

BANGLADESH: Improving School Readiness with an Additional Year of Preschool

Early learning experiences promote child development and help children get prepared for school, providing children with a foundation for learning that can last into primary school and well beyond. Evidence suggests the positive impacts of these experiences

are particularly pronounced for disadvantaged children, who often have limited access to learning materials and stimulation at home, and policymakers around the world have expanded access to preprimary education. But how much preprimary education do children need? Is one year enough, or do children reap additional benefits from two years of preschool?

In Bangladesh, the World Bank's Strategic Impact Evaluation Fund supported a randomized evaluation to investigate these questions. Researchers measured the impact of offering families an additional year of preschool for children at age 4, compared to just the standard one-year of preschool starting at age 5. The program leveraged the classrooms and trained preschool teachers who taught the 5-year-old class to deliver the additional class for 4-year-olds (at a different time of day).

After two years, children offered the additional year of preschool had significantly higher literacy, numeracy, and social emotional development scores than children who only had public access to preschool starting at age 5. Gains in these school readiness measures were observed after one year, even though many families in the comparison group chose to send their children to other preschools. That gains persisted after two years, when most of the comparison group would have also benefited from the standard preprimary program for 5-year-olds, suggests the potential for high quality services delivered at age four to amplify the benefits of provision at age 5. The program cost approximately \$145 per child, making it affordable enough to be scaled up. In June 2020, the Government of Bangladesh announced that it would extend its provision of preprimary school to two years.



Source: Elizabeth Spier

Context

Over the last decade, Bangladesh has made considerable progress in reducing poverty and improving health and educational services, which has included expanding access to preschool education. In 2010, Bangladesh included two years of preschool education in its national education plan, starting with one year of preschool education in all primary schools, with the aim of gradually growing into a two-year program. In 2013, Save the Children supported the government's preschool expansion effort by partnering with representatives from the Ministry of Women and Children Affairs and the Ministry of Primary and Mass Education to develop the Early Years Preschool Program, which provides a second year of preschool to 4-year-old children in the two districts of Meherpur and Barisal.

The Early Years Preschool Program's curriculum was designed to seamlessly feed into the current government-approved, one-year pre-primary curriculum. Children receive instruction for about two hours per day in government primary schools in pilot communities. The lessons take place in existing preprimary

classrooms and with the same teachers, but the program has a different curriculum and materials from what the 5-year-old children would experience. Teachers are also tasked with carrying out monthly parenting sessions to build parents' awareness about providing a supportive and educational environment at home and providing materials and activities for home learning in literacy and mathematics.

Did you know...

In Bangladesh, access to preschool is expanding but:

- The share of children aged 36 to 59 months who attended early childhood education is still small at 19 percent.
- Less than a third of children aged 3-4 years are developmentally on track for literacy and numeracy. On the other hand, close to three-quarters are on-track socially and emotionally.
- Only 6 percent of children aged 3-4 years have 3 or more books at home.

Source: Multiple Indicator Cluster Survey 2019 (UNICEF)

Evaluation

This study used a randomized controlled trial to measure the impact of the Early Years Preschool Program on children's learning and development. The evaluation sought to measure the program's implementation, the effectiveness and cost of the program, and any gender differences in impact.

In December of 2016, the research team randomly assigned 100 schools in the Meherpur district of Bangladesh to either a treatment group or a comparison group. In October 2017, the research team conducted a census around all 100 schools to identify children who lived within a 15-minute walk of the school and were in the target age range, that is children expected to enroll in typical government pre-primary in 2019 and enter Grade 1 in 2020. In the 50 treatment school catchment areas, children selected for the study were invited to participate in the program at their local school during the 2018 school year. They would then go on to government preprimary school as usual in 2019. In the 50 comparison school catchment areas, children selected for the study were eligible to enroll in government preprimary school as usual in 2019 but did not have the Early Years Preschool program

available to them the year before.

To measure impacts, researchers collected baseline, midline, and endline data from both the treatment and comparison groups over two years. This data included background information on communities and schools, household surveys, and direct assessments of children's learning that used the International Development and Early Learning Assessment (IDELA) tool, which assesses children's emergent literacy and language development, emergent numeracy development, executive function, and approaches to learning. Researchers also gathered qualitative feedback about the program from the teachers themselves. The World Bank also gathered cost information about the program.

The baseline was conducted from December 2017 to January 2018. The midline took place one year later, from November 2018 to December 2018, and the endline took place exactly one year after that, from November 2019 to December 2019. Of the 1,856 children and families enrolled in the study, 1,801 (97 percent) participated at all three points in time.

Findings

Overall the program greatly increased enrollment rates and reached children without access to other options. About half of families offered the program enrolled their children in the program.

In the program group, around 50 percent of children attended the program, while 40 percent attended other preschool programs, and 10 percent did not attend preschool in 2018. In the comparison communities, 42 percent did not attend any preschool. In other words, the program led to a large increase in the proportion of children who were enrolled in preschool at age 4 and brought communities close to universal coverage. Notably, parents who were offered the program but sent their children to other preschools instead were more literate on average than parents whose children attended the EYPP. Taken together, these findings suggest the EYPP was not only successful in increasing access to preschool but reached children who needed it most.

After one year, when children were entering government preprimary school at age 5, those in the program group were developmentally more advanced than children in the comparison group, even though many children in the comparison group also attended preschool.

At the time of the midline, researchers found that children from communities offered the program had significantly higher literacy, numeracy, and social emotional development scores than children in the comparison group. They also had better motor development and displayed better approaches to learning. The impacts on approaches to learning were roughly equivalent to bridging the gap between children whose mothers completed primary education compared to those who did not.

The positive effects on learning and development persisted into year two, right before the children entered primary school—a remarkable finding given that nearly all children in both study groups had just completed the one-year government pre-primary class.

While some effects, such as motor development and approaches to learning, faded out by year two, the positive impacts on literacy, numeracy, and social-emotional development remained—with impacts of 18 percent, 26 percent and 38 percent, respectively, compared to children in comparison areas. These impacts were similar after one and two years. Researchers did not find any impacts of the program on children's executive function at either the one- or two- year mark.

The impacts on school readiness appear to be driven by the program providing an additional year of preschool to children who would otherwise not have had it, rather than being better than other available preschool programming. Because many children across Bangladesh don't have access to two years of preschool, researchers believe the impacts would persist at scale.

Girls reaped the largest benefits from the program, gaining more than boys in literacy, numeracy, and social emotional development, though boys also benefitted.

At both the one- and two-year marks, researchers found girls experienced larger benefits than boys in literacy, numeracy, and social emotional development, even though boys were equally likely to take-up the program. The reason for the larger impact for girls is not clear, however, and will therefore require further study.

The program was affordable to implement, costing approximately \$145 per child.

Based on calculations from the World Bank, the cost to implement the program in the 50 communities was US\$157,300 total, or \$3,146 per community. There were 1,084 beneficiaries, meaning the annual cost was approximately \$145 per child.

These estimates capture the total costs of providing the preschool program, including administrative and support costs, as well as use of classrooms and school and community contributions to teacher's salaries, not just the expenditures by Save the Children.

Conclusion

Overall, this evaluation reveals that providing young children an additional year of preschool is an effective way to improve school readiness for both girls and boys (and especially girls). The program benefitted children's school readiness skills, an effect that persisted to the start of Grade 1, and the program was very effective in getting 4-year-old children, who would not have enrolled otherwise, enrolled in a second year of preschool. Teachers were very positive about the program and had only minor suggestions for improving the curriculum.

Given the high level of success of the program, the research team recommended scaling it up in Bangladesh and keeping the existing program structure and curriculum. Because the intervention leverages existing resources—using the same classrooms and teachers as the government's preprimary school—the program would be relatively straightforward to scale. Indeed in June 2020, the Government of Bangladesh announced that it would extend its provision of preprimary school to two years.



The Strategic Impact Evaluation Fund, part of the World Bank Group, supports and disseminates research evaluating the impact of development projects to help alleviate poverty. **The goal is to collect and build empirical evidence that can help governments and development organizations design and implement the most appropriate and effective policies for better educational, health, and job opportunities for people in low and middle income countries.** For more information about who we are and what we do, go to: <http://www.worldbank.org/sief>.

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