



Behavioral Insights and Parenting Lab

About TIME (Technology in Math Education)

THE CHALLENGE

Early math skills are the strongest predictor of both math and reading skills.

However, disadvantaged children are at risk for entering kindergarten behind more advantaged peers, creating an achievement gap that continues through later school and into adulthood.

THE STUDY

About TIME (Technology in Math Education) is a math intervention that assesses the efficacy of technology in building children's early math skills in the home environment for both low-income and higher-income families.

About TIME aims to experimentally test the comparative advantage of access to high-quality digital math apps in contrast to traditional math learning materials on two dimensions: 1) **efficiency** in building early math skills and 2) **usage** of materials. Efficiency is measured through lab-in-the-field assessments with parent-child pairs. In the large-scale experiment that follows, we assess child math skills before, during, and after the intervention. App usage is tracked through partnerships with several math app developers.

For the large scale study, diverse Chicago-area families with preschool-aged children are randomly assigned to one of two treatment groups or a control group:

- **Treatment group one** families receive a tablet preloaded with several high-quality math apps.
- **Treatment group two** families receive traditional learning materials for parents to do with their children.
- **Control group** parents receive neither the tablet nor any traditional learning materials.

About TIME

WHO WE ARE

The Behavioral Insights and Parenting Lab at the University of Chicago Harris School of Public Policy studies the science of parental decision-making through the lens of behavioral science. Research shows that a variety of behavioral supports can optimize the decisions that people make. The BIP Lab is dedicated to understanding how such behavioral supports can be used to motivate parental investments that promote children's development, especially in low-income families. The lab was co-founded in 2014 by University of Chicago Harris School of Public Policy Professors Ariel Kalil and Susan Mayer.

DIRECTORS

Ariel Kalil, PhD, is a professor at Harris Public Policy, where she also directs the Center for Human Potential and Public Policy. She is a developmental psychologist who studies economic conditions, parenting, and child development. In addition to her work at the BIP Lab, her current research examines the historical evolution of income-based gaps in parenting behavior and children's cognitive and non-cognitive skills.

Susan E. Mayer, PhD, is a professor and dean emeritus at Harris Public Policy. She has published numerous articles on the measurement of poverty, the effect of growing up in poor neighborhoods, and the effect of parental income on children's well-being. In addition to her work at the BIP Lab, she is engaged in a number of studies of intergenerational economic mobility.