



# Behavioral Insights and Parenting Lab

The MPACT Initiative: Math for Parents and Children Together

## THE CHALLENGE

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

Early math skills are the strongest predictor of both later math and reading skills. However, many parents spend little time promoting their children's math skills at home. Interventions to support parents' promotion of their children's math skills in the home environment may help build math and reading skills and narrow this gap. Unfortunately, few home-based interventions for low-income parents emphasize children's early math learning, and even fewer have been rigorously evaluated.

## THE STUDY

MPACT, Math for Parents and Children Together, is an initiative that teaches parents what effective math instruction for young children looks like, shows them how to integrate math learning into everyday routines, and encourages parents to spend time in these activities.

Building on the principles of the successful Parents and Children Together (PACT) project, which increased the time low-income parents spent reading to their children, MPACT uses insights from behavioral science to promote parents' engagement in building children's developmentally relevant math skills.

Chicago-area parents with children ages three to four who are currently enrolled in subsidized preschool programs are randomly assigned to one of three treatment groups or a control group:

- **Treatment group one** receives an activity booklet with developmentally appropriate, math-focused activities for parents to do with their child.
- **Treatment group two** receives the same intervention as group one and in addition receives behaviorally informed text messages.
- **Treatment group three** is lent a digital tablet preloaded with developmentally appropriate, math-focused applications.
- **The control group** receives no math tools or behaviorally informed intervention.

The goal of MPACT is to test how each of these different interventions **improves parents' confidence in building their children's math skills, decreases parents' math anxiety, and increases children's relevant math skills**, such as numeracy, number recognition and relationship, and counting. The study began in 2016 and is scheduled to conclude in 2020.

## FUNDING

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### WHO WE ARE

**The Behavioral Insights and Parenting Lab** at the University of Chicago Harris School of Public Policy studies the parental investments that promote children's success and how behavioral tools can leverage these investments to increase their return. Research shows that a variety of low-cost, light-touch "behavioral tools" can successfully change behavior in a number of key arenas of life, including health and financial savings behavior. Part of the Center for Human Potential and Public Policy at Harris, the BIP Lab is dedicated to experimental research to investigate whether these approaches can make a difference in parenting strategies to promote children's development in low-income families. The BIP Lab was founded in 2014 by Harris professors Ariel Kalil and Susan E. 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.



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