SCHOOL of PUBLIC AFFAIRS American University • Washington, DC

SPA Policy Brief Beyond The Classroom: The Case for Public Preschool

Understanding the broad impacts of public preschool – beyond even the children who directly attend – is key to the debate about future expansions. Previous research has linked preschool attendance with direct effects for attendees,^{1,2,3,4,5,6} including improved school readiness at kindergarten entry, improved behavior,^{7,8,9,10} and a reduced likelihood of grade retention, with children from disadvantaged backgrounds showing greater benefits.^{11,12,13} But do these advantages extend outside of the school, to the larger communitu?

SPA Professor Taryn Morrissey and coauthor Michah Rothbart (Syracuse University), using Virginia administrative data from 2015 through 2019 (~630,000 students), found that children in communities with expansions in the Virginia Preschool Initiative (VPI+) - the state's public pre-K program for children in low-income or otherwise at-risk households - showed changes in pre-K attendance and improved literacy outcomes. Specifically, VPI+ decreased the probability that children did not attend any licensed settings (by 6-7 percentage points), while increasing attendance in both public pre-K and private centers (5-8 and 2-3 percentage points, respectively). In addition, kindergarten literacy skills scores improved (5%-6% of a standard deviation) and children's risk of being identified as being below benchmark, a metric used for identifying children in need of extra help, decreased by one percentage point, translating to about 200 more students starting school at or above benchmark per year in these expansion districts alone, saving public funds, and potentially changing academic trajectories. These literacy effects were strongest among kindergarteners in lower-income households (those eligible for free or reduced-price lunch) but were also apparent among those in higher-income households, who likely were not eligible to attend VPI+, suggesting spillover or broader effects.



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KEY FINDINGS

• The implementation of a state-sponsored preschool program targeted to children in low-income families affects the early learning experiences and early literacy outcomes of the broader community.

• The expansion of public preschool in Virginia increased the probability that children attend both public pre-K as well as private centers, and children attend more hours of early care and education programming per week. However, children were less likely to attend Head Start or no licensed early care or education settings.

 At kindergarten entry, children in communities that expanded public preschool showed improved literacy skills. These effects were strongest among children in lower-income households, who were likely eligible for VPI, but children in higher-income families also showed benefits.

• Findings suggest that the benefits of public preschool extend beyond the classroom walls.

• These broader effects of public preschool have implications for public preschool program evaluations, which often compare children who attended to those in the same community who did not.

	Туре					Hours/Week			
Variables	Public (1)	(2)	(3)	Lic. home (4)	Unlic/Miss (5)	(6)	(7)	(8)	30+
VPI_Post	0.080*** (0.012)	-0.025*** (0.006)	0.019** (0.010)	0.002 (0.002)	-0.076*** (0.014)	-0.089*** (0.014)	-0.006 (0.005)	0.031*** (0.006)	0.064*** (0.011)
Sch & Yr FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Control Vars	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	631,914	631,914	631,914	631,914	631,914	631,914	631,914	631,914	631,914
Districts	129	129	129	129	129	129	129	129	129
Schools	974	974	974	974	974	974	974	974	974
R^2	0.190	0.107	0.310	0.024	0.107	0.112	0.108	0.098	0.155
Panel B: School F	E models, PS weighter	1							
VPI_Post	0.053*** (0.013)	-0.023*** (0.007)	0.035*** (0.010)	0.000 (0.002)	-0.065*** (0.015)	-0.092*** (0.015)	-0.003 (0.006)	0.032*** (0.007)	0.062*** (0.012)
Sch & Yr FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Control Vars	Y	Y	Y	Y	Y	Y	Y	Y	Y
PS weighted	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	610,419	610,419	610,419	610,419	610,419	610,419	610,419	610,419	610,419
Weight	330,746	330,746	330,746	330,746	330,746	330,746	330,746	330,746	330,746
Districts	129	129	129	129	129	129	129	129	129
Schools	974	974	974	974	974	974	974	974	974
R^2	0.228	0.090	0.332	0.019	0.140	0.146	0.112	0.096	0.179

ESTIMATED IMPACT OF VPI+ ON PREKINDERGARTEN TYPE AND HOURS, SCHOOL FE MODELS, 2011 TO 2019

Note: Sample includes Virginia first-time public school kindergarteners (2011–2019) taking PALS-K assessment in fall of kindergarten, excluding those in two later-adopting VPI+ districts, Frederick County and Virginia Beach City. Robust standard errors clustered by district in parentheses **p < 0.1, *p < .5, p < .1, Columns 1 to 5 show impacts of VPI+ expansion on the probability stat students in talenda the indicated preschool setting (public presc). Fig. 15-30, and 30 or more hours per week, respectively). Olumnes to 9 show impacts to nume hours blue student is in licensed bours per week (0, 1–15, 15-30, and 30 or more hours per week, respectively). Olumneds include school and year-fixed effects and controls for student characteristics, including student eligibility for free/reduced meaks, race/etinkeity, and gender. Panel B dows impact continues from software weighted by morpensity scores for choir of the direct transfer for VPI+ regrams expansion (applying a 0–1 boundary correction to density estimation of the propensity scores, bandwidth for propensity scores of choir of the direct VPI+ = Virginia Preschool Initiative VPI+ = Virginia Preschool Initiative VPI+ = Virginia Preschool Initiative VPI.

Estimated Impact of VPI+ on Prekindergarten Type and Hours, School FE Models, 2011 to 2019

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THE LANDSCAPE OF U.S. PUBLIC PRE-K

While most U.S. states offer some form of public preschool, access is uneven. Virginia began VPI in 1995,¹⁴ and expanded through VPI+ in 2015 to increase access among income-eligible children. Within VPI+ expansion and comparison districts, the team used linked administrative data from 2015-2019 on kindergarten enrollment, prekindergarten setting and hours per week, child demographic and socioeconomic characteristics, and performance on the Phonological Awareness Literacy Screening Kindergarten (PALS-K) assessment in the fall of kindergarten. This study is among a small but growing body of research examining the market and spillover effects of a targeted public preschool program.^{15,16,17,18}

IMPLICATIONS FOR POLICY AND RESEARCH

This study adds to the evidence about preschool's direct effects on the children who participate, and indicate that these benefits appear to spill over to the broader student population. The positive impacts of expanding means-tested public pre-K are large and perhaps more widely spread than previously thought. Control groups and counterfactuals of preschool evaluations should consider the potential indirect benefits of local public preschool availability and quality. Understanding the direct and indirect effects is key to understanding the full implications of public preschool expansions. The study has limitations: it included public preschool expansions in largely disadvantaged districts in Virginia, which may not be generalizable to other states or wealthier, whiter, or less metropolitan areas. These findings add to a large body of literature finding benefits of public preschool expansions. As public preschool expansions continue to be debated at local, state, and federal levels, these broader changes and potential benefits warrant greater discussion and research.

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