

Sequencing Two Early Childhood Interventions Back-to-back in India

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Sector(s): Education

Location: Odisha, India

Sample: 1,387 children

Target group: Children

Outcome of interest: Student learning Cognitive development

Intervention type: Early childhood development

AEA RCT registration number: AEARCTR-0003161

Research Papers: Cluster randomised trial of the effects of timing and duration of early childhood development interventions: Group Sessions or Home Visits for Early Childhood Development in India: A Cluster Randomised Trial

Partner organization(s): Pratham, Center for Early Childhood Education and Development, European Research Council (ERC), Economic and Social Research Council (ESRC), Yale University Cowles Foundation for Research in Economics, Government of Odisha, World Bank, Integrated Child Development Services, Jacobs Foundation, Dubai Cares

Exposure to poverty very early in life can harm individuals' cognitive development. Interventions that promote early-life stimulation can counteract these deficits and lay a foundation for success throughout life. Researchers are evaluating the impact of immediately following up an early childhood development intervention for one-to-three-year-old children with a second intervention for three-to-six-year-olds focusing on school readiness and cognition. Results are forthcoming.

Policy issue

Genetics and interaction with one's environment, both at home and at school, affect child development. Exposure to poverty can harm the brain development and function of children. Interventions that promote early-life stimulation can counteract these deficits and lay a foundation for success throughout life. However, there is limited information on the optimal timing and duration of Early Childhood Development (ECD) interventions. What are the effects of an ECD program on children ages three to six? Does administering an ECD program to children ages three to six have a different impact on their development than an intervention administered at ages one to three? And, can complementing one ECD intervention with a subsequent intervention sustain and

reinforce the effectiveness of the individual interventions?

Context of the evaluation

In India, pre-school services are provided through the Anganwadi program, which was started by the Indian government in 1975 as part of an effort to combat child hunger and malnutrition. Anganwadi centers are run by a woman from the local community and provide a range of services including supplementary nutrition, non-formal pre-school education, nutrition and health education, immunization, and health check-up and referral services. The centers are usually one room and host between eight and twenty children a day. They include a pre-school education component for children ages three to six, which focuses on school readiness and the development of positive attitudes toward education. However, these services are implemented inconsistently and are often not well known in the communities.

The ECD interventions evaluated here are implemented as a complement to the existing Anganwadi pre-school education program in three rural districts in the state of Odisha in India. Within these districts, most of the population lives in conditions of extreme poverty. In the sample, 75 percent of household heads are literate, 32 percent of mothers have not completed primary education, and 93 percent are Hindu, but with a sizable Muslim minority.



Photo: Pratham

Details of the intervention

Researchers are conducting a randomized evaluation to test the impact of combining an enhanced curriculum, mentors from the Indian NGO Pratham, and parenting meetings in Anganwadi centers on school readiness and cognition of young children, as well

as their behavior and health. They build upon an early childhood psychosocial intervention implemented from December 2015 to January 2018 that included nutritional education, individual stimulation at home, and group stimulation. Researchers randomly allocate villages within the treatment and comparison arms of the original study to either receive a new ECD intervention, or not. This study design will allow the researchers to understand the impacts of receiving each intervention by itself, as well as the combined effect of receiving the two interventions sequentially.

When designing the new intervention, program implementers expanded the existing curriculum based on scientific and contextual knowledge. The enhanced curriculum aims to promote various dimensions of child development, with a special emphasis on cognition and language. The curriculum also promotes socio-emotional development by emphasizing sharing, taking turns, helping others, and empathy.

As part of the intervention, activity corners are set up daily in each center. These include looking at books, pretend or role play, construction, and arts. Children are allowed to choose their activity for part of the day. Additionally, there is at least one structured learning session each day, when basic concepts such as size, shape, color, position, similarity, difference, and quantity are taught, as well as literacy and numeracy. There is also daily story time and singing.

In addition to the enhanced curriculum, mentors certified by Pratham—India's largest educational NGO—visit each center twice a week. They provide curriculum support, trainings, and ongoing coaching and mentoring. Both Pratham mentors and the women who run the Anganwadi centers receive a two-day refresher training four times a year.

Finally, parents are invited to join their children at the centers for ninety minutes each month. During these meetings, parents receive lessons on the importance of language during daily activities, the use of books, how to encourage learning, how to provide good nutrition and health care, and activities to be practiced at home. Parents are also allowed to take home books for specific amounts of time to reinforce the promoted activities.

Results and policy lessons

Results forthcoming.

Grantham-McGregor, Sally, Akanksha Adya, Orazio Attanasio, Britta Augsburg, Jere Behrman, Bet Caeyers, Monimalika Day et al. "Group sessions or home visits for early childhood development in India: a cluster RCT." *Pediatrics* 146, no. 6 (2020)