The Heckman Equation





Early Childhood Education: Quality and Access Pay Off

James J. Heckman is the Henry Schultz Distinguished Service Professor of Economics at the University of Chicago, a Nobel laureate in economics and an expert in the economics of human development.

Professor Heckman's comprehensive new study, Early Childhood Education, addresses two important issues in the debate over early childhood education programs: are they effective and should they be subsidized by the government. Heckman and co-authors Sneha Elango, Jorge Luis García and Andrés Hojman, find that disadvantaged children benefit the most from a variety of early childhood interventions and society receives a higher return from targeted investments. As a result, policy makers would be wise to use means-testing rather than universal subsidies for all children.

Making sense of multiple studies.

The variety of early childhood programs and their evaluations often leads to confusion about the overall effectiveness of public investment. *Early Childhood Education* makes sense of it all by gathering in one place the effectiveness of a wide range of means-tested and universal programs—including Head Start, state preschool programs, and demonstration programs such as the Perry Preschool Program and the Carolina Abecedarian Project. The study analyzes data from randomized controlled trials and less rigorous evaluations to compare treatments, treated populations and findings across programs. The results consistently show program effectiveness and the economic value of providing disadvantaged children with access to quality early childhood programs.

Programs work for the disadvantaged.

Heckman finds that effectiveness depends on program quality, the characteristics of those being served and their access to alternative programs. Government programs that provide disadvantaged families with access to high quality center-based care are better and more effective alternatives

than no formal care. Affluent families who can afford higher quality center-based and in-home care are more likely to do better with those alternatives, calling into question the economic effectiveness of influencing their choices with government subsidies.

Quality matters.

High quality programs produce high quality outcomes. The Perry Preschool Program and Abecedarian Preschool Project—long considered the quality gold standards—delivered better education, health-related behavior, social and economic outcomes for disadvantaged children who received treatment versus those who received none. Abecedarian, a comprehensive birth to age five program, had lasting effects on IQ, boosted academic and economic achievement and helped prevent the incidence of chronic disease and obesity in adulthood. Despite their costs, they more than pay for themselves in increased productivity and reduced social spending. However, the study also shows that less intensive programs such as Head Start still have significant short- and long-term positive effects for disadvantaged children and society.

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Head Start works.

Imperfections in the frequently cited Head Start Impact Study (HSIS) cloud the evidence of the program's effectiveness. HSIS does not address the lack of uniform quality across Head Start, control contamination in the evaluation and the lack of long-term follow-up. Heckman analyzes the work of three independent research groups that used HSIS data to assign participants into three distinct experiences: those who attended Head Start, those who received other center-based care and those who had home-based care. They found that Head Start had significant beneficial effects, was as good as other available center-based alternatives and was much better than what disadvantaged children would have received at home or with a relative. While HSIS lacks long-term follow up data, other studies have found Head Start to be effective when judged on multiple outcomes rather than just short-term cognitive gains. Across a number of different studies, positive effects were found on behavioral outcomes such as grade repetition and special education, as well as on health behaviors. Long-term, Head Start reduced obesity at ages 12 and 13, depression and obesity at ages 16 and 17, and crime at ages 20 and 21.

Lasting effects, not fadeout.

Quality early childhood education provides persistent boosts in socio-emotional skills even if the effects on cognitive skills diminish in the shortrun. The current obsession with cognitive fadeout obscures the important fact that socio-emotional skills have greater effects on later-life

outcomes than cognitive skills. For example, data from the Perry Preschool Program shows that increased academic motivation creates 30% of the effects on achievement and 40% on employment for females. Reduced externalizing behavior creates a 65% reduction in lifetime violent crime, 40% reduction in lifetime arrests and 20% reduction in unemployment. Positive later-life effects are consistent across other programs with long-term follow up and speak to the need to invest in programs that develop the whole child with a full range of skills.

Policy makers should invest in quality and access.

It makes dollars and sense to target disadvantaged children with quality early childhood programs rather than subsidize low quality universal programs. Investing public dollars in quality early childhood education for disadvantaged children will provide significant social and economic outcomes in the short- and long-term. However, disadvantage in early childhood is not just income based but also depends on the quality time parents can spend with their children and the parenting resources they can allocate for early development. Today's economic pressures force poor and middle-income parents alike to spend more time away from their children to make ends meet. The need for quality early childhood education is intensifying, the costs are increasing and many more parents will find themselves without the means to provide it. Every child needs quality early childhood education. Those most in need should receive the most help from policy makers. Those with means do best on their own—and that is best for everyone.

Elango, Sneha, Andrés Hojman, Jorge Luis García, and James J. Heckman. (2016). "Early Childhood Education." Forthcoming, in Moffitt, Robert (ed.), Means-Tested Transfer Programs in the United States II. Chicago: University of Chicago Press.

