

INVESTING IN SCHOOLS IS INVESTING IN THE ECONOMY

Jackson, C K, Johnson, R. C, Persico, C. (2016) The effects of school spending on education and outcomes. *Quarterly Journal of Economics*. 131:1 (157-218). https://doi.org/10.1093/qje/qjv036

Prominent findings

A 10% increase in per/pupil spending each year for 12 years of public schooling resulted in

- •.46 additional years of completed education
- •6.1% reduction in annual incidence of adult poverty
- •9.6% higher earnings

Note: Observations of individual over time showed- A 2.8% increase in wages at age 20, about 8% during one's thirties, and 13.4% at age 45.

- Among low-income children, a 10% increased likelihood of currently being married and never previously divorced
- •District choices for spending additional dollars affected outcomes. Highly significant investments were-
 - -reduction in the student-teacher ratio (p -value< .01)
 - -more school days (p -value< .01)
 - -increase in base teacher salaries (**p** -value< .01) (NOTE-OR teacher salaries rank 13th in nation)

Robust research design

Study based on nationally representative data from children born between 1955-1985 and followed through 2011. (93,022 adult person-year observations of 15,353 individuals (9,035 low-income children; 6,318 non-poor children) from 1,409 school districts, 1,031 counties, and all 50 states and the District of Columbia)

Study examined the effects of increased per/pupil spending on educational attainment and long term outcomes on adult earnings and success in life.

Study includes an extensive literature review and offers substantive comparisons of findings.

Study also identified significant spending choices that affected outcomes.

Comparisons to previous studies

Most previous studies used test scores as measures of learning and recent studies have documented that effects centered on test scores are "imperfect measures of learning and may be weakly linked to adult earnings and success in life."

Most previous studies did not include long term follow ups and observational data

Long term economic implications

25% increase in per/pupil spending for 12 years of public schooling could eliminate the average achievement gaps between poor and non-poor income families (\$31,925 vs \$72,029 in 2000 dollars).

Researcher Bios

Dr. Kirabo Jackson, a labor economist at Northwestern University, studies education and social policy issues. He has analyzed several important aspects of education policy such as the importance of public school funding on student outcomes through adulthood, the effects of college-preparatory programs on students' college and labor market outcomes. Email: Kirabo-jackson@northwestern.edu

Dr. Rucker C. Johnson, Associate Professor at UC Berkley, studies the role of poverty and inequality in affecting life chances. He looks at the long-run impacts of school desegregation, Head Start, impacts of school spending via school finance reforms and Title I, & effects of child neighborhood and school quality on socioeconomic success and later-life health; the determinants of intergenerational mobility; the societal consequences of incarceration; effects of maternal employment patterns on child well-being; and the socioeconomic determinants of health disparities over the life course. Email: ruckerj@berkeley.edu

Dr. Claudia Persico, is an Assistant Professor of the Economics of Education and a faculty affiliate of the La Follette School of Public Affairs. She is also affiliated with the Center for Demography and Ecology and the Institute for Research on Poverty. As an economics-oriented policy scholar, she studies the intersection of inequality, education policy and early childhood health. Email: cpersico@wisc.ed