), formerly called the Food Stamp Program. In fiscal year 2013, 83% of SNAP households were living below the FPL.²³ Furthermore, 57% of all SNAP benefits went to the 43% of households whose incomes were at or below 50% of the FPL, which equated to less than \$11 775 per year for a family of 4.²³ The SNAP program provides monthly benefits for eligible low-income households to purchase approved food items at authorized food stores. However, despite the exponential increase in food insecurity, only approximately 70% of eligible families with children participated in the program, according to the most recent wave of the National Survey of Children's Health in 2011.²⁴

In addition, despite the fact that SNAP was expanded as part of the Recovery Act of 2009, these benefits expired on November 1, 2013.⁶ The Agriculture Act of 2014 cut SNAP

benefits even further, with projections estimating that 850 000 households could lose an additional \$90 per month in benefits.²⁵ The majority of the cuts were created by setting a higher minimum for states' participation in the Heat and Eat program, with the assumption that states would not participate at the higher minimum. As of March 2014, 8 of the 26 states that participate in the Heat and Eat program had decided to increase the contribution to the new \$20 minimum, allowing those who would have had their benefits reduced to retain their current benefits.²⁶ Though this presents a temporary solution to the recent SNAP cuts, it increases the costs for states to get the full benefits for their residents at a time when many states are just reaching prerecession budget levels. In addition, it does not guarantee the future benefit levels if the states are faced with further economic strains or budget cuts in other areas.

Study aims

In light of the recent cuts and changes to the SNAP, as well as the existing literature that highlights the negative effects of food insecurity on educational outcomes, the focus of this article is to examine the association between SNAP participation, material hardship (including food insecurity), and educational outcomes among children living in poverty. More specifically, this study aims to (1) compare the characteristics of families with children participating in the SNAP program in comparison to those eligible families not participating, (2) explore the relationship between severe economic and material deprivation and child educational outcomes, and (3) examine the potential moderating effect of SNAP participation on the association between material deprivation and child educational outcomes. The current study consists of a secondary data analysis of the 2007 and 2011 waves of the National Survey of Children's Health (NSCH).^{24,27}

Methods

Data source: National Survey of Children's Health

This current analysis was conducted using the 2 most recent waves of the NSCH from 2007 and 2011.²⁸ The NSCH is a cross-sectional study that has been conducted 3 times and is sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration. The first survey was conducted in 2003, and the subsequent 2 waves of data were collected in 2007 and 2011. NSCH captures data on the physical and emotional health of children ages 0 to 17 years of age and their caregivers. Special emphasis is placed on factors that may relate to the well-being of children, including medical homes, family interactions, parental health/mental health, school and after-school experiences, service usage, and safe neighborhoods.

Participating families in the NSCH were identified via the National Immunization Survey already in the field as part of the State and Local Area Integrated Telephone Survey. Families were screened for eligibility for the NSCH. Once found to be eligible, representative samples were created within each state. Interviews were then administered with the final sample at each wave via a computer-assisted telephone interviewing system. If there was more than one child in the household, a child was randomly selected at the start of

the interview and referred to during the subsequent questions as the “selected child” or “SC.”

Study samples

The subgroups used in the current analysis from the 2007 and 2011 waves were living below the poverty line (see Table 1). The mean age of the school-age children included in the analysis was 11.4 ($SD \pm 3.46$) in 2011. Forty-three percent of the families described themselves as being a 2-parent household (i.e., biological or adoptive parents), and 37% reported being a household headed by a single mother. Over a third of the households (36%) in 2011 reported having one child, and almost the same amount (32%) reported having 2 children.

Almost a third of children (29%) had missed 11 or more days of school, approximately 80% usually or always finished their homework, and 16% had repeated a grade. In 2011, a little over half of the households reported that they had experienced not being able to afford basic necessities like food, clothing, and shelter (this domain was not captured in the 2007 wave of data collection). Sociodemographic characteristics remained fairly stable between 2007 and 2011 with the exception of SNAP participation, which increased from 55% to 69%.

Variables

Demographic characteristics—Child age was a continuous variable and ranged from 6 to 17 because only school-age children were included. Child gender was dichotomous where female was coded as the reference group. Race of the child was measured with a categorical variable Hispanic, white, African American, multiracial, or other. This was later dichotomized for the final analysis to white and non-white. In addition, 3 variables were used to capture family structure. The first was a dichotomous variable that compared single-parent households to 2-parent households. The second was an ordinal variable that measured the number of children in the household (i.e., 1, 2, 3, or 4, or more children), and the third variable indicated the number of adults living in the household (1, 2, or 3 or more adults).

Independent variable: Difficulty affording basic necessities (material hardship)

—Difficulty affording basic necessities was measured using the following question: “Since [SC] was born, how often has it been very hard to get by on your family’s income; for example, it was hard to cover the basics like food or housing?” This was a binary variable with response categories coded as *never/rarely* and *somewhat/often*.

Potential moderating variable: SNAP participation—Participation in SNAP was measured using the following question: “During the past 12 months, did ([CHILD’S NAME]/any child in the household) receive Food Stamps or Supplemental Nutrition Assistance Program benefits?” This variable was coded dichotomously as “yes” or “no.”

Dependent variables: Educational outcomes—For this study, 3 outcome variables were examined. The dependent variables include whether the child did all required homework, whether he or she missed 11 or more days of school during the previous 12 months, and whether the child ever repeated a grade. The variables were coded

dichotomously, where *never/rarely/sometimes* was coded as 0 and *usually/always* was coded as 1.

Data analysis

To carry out the aims of this study, a subsample of those living under the FPL and eligible for food stamps was created from the 2007 ($n = 10\,971$) and 2011 ($n = 14\,928$) waves of the NSCH. This poverty subsample represented 16% ($n = 95\,677$) of the 2011 wave, which was a 4% increase from the previous wave in 2007 ($n = 91\,642$). Our first study aim was to examine differences between families participating in SNAP compared to eligible families not receiving SNAP. Families living below the FPL participating in SNAP were compared to those living below the FPL and not participating in SNAP on a range of demographic characteristics, including age of child, child gender, family structure (e.g., single-mother household, 2-parent household), and difficulty affording basic necessities.

Logistic regression and multivariate logistic regression analyses were conducted to assess for differences between the 2 groups across demographics and material deprivation using the 2007 and 2011 data sets. Statistical difference in age of child between the 2 groups was assessed via a *t* test. However, the variable related to difficulty affording basic necessities was only available in the 2011 data set; therefore, analyses with that variable were confined to that wave of data.

Next, logistic regression analysis was conducted to examine the association between difficulty affording basic necessities and educational outcomes. All demographic variables were included in the models to control for individual- and household-level variables that could be potential confounders. The third and final analysis examined the associations between difficulty affording basic necessities and educational outcomes with SNAP participation added as a potential moderating variable. More specifically, in order to assess for moderation, interaction terms were included in the models described for the second analysis related to difficulty affording basic necessities and educational outcomes.

Results

Differences between those families participating in SNAP and those who are eligible but not participating in SNAP

Results of the first analysis assessing the differences between those participating in SNAP and those families eligible but not participating in SNAP are summarized in Table 2. Results indicate that those families participating in SNAP are at increased odds of being headed by single women, of having younger children, and of having greater difficulty affording basic necessities when compared to those eligible families not participating in SNAP. In addition, the results of the multivariate logistic regression indicated that families participating in the SNAP program are more likely to have more children and fewer adults in the household. No differences in child gender were found between the 2 groups.

Associations between difficulty affording basic necessities and educational outcomes

Results of the second analysis revealed a positive association between difficulty affording basic necessities and all educational outcomes (see Table 3). These associations still remain highly statistically significant after controlling for demographics (i.e., family structure, child gender, child race, and child age). More specifically, those children who were in households that had experienced difficulty in affording basic necessities had an increased odds of not completing homework, repeating a grade, and missing 11 or more days of school in the past 12 months relative to those children in households that had not experienced difficulty affording basic necessities.

SNAP as moderator of material hardship on educational outcomes

The final analyses revealed that SNAP participation moderated the relationship between the difficulty affording basic necessities and repeating a grade. More specifically, SNAP participation had no moderating effect on the association between difficulty affording basic necessities and completing homework or missing 11 or more days of school in the last 12 months. However, SNAP participation did prove to significantly moderate the association between difficulty affording basic necessities and repeating a grade. This was shown by the statistical significance of the interaction term with SNAP participation (see Table 3) and confirmed by the stratified odds ratio analysis.

Discussion

Results of this analysis suggest that families participating in SNAP are more economically strained when compared to those families who are eligible and not participating in SNAP. More specifically, families participating in SNAP have more dependent children and fewer adults to provide for those children. The findings also suggest that families appear to be seeking government assistance when they are most in need and have difficulty affording even basic necessities. Lastly, the findings offer cross-sectional support for the significant association between SNAP participation and academic achievement for children living in poverty. More specifically, SNAP is inversely related to repeating a grade, which is particularly important because grade retention can have very significant long-term effects on the healthy development of children into adulthood.

In 2011, only approximately 70% of eligible families with children took advantage of the SNAP program, which begs the question why, despite experiencing difficulty affording basic necessities, the families choose not to seek out SNAP benefits. Previous research has suggested that a number of barriers may encourage nonparticipation in the SNAP program. First, many participants have cited administrative hassles in the process of enrollment.²⁹ There have also been reports of stigma from others for participating in a “welfare program,” which decreases a potential participant’s desire to enroll.²⁹ Families may also worry about becoming dependent on welfare programs such as SNAP.³⁰ Awareness of eligibility for the program and the process of providing the necessary financial information have also been cited as reasons for nonparticipation.²⁹ Many families are unaware that they are eligible or assume that they could not receive benefits based on their income or assets.^{29,31} Even if they

are aware of meeting the standards for eligibility, the process of calculating and providing necessary financial information is often a deterrent to further pursuing SNAP participation.

Limitations

One of the limitations of this study is that it is not a longitudinal study but rather 2 waves of data from similar (but distinct) samples across a 5-year time span. This limits the ability to infer causation between material deprivation and educational outcomes among children living in poverty. In addition, it is not possible to assess trends among the children and the long-term impact of material deprivation and poor educational outcomes with these particular data sets.

A second limitation centers on the items and data available in the National Survey of Child Health. The NSCH survey did not include items to directly measure the level of food insecurity in a household. As a result, it was not possible to control for food insecurity when assessing the relationship between material hardship and educational outcomes or to test the associations of food insecurity and educational outcomes directly. As a result, these findings may represent an underestimation of the positive effect of SNAP participation on educational outcomes.

The variable assessing whether a child is completing his or her homework is also limited. A report of the completion of homework does not necessarily indicate how well the child is scoring on homework assignments or whether they have accurately learned the information required for the assignments. Additionally, these responses were based on caregiver report, which may not be the most reliable source when measuring homework completion. For example, using school records when possible instead of caregiver account may be one method to improve the accuracy of such data.

Conclusion

This study highlights the lingering need of families with children living in poverty and how SNAP can play a positive role in meeting these needs. More specifically, SNAP may contribute to the educational advancement of children living in poverty, which could have life-long positive effects for them, their families, and society as a whole. Thus, this research adds to the evidence that calls for future, more rigorous examinations of the child outcomes associated with the SNAP program, particularly for families with children. It is also plausible that the ability to control for food insecurity in these analyses would have resulted in SNAP moderating the negative effects of material deprivation on all 3 educational outcomes in the analysis and not solely grade retention.

These findings also suggest that future research should focus specifically on how SNAP impacts the negative effects of food insecurity on a wide range of child outcomes over time given that the inclusion of food insecurity was not possible for these particular analyses. To our knowledge, there is no national data set that includes both educational outcomes for children and food insecurity to make this analysis possible. Ideally, longitudinal data would allow for the opportunity to assess the long-term impact of these associations and trends over time. Lastly, more qualitative research is needed to determine why families who are

eligible for SNAP and having difficulty affording basic necessities are not participating in the program. This knowledge could help researchers and policy makers to understand how to better reach those eligible and in need.

References

1. ASPE. Poverty Guidelines. Available at: <http://aspe.hhs.gov>. Accessed September 25, 2016
2. DeNavas-Walt, C., Proctor, B. Income and Poverty in the United States: 2014. Washington, DC: U.S. Government Printing Office; 2015.
3. Jian, Y., Ekono, M., Skinner, C. Basic Facts about Low-Income Children: Children Under 18 Years, 2013. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University; 2015.
4. Bhargava A, Jolliffe D, Howard LL. Socio-economic, behavioural and environmental factors predicted body weights and household food insecurity scores in the Early Childhood Longitudinal Study–Kindergarten. *Br J Nutr*. 2008; 100:438–444. [PubMed: 18275621]
5. Sarlio-Lähteenkorva S, Lahelma E. Food insecurity is associated with past and present economic disadvantage and body mass index. *J Nutr*. 2001; 131:2880–2884. [PubMed: 11694612]
6. Dean, S., Rosenbaum, D. SNAP Benefits Will Be Cut for Nearly All Participants in November 2013. Washington, DC: Center on Budget and Policy Priorities; 2013.
7. Rose D. Economic determinants and dietary consequences of food insecurity in the United States. *J Nutr*. 1999:129–517.
8. Coleman-Jensen, A., Nord, M., Andrews, M., Carlson, S. Household Food Security in the United States in 2011 Statistical Supplement. Washington, DC: US Department of Agriculture, Economic Research Service; 2012.
9. Coleman-Jensen, A., Rabbitt, M., Gregory, C., Singh, A. *Trends in Prevalence Rates of Food Insecurity and Very Low Food Security in US Households, 1995–2014*. Washington, DC: US Department of Agriculture, Economic Research Service; 2015.
10. Brooks-Gunn J, Duncan GJ. The effects of poverty on children. *Future Child*. 1997; 7(2):55–71. [PubMed: 9299837]
11. Jyoti DF, Frongillo EA, Jones SJ. Food insecurity affects school children’s academic performance, weight gain, and social skills. *J Nutr*. 2005; 135(12):2831–2839. [PubMed: 16317128]
12. Jyoti DF, Frongillo EA, Jones SJ, Al JET. Community and international nutrition food insecurity affects school children’s academic performance, weight gain, and social skills 1–3. *Commun Int Nutr*. 2010:2831–2839.
13. Crosnoe R, Mistry R, Elder G Jr. Economic disadvantage, family dynamics, and adolescent enrollment in higher education. *J Marriage Fam*. 2002; 64:690–702.
14. Swanson, CB. *Who Graduates? Who Doesn’t?: A Statistical Portrait of Public High School Graduation, Class of 2001*. Washington, DC: The Urban Institute; 2004.
15. Alaimo K, Olson C, Frongillo E. Food insufficiency and American school-aged children’s cognitive, academic, and psychosocial development. *Pediatrics*. 2001; 108:44–53. [PubMed: 11433053]
16. Winicki J, Jemison K. Food insecurity and hunger in the kindergarten classroom: its effect on learning and growth. *Contemp Econ Policy*. 2003; 21(2):145–157.
17. Christle CA, Jolivet K, Nelson M. Breaking the school to prison pipeline: identifying school risk and protective factors for youth delinquency. *Exceptionality*. 2005; 13(2):69–88.
18. Roderick M. Grade retention and school dropout: investigating the association. *Am Educ Res J*. 1994; 31:729–759.
19. Wald J, Losen DJ. Defining and redirecting a school-to-prison pipeline. *New Dir Youth Dev*. 2003; 99:9–15.
20. Cook, J., Jeng, K. *Child Food Insecurity: The Economic Impact on Our Nation*. Chicago, IL: Feeding America; 2009.

21. Jimerson SR. On the failure of failure: examining the association between early grade retention and education and employment outcomes during late adolescence. *J Sch Psychol.* 1999; 37(3):243–272.
22. Manlove J. The influence of high school dropout and school disengagement on the risk of school-age pregnancy. *J Res Adolesc.* 1998; 8(2):187–220. [PubMed: 12294323]
23. Gray, KF., Genser, J. Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2013. Washington, DC: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support; 2014.
24. Child and Adolescent Health Measurement Initiative. 2011–2012 National Survey of Children’s Health (NSCH). Author; 2013.
25. Nixon R. House approves farm bill, ending a 2-year impasse. *New York Times.* Jan 30, 2014 :A14.
26. Fessler, P. States’ rebellion against food stamp cuts grows. Available at: <http://www.npr.org/sections/thesalt/2014/03/13/289849253/states-rebellion-against-food-stamp-cuts-grows>. Accessed September 25, 2016
27. Child and Adolescent Health Measurement Initiative. National Survey of Children’s Health (NSCH). Author; 2007.
28. Health Resources and Services Administration. US Department of Health and Human Services. The Health and Well-Being of Children: A Portrait of States and the Nation, 2011–2012. Rockville, MD: U.S. Department of Health and Human Services; 2014.
29. Coe RD. Nonparticipation in welfare programs by eligible households: the case of the Food Stamp program. *J Econ Issues.* 1983; 17:1035–1056.
30. Dodds JM, Ahluwalia I, Baligh M. Experiences of families using food assistance and welfare programs in North Carolina: perceived barriers and recommendations for improvement. *J Nutr Educ.* 1996; 28(2):101–108.
31. Osborne B, Sanders S, Taylor L, Daponte BO. Why do low-income households not use Food Stamps?: evidence from an experiment. *J Hum Resour.* 2014; 34:612–628.

Table 1Sociodemographic description of sample by year (2007: $n = 10\,971$; 2011: $n = 14\,928$).^a

Variable	Year	
	2007	2011
Affording basic needs, n (%)		
Never, rarely hard	NA	7504 (52%)
Somewhat, very often hard	NA	6987 (48%)
Race, n (%)		
Hispanic	3404 (32%)	4304 (30%)
White, non-Hispanic	3869 (36%)	5563 (38%)
African American, non-Hispanic	2307 (21%)	2681 (19%)
Multi/other, non-Hispanic	1156 (11%)	1937 (13%)
Child age, mean (SD)	11.7 (3.43)	11.4 (3.46)
Family structure, n (%)		
Two-parent, biological/adopted	4381 (40%)	6343 (43%)
Two-parent, step-family	752 (7%)	1251 (8%)
Single mother, no father present	4614 (42%)	5569 (37%)
Other	1136 (10%)	1510(10%)
Number of children in household, n (%)		
1	3600 (33%)	5286 (36%)
2	3610 (33%)	4845 (32%)
3	2204 (20%)	2825 (19%)
4+	1556 (14%)	1972 (13%)
Number of adults in household, n (%)		
1	2647 (24%)	3194 (23%)
2	5092 (47%)	7012 (51%)
3+	3161 (29%)	4652 (26%)
Missing 11+ days of school, n (%)		
0 days missed	1815 (72%)	2226 (71%)
11+ days missed	710 (28%)	914 (29%)
Finishes homework, n (%)		
Never, rarely, sometimes	1437 (21%)	1742 (19%)
Usually, always	5556 (79%)	7333 (81%)
Repeats a grade, n (%)		
No	5580 (80%)	7605 (84%)
Yes	1426 (20%)	1476 (16%)
SNAP participation, n (%)		
No	4875 (45%)	4420 (31%)
Yes	5851 (55%)	9960 (69%)

^aSNAP indicates Supplemental Nutrition Assistance Program.

Table 2

Bivariate analysis of child demographics, family structure, and difficulty affording basic necessities among families participating in SNAP versus eligible families not participating in SNAP in 2007 and 2011.^a

Variable	Odds ratio (confidence interval)	
	2007	2011
Affording basic needs ^b		
Never/rarely vs. somewhat/very often	NA	1.799 (1.672–1.935) **
Sex of child ^c		
Female vs. male	0.959 (0.889–1.035)	0.956 (0.891–1.027)
Race of child ^d		
White vs. non-white	0.991 (0.915–1.073)	0.863 (0.429–0.504) **
Child age (<i>t</i> value)		
Mean ages	9.72 **	14.51 **
Family structure ^e		
Single parent vs. 2 parents	0.399 (0.367–0.433) **	0.465 (0.429–0.504) **
Number of children in household		
1	Reference	Reference
2	1.168 (0.359–0.440) **	1.258 (1.156–1.369) **
3	1.345 (0.290–0.362) **	1.546 (1.395–1.712) **
4+	1.581 (1.064–1.788) **	2.045 (1.808–2.313) **
Number of adults in household		
1	Reference	Reference
2	0.397 (0.359–0.440) **	0.512 (0.462–0.568) *
3+	0.324 (0.290–0.360) **	0.387 (0.348–0.431) **

^aSNAP indicates Supplemental Nutrition Assistance Program.

^bNever/rarely = 0; somewhat/very often = 1.

^cFemale = 0; male = 1.

^dWhite = 0; non-white = 1.

^eSingle parent = 0; 2 parents = 1.

* *p* 0.01.

** *p* 0.001.

Table 3

Multivariate analysis of difficulty affording basic necessities and educational outcomes (2011).^a

	Completing homework		Repeating a grade		Missing 11+ days	
	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
Gender ^b	0.64 ^{***} (0.06)	0.65 ^{***} (0.06)	-0.41 ^{***} (0.07)	-0.41 ^{***} (0.07)	0.14 (0.09)	0.15 (0.09)
Age (child)	-0.14 ^{***} (0.01)	-0.15 ^{***} (0.01)	0.13 ^{***} (0.01)	0.13 ^{***} (0.01)	0.01 (0.01)	0.02 (0.01)
Race ^c	-0.01 (0.06)	-0.02 (0.06)	0.03 (0.07)	0.03 (0.07)	-1.19 ^{***} (0.09)	-1.19 ^{***} (0.09)
No. of children						
1 vs. 2	-0.10 (0.08)	-0.07 (0.08)	-0.16 (0.08)	-0.20 ^{**} (0.08)	-0.17 (0.11)	-0.21 (0.12)
1 vs. 3	-0.27 ^{**} (0.09)	-0.21 [*] (0.09)	-0.00 (0.09)	0.09 (0.10)	-0.25 (0.13)	-0.33 [*] (0.13)
1 vs. 4+	-0.27 ^{**} (0.10)	-0.18 (0.10)	0.19 (0.10)	0.05 (0.10)	-0.36 [*] (0.15)	-0.47 ^{**} (0.15)
No. of adults						
1 vs. 2	0.18 [*] (0.09)	0.17 (0.09)	0.01 (0.10)	0.01 (0.10)	-0.12 (0.14)	-0.13 (0.14)
1 vs. 3+	0.00 (0.10)	-0.03 (0.10)	0.08 (0.10)	0.13 (0.10)	-0.18 (0.15)	-0.13 (0.15)
Family structure ^d	0.29 ^{***} (0.08)	0.24 ^{**} (0.08)	-0.24 ^{**} (0.08)	-0.14 (0.08)	-0.35 ^{**} (0.12)	-0.26 [*] (0.12)
Difficulty affording basic necessities ^e	-0.49 ^{***} (0.06)	-0.39 ^{**} (0.12)	0.18 ^{**} (0.07)	0.45 ^{**} (0.13)	0.78 ^{***} (0.09)	0.94 ^{***} (0.17)
SNAP participation		0.29 ^{**} (0.01)		0.75 ^{***} (0.11)		0.67 ^{**} (0.16)
Difficulty affording × SNAP		-0.09 (0.14)		-0.45 ^{**} (0.15)		-0.33 (0.21)

^aSNAP indicates Supplemental Nutrition Assistance Program.

^bFemale = 0; male = 1.

^cWhite = 0; non-white = 1.

^dSingle parent = 0; 2 parents = 1.

^eNever/rarely = 0; somewhat/very often = 1.

* *p* 0.05.

** *p* 0.01.

*** *p* 0.001.