

Syracuse University

SURFACE at Syracuse University

Center for Policy Research

Institutes, Research Centers, and Campus
Groups

3-22-2023

Children in Economically Disadvantaged Households Have Lower Early Literacy Skills than their Higher-Income Peers

Michah W. Rothbart

Syracuse University, mwrothba@syr.edu

Colleen Heflin

Syracuse University, cmheflin@syr.edu

Gabriella Alphonso

Syracuse University, gaalphon@syr.edu

Follow this and additional works at: <https://surface.syr.edu/cpr>



Part of the [Educational Sociology Commons](#), [Education Policy Commons](#), and the [Social Welfare Commons](#)

Recommended Citation

Rothbart, M.W., Heflin, C., & Alphonso, G., (2023). Children in Economically Disadvantaged Households Have Lower Early Literacy Skills than their High-Income Peers. Syracuse University Center for Policy Research, Policy Brief Series. Brief #1.

This Policy Brief is brought to you for free and open access by the Institutes, Research Centers, and Campus Groups at SURFACE at Syracuse University. It has been accepted for inclusion in Center for Policy Research by an authorized administrator of SURFACE at Syracuse University. For more information, please contact surface@syr.edu.

Children in Economically Disadvantaged Households Have Lower Early Literacy Skills than their Higher-Income Peers

POLICY BRIEF #1
MARCH 22, 2023

Michah W. Rothbart, Colleen Heflin, and Gabriella Alphonso

Literacy is critical for numerous developmental outcomes and wellbeing among children, including academic performance, likelihood of graduating, behavioral problems, self-esteem, and health.^{1,2} Children entering kindergarten with high literacy skills are more likely to stay on track in school and perform well.^{3,4} Low literacy skills in childhood can also affect individuals into adulthood, with illiteracy connected to higher probabilities of unemployment and low-paying jobs, incarceration, and negative health outcomes.

Early literacy skills, including initial reading skills and decoding (i.e., matching sounds to letters and active efforts to understand printed works), are lower among children raised in low-income households.^{5,6} Because only low-income households are eligible for federal social income support programs like Temporary Assistance for Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), and Free or Reduced-Price Lunch (FRPL), participating in them can be used as an indicator of children's household economic status. However, the relationship between children's participation in these programs and their literacy skills when entering kindergarten had been unexplored until our research.

This brief summarizes findings from our recent paper published in [Children and Youth Services Review](#).⁷ We used administrative data on kindergarten cohorts entering Virginia public schools, including information on Phonological

KEY FINDINGS



Children in households participating in more than one social assistance program, (including Temporary Assistance for Needy Families [TANF], the Supplemental Nutrition Assistance Program [SNAP], and Free or Reduced-Price Lunch [FRPL]) have lower literacy skills when they enter kindergarten than children in households participating in fewer or no programs.



Literacy skills are highest among kindergartners that do not receive any of the social supports studied, followed by those eligible for school meals but that do not participate in the others, then those whose households participate in SNAP (but not TANF), and finally those whose households participate in TANF.



Our findings suggest that federal and state governments need to provide more supports for TANF and SNAP households in early childhood to improve literacy skills for children with the greatest needs.

Awareness Literacy Screening for Kindergarten (PALS-K) performance, child race/ethnicity and gender, certified FRPL eligibility, and household TANF and SNAP participation to examine relationships between participating in these three cash and food assistance programs and literacy skills in kindergarten.

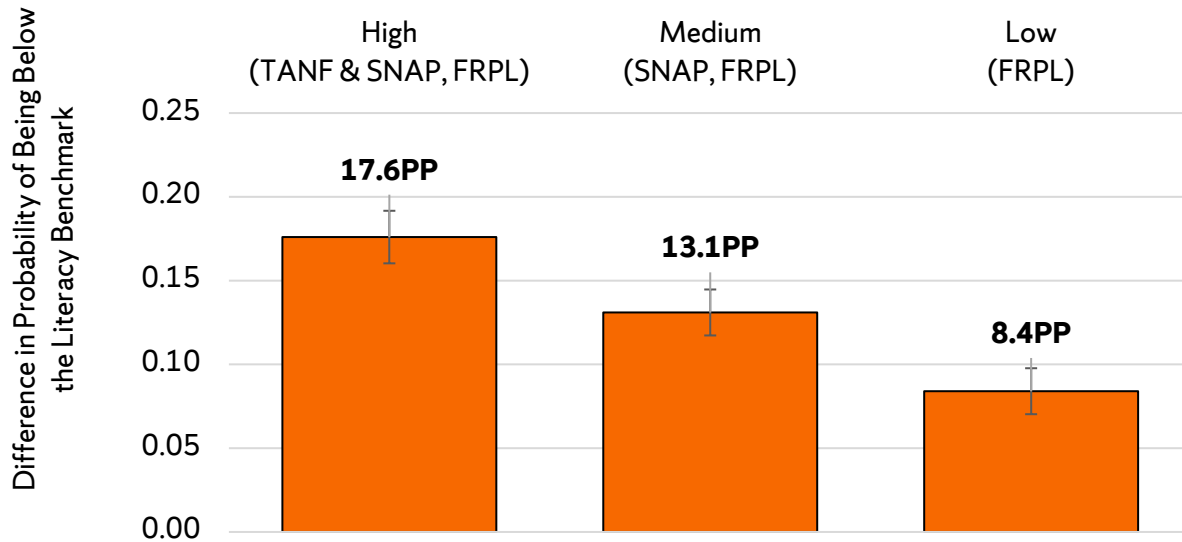


Figure 1: Children Participating in Multiple Social Programs are More Likely to Score Below the PALS-K Benchmark in the Fall of Kindergarten

Data Source: Virginia Department of Education and Virginia Department of Social Services Administrative Data, 2014-2017 (N = 296,433 first-time kindergarten students)

Note: PP=percentage points.

Children Who Participate in Social Programs Have Lower Literacy Skills than Those Who Do Not

Children participating in all three social support programs are more likely to perform below the benchmark literacy levels for kindergarten - by 17.6 percentage points (PP) - than their peers not participating in any of the programs (see Figure 1). Children participating in all three programs are also more likely to perform below the benchmark literacy level than those participating in only one program. Additionally, those participating in even one social program have a higher probability of performing below the benchmark literacy level than those who do not participate in any program.

These differences in literacy skills may reflect differences in economic burdens among households participating in social programs. Other notable differences that may impact literacy skills include the level of parental education, the number of adults in the

household, and the neighborhoods in which children live.⁸⁻⁹ However, our strategy of comparing students enrolled in the same kindergarten likely controls for some of these influences.

Addressing Economic Disadvantage Among Children is Critical for Improving Early Childhood Literacy

The literacy gaps we observed between children whose households participate in three federal social programs (SNAP, TANF, and FRPL) may reflect economic vulnerability in social program participating households. It has long been known that children from low-income households have lower literacy skills than those from more advantaged households. This disparity demonstrates a need to provide greater financial and educational supports for families participating in TANF and SNAP. While expanding the scope of social programs to include academic supports may address differences in early literacy skill development,

such interventions can be expensive. Therefore, targeting children who are most likely to have the greatest need is essential.

Data and Methods

Our sample included 296,433 first time kindergarten students attending 1,044 public schools in 135 districts in Virginia between 2014 and 2017. We used data on children's phonological awareness (i.e., matching sounds to letters and active efforts to understand printed works) and literacy scores in the fall of kindergarten in Virginia PALS-K. We also used data on eligibility or participation in cash and food assistance programs. We estimated patterns of literacy skills by program participation. Further details on our methods can be found in the [published study](#).⁷

References

1. Zajacova A., & Lawrence E.M. (2018). The Relationship Between Education and Health: Reducing Disparities Through a Contextual Approach. *Annual Review of Public Health*, 39:273-289.
2. Healthy People 2030. (n.d.). Education Access and Quality. Retrieved from: <https://health.gov/healthypeople/objectives-and-data/browse-objectives/education-access-and-quality>
3. Foster, W. A., & Miller, M. (2007). Development of the Literacy Achievement Gap: A Longitudinal Study of Kindergarten Through Third Grade. *Language, Speech & Hearing Services in Schools*, 38(3), 173-181.
4. Xue, Y., & Meisels, S. J. (2004). Early Literacy Instruction and Learning in Kindergarten: Evidence from the Early Childhood Longitudinal Study - Kindergarten Class of 1998-1999. *American Educational Research Journal*, 41(1), 191-229.
5. Chall, J. S. (1983). Stages of Reading

- Development. New York: McGraw-Hill.
6. McBride-Chang, C. (2014). Children's Literacy Development. *Routledge*.
7. Rothbart, Michah W., & Heflin, C. (2023). Inequality in literacy skills at kindergarten entry at the intersections of social programs and race. *Children and Youth Services Review*, 145, 106812.
8. Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & Coll, C. G. (2001). The Home Environments of Children in the United States, Part I: Variations by Age, Ethnicity, and Poverty Status. *Child Development*, 72(6), 1844-1867.
9. Chaudry, A., Morrissey, T., Weiland, C., & Yoshikawa, H. (2017). *Cradle to Kindergarten: A New Plan to Combat Inequality*. New York: Russell Sage Foundation.

Acknowledgements

Financial support was provided by the U.S. Department of Agriculture, Economic Research Service (cooperative agreement #58-4000-8-0036R). We acknowledge the services and support of the Virginia Department of Social Services and Department of Education. We also thank Zoé Tkaczyk, Alexandra Punch, Shannon Monnat, and Alyssa Kirk for editorial assistance on this brief.

Recommended Citation

Rothbart, M.W., Heflin, C., & Alphonso, G., (2023). Children in Economically Disadvantaged Households Have Lower Early Literacy Skills than their High-Income Peers. Syracuse University Center for Policy Research, Policy Brief Series. Brief #1.

About the Authors

Michah W. Rothbart (mwrothba@syr.edu) is an Assistant Professor in Public Administration and International Affairs and a Senior Research Associate in the Center for Policy Research in the Maxwell School of Citizenship and Public Affairs at Syracuse University (SU). **Colleen**

Heflin (cmheflin@syr.edu) is an Associate Dean in the Maxwell School and Chair and Professor in Public Administration and International Affairs, a Senior Research Associate in the Center for Policy Research and Lerner Center for Public Health Promotion and Population Health, and an affiliate of the Center

for Aging and Policy Studies in the Maxwell School at SU. **Gabriella Alphonso** (gaalphon@syr.edu) is a student in the master's in public administration (MPA) program, and Graduate Research Assistant in the Maxwell School at SU.



The Syracuse University Center for Policy Research supports policy-relevant research and disseminates knowledge that enables leaders to make informed policy decisions and provide effective solutions to critical challenges in our local region, state, country, and across the world.

426 Eggers Hall • Syracuse • New York • 13244
(315) 443-3114

<https://www.maxwell.syr.edu/research/center-for-policy-research>