



# State-Level Investments in Early Childhood Education: Evidence of Short and Long-term Impacts

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In a variety of contexts, early childhood interventions are shown to develop human capital. As such, recent proposals at the federal and state levels aim to expand public early childhood education (ECE) programs. Due to rapid neurological development during the earliest years of life, prior to school entry, investments during this period have been shown to be among the most productive social policy investments with substantial returns for both individuals and society. While in most states kindergarten began as a voluntary program, starting in the 1970s some states evolved to mandating kindergarten attendance. Several changes in state mandatory school entrance laws across states over time provide an opportunity to causally identify the influence of an additional year of ECE on important individual education and labor market outcomes, comparing states with mandatory attendance to those with voluntary attendance. We examine the impacts of mandatory kindergarten attendance on long-run outcomes as a first look at how an additional year of education during early childhood will influence long-run outcomes, in a policy context where federal and state governments are actively considering universal preschool programs. Mandatory kindergarten presents an opportunity not only to the child who is exposed to a year of early schooling, but also to the parents, particularly mothers, who may choose to change their labor supply in response to the policy.

### Key Findings:

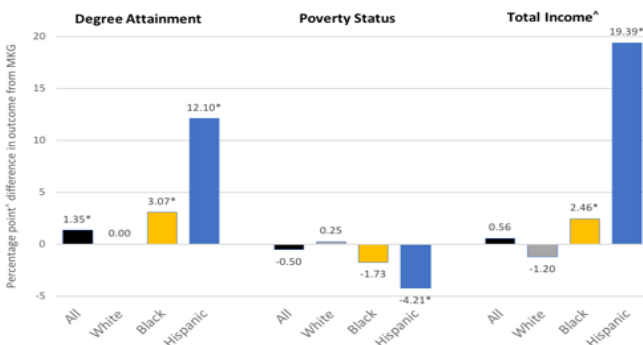
- Adoption of mandatory kindergarten increased kindergarten enrollment by 7.5 percentage points.
- Exposure to mandatory kindergarten increased the probability of completing an Associate’s degree or more by 1.4 percentage points.
- Impact of mandatory kindergarten policy differed across key population subgroups. The policy was most beneficial for Hispanic children in terms of their educational attainment, income, and reducing the likelihood of poverty. For Hispanic children’s educational attainment, we find a 13 percentage point increase for college degree completion relative to white children. Hispanic children exposed to mandatory kindergarten also experience a nearly 20 percent increase in wage and total income relative to white children exposed to the policy. We also find smaller but nontrivial differential impacts on education and income for Black children (3 percentage points) and for women (2 percentage points).
- Mothers of five-year-olds did not join the labor force as a result of kindergarten mandates, but did increase the number of hours worked.

### Implications for Policy:

Other studies have shown that providing additional state funding for kindergarten improved educational outcomes (grade retention, graduation), reduced institutionalization, and improved earnings for non-whites and children from low socioeconomic households (Cascio, 2010; Dhuey, 2011).

This study indicates that state investments in early education can have a meaningful impact on long-run educational and labor market outcomes, particularly for children and families of color who are traditionally underrepresented in higher education and in the top parts of the income distribution, and for women as well.

The Impacts of MKG on Long-Run Outcomes



Notes: Estimates for White, Black, & Hispanic are interaction coefficients that capture the differential impact of MKG for the particular subgroup. \* Statistically significant at .05 level. ^ Total income impacts shown as percentage increases.