Early Childhood Center-Based Care for Infants and Toddlers. First Findings from a Randomized Trial of the AeioTu program in Colombia.

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The last decades have seen growing global interest in public investments on disadvantaged young children. This is based on evidence of the importance of environmental influences on early development, the human and economic costs of poor developmental trajectories, and the potential for early interventions to alter those trajectories. There is increasing agreement about the value of early interventions, yet less agreement about the most effective and efficient forms of intervention. In particular, there is scarce evidence on the impact of center-based care on infants and toddlers. In developing, low-income countries there have been few comprehensive nutritional and educational interventions (most lacking a rigorous evaluation), and more less costly nutrition, stimulation or cash transfer interventions. In many, public policies have focused on relatively weak educational interventions. Little empirical information is available to assess whether earlier is better and to examine mechanisms that produce lasting effects.

We investigate the effects of an intensive, comprehensive early intervention program, named AeioTu, on the development of disadvantaged children in Colombia. Private-public programs such as AeioTu offer a sustainable alternative for more intensive early interventions than pure public provision might achieve. A rigorous experimental design will provide accurate estimates of program effects and be extremely informative for policy-design. The study builds on a) the literature on experimental design, b) findings from experimental studies in the U.S., c) evaluations in Latin America, the Caribbean, Africa, and Asia, d) on-going early childhood studies in Colombia, and e) socio-biological models of child development. The study is the first of its kind in Latin America.

This paper assesses motor, cognitive, linguistic, and socio-emotional development 8 months into treatment. Results show strong impacts on early development for children in the treatment group and show evidence of heterogeneous effects across gender and education background. We report on the design, measurement and first follow up for the Aeiotu Longitudinal Study. The randomized trial provides confidence of unbiased estimates of effects of treatment and was feasible given the context of excess demand. This paper will answer the following questions: What are the immediate and medium-term effects of participation in AeioTu on children's early development? To what extent do child and family characteristics moderate the effects on children?

Various instruments are used to assess different dimensions of child development; that is, cognitive, socio-emotional and motor development. Baseline indicators show evidence of successful randomization. Treatment and control groups (intent-to-treat) are on average equivalent. Through Intent-to-treat estimations and instrumenting enrollment using the randomization allow us to estimate program effect. We find strong evidence of developmental differences in favor of the treatment group only 8 months into treatment in receptive and expressive language. In addition, investigating into heterogeneous effects we find evidence of stronger impacts on females.