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Understanding parental choice for Budget Private Schools



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Introduction: India, a global leader in low-cost private schooling

An extraordinary grassroots revolution of low-cost private schools is taking place across the developing world. In this chapter, after first sharing some estimates of the numbers in low-cost private schooling in India and elsewhere, I outline what the literature says about the reasons for this demand from low-income families. The chief reason hinges on parental perception of superior academic quality in private schools compared to government schools. However, many critics question the rationality of these parental preferences; one recent, very influential research paper along these lines is explored in detail (Muralidharan and Sundararaman 2015). Our conclusion is that there is substantial on-going research that shows parental demand for low-cost private schools appears to be

a reflection of their superior educational quality compared to government schools.

India is a leader in the low-cost private school revolution. The Annual Status of Education Report (ASER) has catalogued the growing demand for private schooling amongst the rural population. From around a quarter of all children in the rural population enrolled in private schools in 2014, the figure is now nearly one-third. In some states, the figure is more than half.

What proportion of the total school-aged population of India is in low-cost private schools? Some 'quick and dirty' calculations give an idea of the scale of the phenomenon. Recent estimates suggest that there are around 300 million school-aged children in India. Assuming a 69 percent rural, 31 percent urban split (in line with all India population) gives 93 million children in urban and 207 million children in rural India. In rural areas, 30 percent of

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children are in private schools, the vast majority of which are likely to be low-cost, so around 60 million children in rural India are likely to be in low-cost private schools.

In urban India, it is estimated that around 70 percent of children (65 million) are in unaided private schools. In a recent study from urban Patna, 49 percent of children in private schools were in low-cost provision (Tooley and Rangaraju 2015). Generalising from this figure suggests there are around 32 million children in low-cost private schools in urban India.

Hence, in India, total children in low-cost private schools could be around 92 million, around 30 percent of all school-aged children.

India is a world leader here, but the phenomenon is across other countries too, especially in sub-Saharan Africa. The most detailed research has been conducted in Lagos State, Nigeria. A census carried out in 2010 (Härmä 2011) found 12,098 private schools—with this number “growing year on year”—with 1,408,420 pupils. Around 75 percent of these were unregistered, therefore likely to be low-cost. Given estimates for growth since then, a conservative estimate now is of around 2.12 million students in low-cost private schools.

Why the demand? Parents perceive higher quality in private schooling; critics disagree.

Reasons for high demand by parents suggested by research include the attractiveness of English-medium schools and the convenient proximity of private schools. However, the recent, extensive ‘rigorous literature

review’ from the British development agency DFID, concluded that the ‘majority of studies’ indicated that “perceived quality of education is a priority for users when choosing between schools, and that private schools are often perceived to be of higher quality than government ones” (Day Ashley et al. 2014, 30).

If demand for low-cost private schooling is led by parental desire for better quality education, the question that is rightly asked is: are parents correct in their perception of higher quality in private rather than government schools? The DFID review did find positive support for the statement that parents “make informed choices about the quality of education” (31). However, these informed choices were sometimes based on “informal sources” such as “networks of parents” (31), which again raises the question about the reliability of the information.

On the question of whether private schools are academically better than government schools, the DFID review equivocates. On one hand, their headlined conclusion is that “Pupils attending private school tend to achieve better learning outcomes” than those in government schools (15); on the other hand, this finding is tempered by the caveat that there aren’t many good studies available (they point to only three of ‘high quality’). Other authors concur:

“There is very little rigorous empirical evidence on the relative effectiveness of private and public schools in low-income countries. Non-experimental studies have ... typically found that private school students have higher test scores, but they have not been able to rule out the concern that these estimates are confounded by selection and omitted variables.” (Muralidharan and Sundararaman 2015, 1013)

These authors, in a paper that emerged after the publication of the DFID-commissioned report (so not included as evidence), set out to fill this lacuna by presenting experimental evidence from a school choice experiment in pre-bifurcation Andhra Pradesh, India. The research featured a two-stage lottery to allocate private school places ('vouchers') to village children, and to create suitable control groups. Children were tested in Telugu (the regional language), Mathematics and English at the end of two and four years, while tests in Science/Social Studies and Hindi were also given after four years.

The study, published in the prestigious *Quarterly Journal of Economics*, has been hugely influential, and therefore is worth focusing on in some depth as, if its findings are correct, this has big implications for the debate on the rationality of parental choice.

The headline results show that there was no significant difference in achievement between the voucher children in private schools and those left behind in the government schools, apart from in Hindi (which only the private schools taught). However, the private schools were able to achieve the same as government schools for around one third of the cost, so they were certainly better value-for-money than the government schools.

For the authors, this leads to two sets of conclusions, depending on the audience. For policy makers, the fact that private schools were 'much more productive' than government schools (1062) suggests that "it may be possible to substantially increase human capital formation ... by making more use of private provision in the delivery of education" (1058).

However, for low-income parents, the conclusion is far less optimistic. Because children's test scores were not better in private than government schools, "it is not obvious," the authors remark, that private schools "represent a better value for the marginal parent who is paying for private schools over a free public school". They point to the possibility that "*parents (especially poor and uneducated ones) may make misguided evaluations of school quality based on visible factors that may not contribute to more effective learning*" (1061-2; emphasis added). Perhaps "parents were not able to easily determine the effectiveness of schools at improving learning outcomes" (1062).

It is this kind of conclusion that has been taken up by critics of low-cost private schools. Karopady, who had been closely involved with the research, asks: "If private schools are not adding any value, why then do parents still prefer them?" (Karopady, 2014, 52). *The Times of*

India opined "The findings dispel a popular myth that private schools lead to better learning" (Chowdhury 2015). Parents' choices of private schools "ironically, have little to do with outcomes" (Chowdhury 2015). Instead, they are to do with things like the neatness of school uniforms, the craze of English-medium teaching and other fripperies.

So, is that the considered conclusion we must accept – that parental choice of low-cost private schooling is based on parents being fooled about respective quality in government and private schools? Actually, no. It turns out that there was a fundamental flaw in the research design which brings into question the headline results. The problem was the language of the tests used. Given the importance of this particular research, we will focus on its challenges in detail in the next two sections.

Critique of recent major research: What language should be used for tests when comparing government and private schools?

Researchers wanting to compare achievement in private and government schools in India have long faced a dilemma: what language should be used for testing children in Mathematics and other non-language subjects? This is an issue because the medium of instruction in government schools is typically in the regional language, whereas private schools often purport to be English-medium.

Because of these different language mediums of instruction, researchers either ensure that Mathematics (and other non-language subject) tests are word-free (e.g. arithmetic operations only and/or wordless cognitive puzzles), or ensure that the instructions given in these tests are in both languages *on the same paper*, so students can choose which language to use for instructions on how to address each question.

Unfortunately, and curiously, the researchers in the Andhra Pradesh school choice study did not use either of these methods. It is not mentioned in the research paper, and I found out only by chance when I asked one of the project researchers to conduct tests to compare low-cost private schools with government schools in Hyderabad. He used different tests in Mathematics for the government and private schools, with instructions in English for the private schools (which were all, ostensibly

at least, English-medium) and Telugu for the public schools. He assured me that this was the method used in the Andhra Pradesh School Choice Project, which was confirmed by one of the authors: the language used in Mathematics (and other non-language) tests “tended to follow the medium [of instruction] of the school, with English-medium private school students taking the test in English and Telugu-medium students taking the test in Telugu (the split was roughly 50% each)” (Karthik Muralidharan, personal communication). Note, importantly, that this is not the same as the second solution to the language dilemma given above. In that case, both languages are given on the same paper so that all students still take the same test, but can choose which language to read. In the previous case, students in effect took different tests in Mathematics and other non-language subjects.

The aim of creating a randomised controlled trial—the ‘gold standard’ method used by the researchers—is as far as possible to ensure that participants in treatment and control groups are treated in exactly the same way apart from the unique factor introduced as the intervention – here school vouchers. This study violated that. Even if it wasn’t obvious how this difference in treatment could lead to bias, one would still call into question the results. However, in this case one can see clearly how different tests could cause serious bias:

In poorer rural (or urban slum) areas of India, the ‘English-medium’ appellation carried by low-cost private schools is typically more of an aspiration than a reality, at least in the lower grades. Karopady noted “In the rural setting, while these schools could have more transactions in English, *they are some distance from being truly English-medium.*” (Karopady 2015, fn 6, 52; emphasis added). This agrees with my research, which finds that low-cost English-medium schools in effect operate as hybrid schools, teaching in the mother tongue in the lower grades, with the aspiration of bringing everyone up to speed in English by higher grades. Hence, even in a simple comparison between public and private schools in rural areas, it would be unfair to give tests with English-written instructions to children in private schools (supposedly English-medium but in fact teaching in Telugu in the lower grades), as this would penalise them against those being given tests with Telugu instructions.

Indeed in this voucher experiment, the situation appears even more difficult because the children switching from Telugu-medium government to English-medium private schools were of lower academic achievement levels than those who remained (Muralidharan and Sundararaman

2015, 1028). For these children, trying to figure out Mathematics questions in English may have presented huge difficulties, particularly as questions asked were often very wordy. For instance, one asked “Which digit is in the hundred’s place in the number 2345?” Another asked “Vaishali wants to buy a pencil worth Rs 4. How many 50 paise coins will she require to buy the pencil?” These and similar questions are impossible to answer without a strong grasp of English.

The unfairness persists even if children in private schools had more exposure to English than their counterparts in government schools by the time they reached the second and fourth years of their study, for it cannot be assumed that the language children learn in English lessons is the same language they will need in Mathematics, or that there is equal degree of English language immersion in language and non-language subjects. It is plausible, for example, that Mathematics’ teachers were less fluent in English than language subject teachers, and so placed a greater emphasis on teaching in Telugu than language teachers. Also, it is well-known that the language of Mathematics is often very different from that found in English lessons (e.g. words such as ‘even,’ ‘odd’ and ‘function’ have completely different meanings in Mathematics and English lessons).

The key point is that the only fair way of assessing students in different language medium schools is to follow one of the two methods outlined above; using word-free tests or using tests with both languages translated side-by-side. As this was not done, we *simply do not know* what the relative academic performance of children in government and private schools was.

Fortunately, this is not the end of the story. Roughly half the private school students (those in Telugu-medium private schools) *did* take the same Mathematics and Science/Social Studies tests as those in public schools. Helpfully, the researchers did explicitly compare these students’ academic performance with that of those attending (Telugu-medium) government schools.

Which are better, private or government schools? Comparing like with like

Given various technical caveats (Muralidharan and Sundararaman 2015, 1047-55), these results are not as statistically robust as the earlier findings. However, given that they are the only results we can sensibly use in the study, we can treat them as ‘suggestive’ and explore their implications.

When children with voucher in Telugu-medium private schools are compared with those in Telugu-medium government schools, the results are quite dramatic: 'the estimated impact of attending a Telugu-medium private school is positive for every subject, and the mean impact across subjects is positive (0.53 standard deviations) and significant' (1051). Table 1 (simplifying the researchers' Table X, 1052) shows the results of comparing like with like.

The results can be summarised as follows:

- In Year 2, estimated score differences between private and public schools are positive in favour of those having vouchers for all subjects apart from Telugu.
- By Year 4, estimated score differences are positive for every subject, and the mean impact when subjects are combined is large and positive (0.53 standard deviations) and statistically significant. Importantly, this is not simply the effect of Telugu distorting the results: Combining Mathematics and Science/Social Studies also gives a large (0.50 standard deviations), positive and statistically significant difference, albeit at the 10% level (1052, Table X).

Children with vouchers in private schools outperformed those in public schools *in all subjects after four years of the voucher program*. The combined result shows a large, statistically significant difference in favour of private schools. This is a hugely positive

albeit suggestive finding for the school choice (voucher) debate.

The findings are also positive for those seeking comparisons between public and private schooling when parents pay school fees, (i.e. not when children are given vouchers). On the base-line scores in Telugu and Mathematics, when students had been in either Grade 1 or pre-school for a full year, there was a huge statistically significant difference in favour of private schools. (1039). Now, the researchers themselves were inclined to underplay this result given their headline findings that 'voucher' children didn't do any better in private schools. These large differences in favour of private schools were therefore likely to be "mostly driven by omitted variables and not by differential effectiveness of public and private schools" (1039). Given the doubts raised about their headline research findings, it may be that these 'omitted variables' are not as important as had been thought i.e. the superior performance found in low-cost private schools is likely to be a genuine school effect rather than simply to do with the educational and social background of the children's families.

This is important new evidence – an influential study that has been hailed as questioning parental preferences for private school actually reveals the opposite. Add this to the positive picture already mentioned from the DFID-commissioned review (Day Ashley et al. 2014), and the conclusion becomes stronger supporting the rationality of parental choice of low-cost private schooling.

Table 1: Comparing like with like - Telugu-medium private schools and public schools: estimated impact on test scores (in standard deviations) of attending private school with a voucher compared to public school

| Year | Telugu | Math | English | Science/Social Studies | Hindi | Combined all subjects | Combined Math & Science/Social Studies |
|--------|--------|-------|---------|------------------------|----------|-----------------------|--|
| Year 2 | -0.033 | 0.062 | 0.408 | N/A | N/A | 0.143 | |
| | - | + | + | | | + | |
| Year 4 | 0.259 | 0.255 | 0.043 | 0.746** | 1.384*** | 0.532*** | 0.496* |
| | + | + | + | + | + | + | + |

(*** significant at the 0.01 level; ** significant at the 0.05 level; * significant at the 0.1 level)

Parental demand for low-cost private schools justified by higher standards

We asked at the beginning of this paper why there was such demand for private schools from low-income families, pointing to perhaps 30 percent of Indian school children attending *low-cost private schools*. A survey of research had suggested that an important reason parents choose private education, in India and other countries, is that they perceive academic standards to be higher in private than government schools. But are these perceptions correct? A DFID-commissioned review of the literature found evidence of academic superiority in private over government schools. However, a recent and highly influential study suggested this was not the case. Given the importance

attached to this recent research, we explored this study and found its findings to be flawed. However, within the paper there was evidence to suggest that, when children in the same language-medium schools were compared, children in low-cost private schools on vouchers significantly outperformed those in government schools. Outside of voucher experiments too, the research showed children in low-cost private schools significantly outperforming those in government schools, after controlling for relevant variables.

Parental demand for low-cost private schooling is huge. Parents report that in large part their choice is because of the superior quality of private education. Their choices, increasingly borne out by the evidence, appear to be rational.

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