Investing in Our Young People

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The Argument in a Nutshell

1 - Many major economic and social problems such as crime, dropping out of high school and drug consumption can be traced to low levels of skill and ability in the population.
Figure 1d

Ever in Jail by Age 30, by Ability Males

Probability

Cognitive
Non-Cognitive

Percentile
The Argument in a Nutshell Continued

2 - Ability gaps between the advantaged and disadvantaged open up early in the life of the child.
Figure
Dynamics of Cognitive Skill Accumulation
Children Born in Families Below and Above the Poverty Line

![Graph showing the dynamics of cognitive skill accumulation for children born in families below and above the poverty line.](image-url)
Figure
Dynamics of Non-Cognitive Skill Accumulation
Children Born in Families Below vs Above the Poverty Line

![Graph showing the dynamics of non-cognitive skill accumulation for children born in families below vs above the poverty line. The x-axis represents age (0 to 14 years), and the y-axis represents standard deviation. The graph compares two lines: one for below poverty line and another for above poverty line. The line for below poverty line shows an upward trend, while the line for above poverty line shows a downward trend.](image-url)
The Argument in a Nutshell

3 - Life cycle skill formation is dynamic in nature. Skill begets skill; motivation begets motivation. If a child is not motivated and stimulated to learn and engage early on in life, the more likely it is that when the child becomes an adult, it will fail in social and economic life. The longer we wait to intervene in the life cycle of the child the more costly it is to remediate to restore the child to its full potential.
In analyzing policies directed toward children, we should recognize the multiplicity of abilities. Cognitive abilities are important for socioeconomic success.

But socio-emotional skills, physical and mental health, perseverance, attention, motivation, self confidence are also important for success in life.

Motivation, perseverance and tenacity feed into performance in society at large and even affect scores on achievement tests.
7 - Family environments (investments) create cognitive and socio-emotional abilities, as well as crime, health and obesity.

8 - Experiments support a large body of non-experimental evidence that adverse family environments promote adult failure.
Figure
Dynamics of Investments in Skills
Children Born in Families Below and Above The Poverty Line

![Graph showing the dynamics of investments in skills for children born in families below and above the poverty line.]

- Standard Deviation
- Age

Red line: Below Poverty Line
Blue line: Above Poverty Line
9 - If society intervenes early enough, it can affect cognitive, and socio-emotional abilities and the health of disadvantaged children.

10 - Early interventions promote schooling, reduce crime, promote workforce productivity and reduce teenage pregnancy.

11 - These interventions are estimated to have high benefit-cost ratios and rates of return.
Figure: Perry Preschool Program
Educational effects, by treatment group

Notes: *High achievement defined as performance at or above the lowest 10th percentile on the California Achievement Test (1970).
Figure: Perry Preschool Program
Economic effects at age 27, by treatment group

Figure: Perry Preschool Program
Arrests per person before age 40, by treatment group

Control

Treatment

Source: Perry Preschool Program. Juvenile arrests are defined as arrests prior to age 19.
The Argument in a Nutshell Continued

12 - Early interventions have much higher returns than other later interventions such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, tuition subsidies or expenditure on police.

13 - A major refocus of policy is required to understand the lifecycle of skill and health formation and the importance of the early years.
Figure
Effects of Early Intervention Targeted at Children Born in Families Below the Poverty Line
Figure

Percentage Change as Response to Early or Late Interventions Targeted to Children Born in Families Below Poverty Line

-0.6 -0.5 -0.4 -0.3 -0.2 -0.1 0 0.1 0.2 0.3

High School Graduation
Crimes
Drugs
Grade Repetition
Special Education

Early Intervention Late Intervention
Figure: Rates of Return to Human Capital Investment at Different Ages: Return to an Extra Dollar at Various Ages
Economics and Social Choice

- Economists recommend policies based on aggregate costs and benefits.
- The typical voter supports or is against a specific policy based on a comparison between personal costs/benefits.
- It is necessary to go behind the “Veil of Ignorance”.
In Summary

- The economic returns to early investments are high.

- They promote efficiency and reduce inequality.

- The returns to later interventions are much lower.

- The reason is the technology of skill formation: Skill begets skill and early skill makes later skill acquisition easier.
In Summary Continued

- Children from advantaged environments by and large receive substantial early investment.
- Children from disadvantaged environments more often do not.
- There is a strong case for public support for funding interventions in early childhood for disadvantaged children.
- Interventions in early childhood is a necessary condition for skill development.