

The Impact of Private Tutoring Prices on Student Attendance and Performance in India

Researchers:James BerryPriya MukherjeeSector(s): EducationFieldwork: PrathamLocation: Delhi, IndiaSample: 5,439 studentsInitiative(s): Post-Primary Education Initiative (PPE)Target group: Parents Secondary schools StudentsOutcome of interest: Enrollment and attendance Student learning Take-up of program/social service/healthy behaviorIntervention type: Coaching and mentoring Pricing and feesAEA RCT registration number: AEARCTR-0000652Partner organization(s): International Growth Center (IGC), Cornell University

In India, there is a large market for private tutoring services. Yet, little is known about how prices influence demand for such services and subsequent student attendance and performance among low-income households. Researchers conducted a randomized evaluation to measure the demand for private tutoring services and estimate how pricing can influence enrollment in these services. Results suggest that higher prices reduced demand for private tutoring and also led to higher drop-out rates over time, with no impact of tutoring on test scores.

Policy issue

In India, there is a large market for private tutoring services. Yet, little is known about how prices influence demand for such services and subsequent student attendance and performance among low-income households. Some research suggests that high tutoring prices contribute to educational inequality, by preventing low-income students from accessing services. Others suggest that fees allow tutoring services to screen out students with low attendance and attract students who are more likely to attend and benefit from the program. Fees could also encourage parents and children to put more effort into education by making them feel committed to attend the tutoring they paid for.

How do prices of private tutoring affect attendance, dropout, and educational outcomes for students?

Context of the evaluation

In India, private tutoring is widespread. One in five students in the 6th through 8th grade receive private tutoring, along with nearly one in three secondary school students. Students from various socioeconomic backgrounds attend private tuition centers, which provide tutoring on specific subjects, with more urban students (28 percent) receiving services than rural students (17

percent).

Delhi has an especially active private tutoring environment, as India's largest metropolitan area. Among its large urban and lowincome population, more than four in five students of the study sample had received private tutoring in the past twelve months. As of 2014, 10 percent of students in this study attended private school and 82 percent had attended tuition centers in the past year. Students' mothers had received an average of 3.7 years of education, with over 50 percent of their mothers receiving none. Pratham is an educational NGO in India with tuition centers in Delhi. It holds classes for primary and upper primary school students, segregated by gender. Classes occur during the school year for three hours, six days a week. They cover topics including typical school subjects ("content" classes), vocational learning, and remedial skills. In 2010, Pratham's content classes started charging a fee for the first time. Prices varied across tuition centers and were designed to increase attendance and revenue. Roughly 16 percent of students in the study were from households already paying for tutoring at Pratham by 2014 and the remaining 84 percent were from households that had not previously paid for any Pratham class.



A woman tutoring a young student through a lesson on a tablet at her home in India.

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Details of the intervention

Researchers conducted a randomized evaluation to measure household demand for private tutoring services and estimate how pricing influences student enrollment, drop-out rates, and performance.

Researchers randomly selected households of 5,439 upper primary school children from 21 low-income neighborhoods with Pratham tuition centers to participate in the study. Between April and September 2014, Pratham offered tutoring services to households at randomly assigned "first prices" of INR 0, INR 75, INR 150, INR 200, or INR 250 (or US\$0, US\$1.23, US\$2.46, US\$3.28, and US\$4.10). This established households' "willingness to pay" for classes, based on offer acceptance and student enrollment. All prices were under the average tutoring prices in the surrounding areas.

After a student had attended and paid for tutoring for one to three months, Pratham offered the household a randomly assigned discount of up to the amount of their initial offer price, resulting in a lower price paid for the remainder of the school year (the "second price"). By offering different prices at two stages, researchers could identify whether prices filter out students who are less likely to use these services over time, and whether paying higher prices could increase student attendance.

Children's attendance in tutoring class was tracked throughout the 2014–2015 school year, and researchers collected data on the socioeconomic background of the households, enrollment in tuition centers and other schools, and child test scores in math and English.

Results and policy lessons

Overall, higher prices reduced demand for tutoring and led to higher drop-out rates over time, although students paying more for tutoring had higher attendance levels before dropping out. The tutoring sessions had no impact on test scores.

Take-Up of Services: The take-up of tutoring services was sensitive to price. As tutoring prices increased, take-up of classes decreased dramatically. Sixty-nine percent of students offered free tutoring enrolled. However, charging INR 100 (around US\$1.64) caused enrollment to drop by around 17 percentage points (25 percent).

Willingness to Pay: Households were less willing to pay for girls to attend private tutoring than boys, by an average of 10 rupees (around US\$0.16). When children were already enrolled in private schools, households were less willing to pay for private tutoring by INR 50 (US\$0.82), which reveals a trade-off between private schools and private tuition centers. Households' income levels did not impact their willingness to pay.

Student Attendance: Students who were willing to pay more for tutoring had higher initial attendance levels. However, researchers found that the higher prices led to a greater number of dropouts, and resulted in lower attendance over time. Students initially offered free tutoring attended XX percent of classes, while students who agreed to pay 100 rupees or more (around US\$1.64) attended more classes by 6 percentage points (a YY percent increase). However, students paying more for tutoring were 12 percentage points more likely to drop out after two to three months, likely because families were weighing the extent to which tutoring was worth the cost. This suggests that lower prices may be needed to prevent students from dropping out over time.

Test Scores: Tutoring did not impact test scores in math or English. One potential explanation is that students who received enrollment offers at higher prices and decided not to enroll in Pratham classes ultimately attended other tutoring classes that are just as effective.

The results emphasize an important trade-off between achieving high attendance and student retention over time when setting prices for private tutoring.

Berry, James, and Priya Mukherjee. "Pricing Private Education in Urban India: Demand, Use and Impact." Working Paper, February 2019.