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It All Starts with Beliefs: Addressing The Roots of Educational Inequities by Shifting Parental Beliefs

Based on BFI Working Paper 2021-127, "It All Starts with Beliefs: Addressing The Roots of Educational Inequities by Shifting Parental Beliefs," by John A. List, UChicago Department of Economics; Julie Pernaudet, UChicago Department of Economics; and Dana Suskind, UChicago Medicine, Department of Surgery

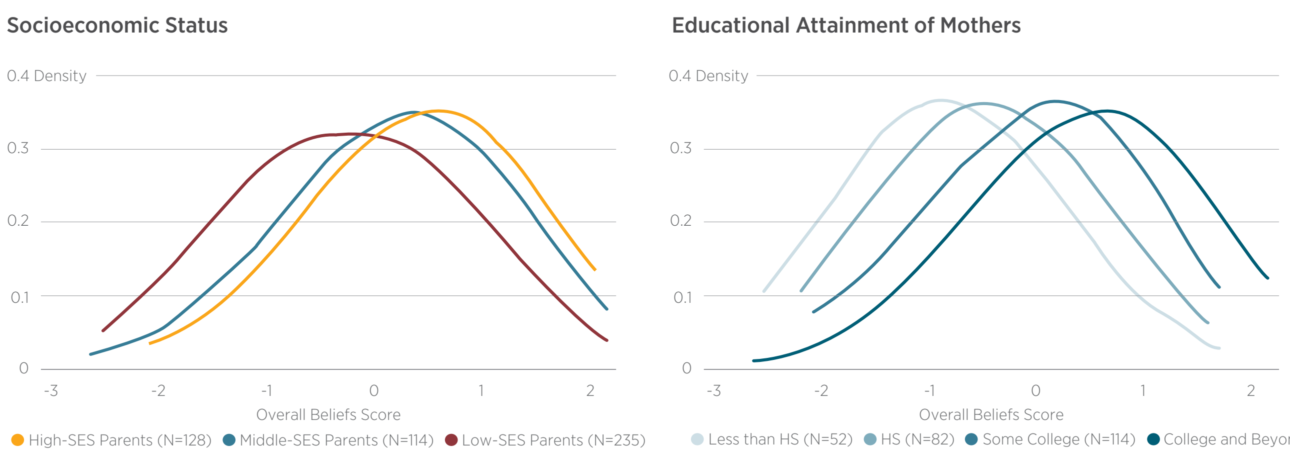
Influencing parental beliefs about child development can be an important pathway to raising parental investments and reducing socioeconomic gaps in children's skills; however, simple informational policies may not be sufficient.

Economic theory in recent decades has coalesced around the idea that human capital, including investments in early childhood education, is key to economic growth. What remains unsettled, though, is the where's, when's, and how's of such investments. For example, parental investments are critical in producing child skills during the first stages of development, with such investments differing across socioeconomic status. While these differences have been consistently observed across space and over time, we know little about their underpinnings.

This paper addresses that gap by examining sources of disparate parental investments and child outcomes to reveal potential mechanisms for improving those outcomes. To do so, the authors developed an economic model that invokes parents' beliefs about how parental investments affect child skill formation as a key driver of investments. Importantly, they also added empirical evidence through two field experiments that explored whether influencing parental beliefs is a pathway to improving parental investments in young children.

In the first field experiment, over a six-month period starting three days after birth, the authors used informational nudges informing parents about skill formation and best practices to foster child development, and they directed those efforts at parents who fall on the low end of a socioeconomic scale (SES) established in

Figure 1 • Socioeconomic Disparities in Parental Beliefs About How Parental Investments Affect Child Skill Formation



Note: The left panel of this Figure compares the belief distribution of low-SES (socioeconomic scale), mid-SES, and high-SES parents. The probability density functions are estimated using the kernel method. Low-SES is defined as household income below 200% of the Federal Poverty Line and the participating parent having at most a bachelors' degree. There are 235 parents in that category in our study. High-SES parents are defined as parents whose household income is above 400% of the Federal Poverty Line (128 observations), and mid-SES parents are neither low- nor high-SES parents (114 observations). The right panel shows the belief distributions across the educational attainment of the mother. Fifty-two mothers have less than a high-school diploma, 82 have a high-school diploma as their highest degree, 114 have some college education, and 231 have college degrees and beyond.

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the literature. In the second field experiment, the authors employed a more intensive home visiting program consisting of two visits per month for six months, starting when the child is 24-30 months old.

The authors partnered with ten pediatric clinics predominantly serving low-SES families in the Chicagoland area, and recruited families in medical clinics, grocery stores, daycare facilities, community resource fairs, and other venues across the city. In both experiments, the authors measured the evolution of parents' beliefs, investments, and child outcomes at several time points before and after the interventions, to find the following:

- There is a clear SES-gradient in parents' beliefs about the impact of parental investments on child development.

- Disparities matter. Parents' beliefs predict later cognitive, language, and social-emotional outcomes of their child. For instance, the authors find that beliefs alone explain up to 18 percent of the observed variation in child language skills.

- Parental beliefs are malleable. Both field experiments induce parents to revise their beliefs, and the authors show that belief revision leads parents to increase investments in their child. For instance, the quality of parent-child interaction is improved after the more intensive intervention (and to a smaller extent, after the less intensive intervention), and the authors provide evidence of a causal relationship with changes in beliefs about child development.

- Significantly, the observed impacts on parental investments do not considerably fade for those who participate in the home visiting program (but do fade for those in the lower-intensity experiment).

- Finally, the authors find positive impacts on children's interactions with their parents in both experiments, as well as important improvements in children's vocabulary, math, and social-emotional skills with the home-visiting program months after the end of the intervention. These insights are a key part of the authors' contribution, as they show that changing parental beliefs is a potentially important pathway to improving parental investments and, ultimately, school readiness outcomes.

University of Chicago economists, from Robert Lucas to Gary Becker and James Heckman, have proved instrumental in developing ideas related to human capital and early childhood development. This work extends those contributions to explore the influence of parental beliefs as they pertain to the value of parental investment in a child's development. In doing so, this research offers key insights for policymakers on the importance of providing information and guidance to parents on the impact of parental investments in children for improving school readiness outcomes. But not all interventions are the same. The authors' show that more intensive educational programs have roughly twice the impact on beliefs as less intensive interventions.

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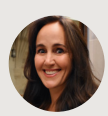

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