



## Cost-effective method to support families in low-income countries

**The first years of a child's life are crucial for the future. During these years, the brain develops rapidly, and therefore the nutrition and stimulation a child receives is of great importance. In low- and middle-income countries, however, it can be challenging to support children's well-being and development because the interventions are expensive. A study by, among others, our PhD student Akib Khan concludes that in countries with established support programs, there is a cost-effective way to introduce help focusing on early education. The program studied, implemented in Bangladesh, showed an internal rate of return of 18.9%.**

Before the program that the researchers study started, roughly 40% of children under the age of five in Bangladesh were below their expected growth curve. Only 13% of children between the ages of 3 and 5 participated in any form of childcare or early education activity. The researchers wanted to investigate whether visiting the families and providing educational materials for children between 3 and 18 months could improve the children's cognitive and social development. In order to keep the costs of the program down, this "educational intervention" was linked to an already established government program with a focus on nutrition and health. During the intervention, the combined program provided

nutrition support and offered educational materials.

18,000 children were included in the study, which lasted 15 months and consisted of monthly visits by program staff and educational materials. Half of the families received the educational tools and extra support, while the other half (the control group) received the usual visits with only nutritional information. The educational material consisted of cards with age-appropriate activities, two picture books, a book with information about children's development and a folder with guidelines for doctor's visits. In conversations with the



program staff, the families received additional suggestions for activities and support in their use of the material.

It turned out that in the families that received talks with a focus on both diet and education, the children developed better cognitively, linguistically and emotionally than in families that did not have access to the educational materials. To measure changes, the standard deviation measure (SD) was used, where a higher standard deviation (anything above 0) indicates measurable and positive improvements in children's development and anything above 0.10 SD shows a significant improvement. The intervention increased cognitive skills by 0.17 SD, language development by 0.23 SD, and socioemotional skills by 0.12–0.14 SD. In addition, acute malnutrition and underweight were reduced by 40% and 8% respectively compared to the control group.

The parents in the intervention group, especially the mothers, became more involved in the child's physical, psychological and social development. This was shown, for example, by mothers playing more variedly with their children and offering different types of activities. The mothers also gained better self-confidence in making decisions regarding the children's health. The result was that families participated in growth checks to a greater extent and also used other support programs offered. In addition, it was noted that older children in the household (aged 5-7 years) had started in some form of educational activity to a greater extent than in the control group.

The fact that children showed positive development in cognitive, social, emotional and health aspects emphasizes that when parents receive support, their children are better equipped for continued learning and growth. The study shows that there are ways to introduce these tools and resources in a cost-effective way by using existing infrastructure.

## Findings

Children developed better when families received support in both nutrition and early education.

The parents became more involved in the child's physical, psychological and social development during the intervention.

The intervention was cost-effective because it could be incorporated into already existing infrastructure.

## Read more

Bos, Johannes M., Abu S. Shonchoy, Saravana Ravindran, and Akib Khan. ["Early childhood human capital formation at scale."](#) *Journal of Public Economics* 231 (2024): 105046.

["Leveraging existing infrastructure to scale early childhood development interventions"](#) published in *VoxDev*.

## About the researcher



**Akib Khan** is a PhD student and his research concerns human capital in developing countries and international migration.

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