The Heckman Equation





The Case for Investing in Disadvantaged Young Children

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It is an honor to be here today with Secretary Duncan and Secretary Sebelius to share this historic moment for our country. The Early Learning Challenge is a major step in helping states voluntarily build comprehensive early childhood systems that can produce substantial economic and social returns for generations to come.

I applaud the Early Learning Challenge being implemented today because it puts into place the wisdom of solid empirical science. A substantial body of research shows that parents matter and that supplementing parental resources and investing in disadvantaged young children promotes productivity and reduces inequality. Well-designed implementations of early childhood programs pass stringent cost-benefit tests and have high economic and social rates of return. They are one of the few options in the public policy arena that has none of the equity-efficiency tradeoffs that are true of most public policies. What is fair is also economically efficient and will promote the productivity of American society.

Hard empirical evidence shows that high quality early childhood systems foster the development of critical cognitive and socioemotional abilities, especially for disadvantaged children whose lack of family resources and access to early learning opportunities results in large achievement gaps that open before kindergarten starts. Voluntary early intervention with quality early learning attacks inequality at its source and boosts economic productivity.

Recent research teaches us three lessons that should guide any successful approach to child development.

Lesson 1: Develop the Whole Child

Many major economic and social problems such as crime, teenage pregnancy, dropping out of school, and adverse health are linked to low levels of skill and ability. Those with high levels of skill and ability succeed in life.

In promoting successful lives, policy makers need to recognize the multiplicity of human abilities. Currently, public policy in most countries around the world—and the U.S. is no exception—focuses on promoting and measuring cognitive ability as measured by achievement tests.

Scores on No Child Left Behind tests have become a principle target for evaluating the performance of schools in America. PISA tests play a similar role in Europe. This exclusive emphasis on cognition ignores the hard evidence that an exclusive focus on the scores of achievement tests neglects important noncognitive—social, physical and emotional—factors that promote success in school and in life.

There is no question that cognitive abilities are important determinants of socioeconomic success. However, there is also decisive evidence that socioemotional skills—physical and mental health, perseverance, attention, motivation, and self-confidence—are as important in predicting success in life. In many tasks in life, they are more important. There is hard evidence on the power of "soft" skills. They contribute greatly to performance in society at large and in workforce productivity.

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Lesson 2: Inequalities Open Up Early in Life

We live in an era of substantial and growing social and economic inequality. Research in economics, psychology, neuroscience, and genetics examines the origins of inequality and analyzes policies to alleviate it. A major research finding is that the accident of birth is a primary source of inequality. Families play a powerful role in shaping adult outcomes, but it is not just through transmitting their genes. Parental resources, skills and abilities matter greatly.

It is now well established that gaps in both cognitive and noncognitive—socioemotional abilities—between the advantaged and the disadvantaged open up early in the lives of children before they enter school. Family environments of young children are major predictors of these abilities.

Family environments in the U.S. and many other countries around the world have deteriorated over the past 40 years. A greater fraction of children are being born into disadvantaged families where the resources available for parenting are small. Due to growing inequality in parental resources and child rearing environments, the disparity in the resources available to the children of the haves compared to the resources of the have-nots has increased substantially. As a group, children from families at the top of the income distribution receive far more investment in parenting and schooling than ever before, and the disparity between the haves and the have-nots is widening.

This trend shows no sign of abating. In fact, the current economic downturn has accelerated it. Unchecked, it will reduce social mobility and create greater economic and social polarization in the next generation. It will also increase the burdens of ill health, crime, and educational and skill deficits for future generations of Americans. Failure to address this problem will result in greater economic deficits with fewer chances to generate revenue through productivity.

Lesson 3: Early Intervention is Far More Effective than Later Remediation

The skills that matter can be created. That is the solid promise of recent research for public policy.

Child poverty is not solely determined by the income available to families. It is most accurately measured by the parenting resources—the attachment, the guidance and the supervision accorded children, as well as the quality of the schools and the neighborhoods that parents can draw on.

Experimental evidence establishes the benefits of quality programs that supplement the early lives of children from disadvantaged families. This evidence is consistent with a large body of non-experimental evidence showing that the absence of supportive family environments harms children and diminishes their opportunities as adults.

If society helps early enough in the lives of children, it can improve cognitive and socioemotional abilities and the health of disadvantaged children. Such early efforts promote schooling, reduce crime, foster workforce productivity and reduce teenage pregnancy. They have rates of return to investment that are higher than the return to investments in the stock market even in normal times.

As programs are currently configured in many countries—and there is always room for improvement—improvements early in the life cycle of disadvantaged children have much higher economic and social returns than later-life remediation targeted towards disadvantaged adolescents, such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, adult literacy programs, tuition subsidies, or expenditures on police.

This substantial benefit from early investments arises because life cycle skill formation is dynamic in nature. Skill begets skill; motivation begets motivation. Motivation crossfosters skill and skill cross-fosters motivation. A healthy child free of asthma and lead poisoning is a child that is ready to engage, who will learn more and who is more likely to be a productive adult. If a child is not motivated and engaged to learn early on in life, the more likely it is that when the child becomes an adult, he or she will fail in social and economic life. The longer society waits to intervene in the life cycle of a disadvantaged child, the more costly it is to remediate disadvantage.

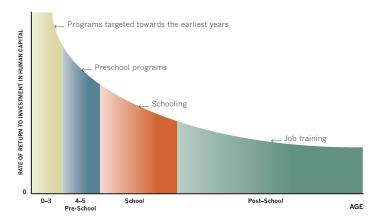
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Returns to early childhood programs targeted toward the disadvantaged are so high because they build the cognitive, socioemotional, physical and mental capabilities that create success in schools and work places. They give disadvantaged children some of the advantages already conferred on middle class and upper-middle class children, including important social and emotional skills and health. Acquisition of these early foundational skills has been shown to increase school persistence which, in turn, substantially increases productivity. For example, the rate of return to a college education for bright, motivated, and healthy adolescents is as high as 20% per annum.

Enriched family and social environments can create the skills that produce the capabilities that promote adult success. A major refocus of public policy is required to capitalize on the importance of the early years in creating opportunity and building capabilities and in producing skills for the workforce.1

The Early Learning Challenge is a critical first step in recognizing the importance of the early years and in helping states, local communities, private organizations and public institutions work together to build early childhood development systems that will promote better education, health, social, and economic outcomes for all and for many years to come.

Returns To A Unit Dollar Invested



Returns to a unit dollar invested at different ages from the perspective of the beginning of life, assuming one dollar intially invested at each age

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¹For further evidence, see Heckman (2008).