

# Expanding Educational Opportunities through a Public-Private Partnership in Pakistan

**Researchers:**

Felipe Barrera-Osorio

David Blakeslee

Matthew Hoover

Leigh Linden

Dhushyanth Raju

Stephen Ryan

**Sector(s):** Education**Location:** Pakistan**Sample:** 199 rural communities**Target group:** Students Rural population Women and girls**Outcome of interest:** Enrollment and attendance Student learning Women's/girls' decision-making**Intervention type:** Scholarships**AEA RCT registration number:** AEARCTR-0002407**Research Papers:** Delivering Education to the Underserved through a Public-Private Partnership Pr...**Partner organization(s):** Sindh Education Foundation, World Bank

In an effort to increase enrollment and learning where public schools seem to be underperforming, many low- and middle-income countries have turned to private education providers. Researchers conducted a randomized evaluation to measure the impact of publicly funded private schools on primary student enrollment and test scores in rural Pakistan. The private school program significantly increased school enrollment and test scores, though it did not reduce gender disparities among students.

**Policy issue**

Large gaps in student enrollment persist across low- and middle-income countries, particularly for girls. As a result, many countries have begun to look for alternative solutions to traditional public schooling, such as providing public subsidies for enrollment in existing private schools or policies to establish new private schools where none are available. However, it is unclear whether the latter approach could overcome the conditions that deterred the construction of schools in the first place.

**Context of the evaluation**

Relative to other low- and middle-income countries, Pakistan's enrollment rates have been historically low. While most villages have one or two public schools, remote areas often lack government schools or have inadequate staffing and high rates of teacher absenteeism. In 2008-2009, only 72 percent of boys and 62 percent of girls ages 6 to 10 were enrolled in primary school. This rate was even lower in rural Sindh where this program was implemented, with boys at 65 percent and girls at 46 percent.

enrollment.

Private schools in Pakistan have been successful in terms of cost and quality, with low annual fees (roughly 2 percent of household spending) and evidence of producing higher test scores than government schools. However, only a small portion (5 percent) of primary school students in rural Sindh attended private schools in 2008-2009. Despite growth over the last 30 years, the availability of low-cost private schools remains low.

In Pakistan, private schools typically have lower operating costs compared to government schools. This is primarily because private schools pay their teachers lower wages. In government schools, teacher salaries are five times higher than those in private schools and account for 80 percent of the total expenses in public institutions. Private school teachers often have lower educational qualifications and are mostly women, as they have fewer alternative job opportunities. On the other hand, teachers in government schools are part of the civil service and are required to meet certain minimum educational qualifications. Their salaries are determined based on their seniority and formal qualifications. Private schools have the autonomy to set and design their own curriculum, while the government sets the curriculum for public schools



Schoolboys line up in Sindh, Pakistan.

Photo credit: J-PAL/IPA

## Details of the intervention

In collaboration with the Sindh Education Foundation (SEF), researchers conducted a randomized evaluation to measure the impact of publicly funded private primary schools on child enrollment in underserved districts in Sindh province, Pakistan. The Promoting Low-Cost Private Schooling in Rural Sindh (PPRS) program, funded by SEF, invited entrepreneurs to apply to create and operate primary schools in 263 selected villages that lacked educational resources.

After applications were processed, 199 of the qualifying 263 villages were randomly assigned to receive the PPRS program and subsidies based on student enrollment. Of the 199, 82 villages were randomly assigned to receive subsidies of INR ₹ 350 (US\$5 in 2008) for each child enrolled, regardless of gender. This subsidy amounted to less than half the cost of providing public schooling for a child. In an effort to close the enrollment gap between boys and girls, 79 villages of the 199 received a larger subsidy for the enrollment of girls, INR ₹ 350 for each male student and INR ₹ 450 (US\$6 in 2008) for each female student, with the aim to test if this incentive would increase the enrollment of girls. Program-school operators also received free school leadership and teacher training; and free textbooks, other teaching and learning materials, stationery, and bookbags. In the remaining 38 villages, no funding for schools was given and served as a comparison group. All children aged 5-10 within PPRS villages were able to enroll in the schools free of charge and regardless of gender.

In addition to assessing the impact on several educational outcomes, the researchers also looked at how schools distributed resources to see if they would maximize social benefit. In February 2009, before the education program began, a select group of households participated in a survey aimed to gather information about the household itself, the person in charge of running the household, and all children aged between 5 and 9 residing there. Two years after the program started, in April and May 2011, a survey was conducted where children were tested on their language and math skills, teachers were interviewed, and the location of the school was tracked using GPS. Attendance was assessed by SEF during periodic, unannounced monitoring visits

## **Results and policy lessons**

The PPRS program significantly increased primary school enrollment and test scores, while gender disparities among students were not impacted.

*Test scores:* Enrollment in a PPRS school led to an increase in test scores. Students in PPRS villages scored higher on math and language exams than those in comparison villages, a 19.6 percentage point increase from a base test score of 46.9 percent (approximately 41.7 percent increase).

*Enrollment:* More children enrolled in schools in villages where a PPRS-supported school opened. The introduction of the PPRS program significantly increased child enrollment by 32 percentage points (60 percent increase) from a base 53 percent enrollment in the comparison villages. In villages without a nearby government school, the intervention increased enrollment by 58 percentage points, whereas in villages where there was already a government school, the treatment increased by 20 percentage points. This suggests that a major benefit of the intervention is making schools more accessible. Moreover, by examining the characteristics of students enrolled across existing private, government, and program schools, researchers conclude program schools encouraged the enrollment of socioeconomically disadvantaged students.

*Gender disparity:* There was no overall differential effect of the program for boys and girls. Moreover, providing greater financial incentives to recruit girls did not lead to greater enrollment or test scores for girls than providing equal compensation for boys' and girls' enrollment.

*Cost-effectiveness:* Researchers estimate that per US\$100 spent on the program, school enrollment increased by 16 to 39 percentage points and test scores increased by 0.3 to 0.8 standard deviations. Relative to other types of educational programs, this cost-effectiveness estimate falls on the lower range of costs.

*Resource distribution:* The researchers studied the resources needed in schools and determined the best way to distribute them for each village. They found that program-school operators were able to capture 94 percent of the potential benefits. The difference was that program schools hired cheaper teachers who attracted slightly fewer students.

The researchers found that the improvements in educational outcomes were mainly due to the establishment of schools in villages where there were no schools before. By bringing schools closer to the villages, it became less expensive for children to enroll, which encouraged more of them to attend school. Additionally, the quality of the program schools was better than that of

government schools, and this also played a role in the improved outcomes. This conclusion is supported by the fact that nearly all children who were originally enrolled in government schools in villages with program schools switched to the program schools, and the children in program schools achieved higher scores on tests.

The findings from this evaluation served as one input in influencing the government's decision to continue to fund the program. As of 2022, the PPRS program and the related SEF Assisted Schools (SAS) program have been expanded to cover more than 550,000 students across more than 2,000 schools. Primary schools that were established in earlier phases of the program have been converted to elementary schools (grades one through eight), allowing children to continue their education in their own villages

Barrera-Osorio, Felipe David S. Blakeslee, Matthew Hoover, Leigh L. Linden, and Dhushyanth Raju. "Expanding Educational Opportunities in Remote Parts of the World: Evidence from a RCT of a Public-Private Partnership in Pakistan" Working Paper, Harvard University, April 2011.