

The Impact of Parental Aspirations on Private School Enrolment:

Evidence from Andhra Pradesh, India

S. Galab, Uma Vennam, Anuradha Komanduri,
Liza Benny and Andreas Georgiadis



The Impact of Parental Aspirations on Private School Enrolment:

Evidence from Andhra Pradesh, India

S. Galab, Uma Vennam, Anuradha Komanduri,
Liza Benny and Andreas Georgiadis

The Impact of Parental Aspirations on Private School Enrolment: Evidence from Andhra Pradesh, India

S. Galab, Uma Vennam, Anuradha Komanduri, Liza Benny and Andreas Georgiadis

First published by Young Lives in April 2013

© Young Lives 2013

ISBN: 978-1-909403-11-6

A catalogue record for this publication is available from the British Library. All rights reserved. Reproduction, copy, transmission, or translation of any part of this publication may be made only under the following conditions:

- with the prior permission of the publisher; or
- with a licence from the Copyright Licensing Agency Ltd., 90 Tottenham Court Road, London W1P 9HE, UK, or from another national licensing agency; or
- under the terms set out below.

This publication is copyright, but may be reproduced by any method without fee for teaching or non-profit purposes, but not for resale. Formal permission is required for all such uses, but normally will be granted immediately. For copying in any other circumstances, or for re-use in other publications, or for translation or adaptation, prior written permission must be obtained from the publisher and a fee may be payable.

Printed on FSC-certified paper from traceable and sustainable sources.

Funded by



Ministry of Foreign Affairs of the Netherlands

Young Lives, Oxford Department of International Development (ODID), University of Oxford, Queen Elizabeth House, 3 Mansfield Road, Oxford OX1 3TB, UK

Tel: +44 (0)1865 281751 • E-mail: younglives@younglives.org.uk

Contents

Abstract	ii
Acknowledgements	ii
The Authors	ii
1. Introduction	1
2. Empirical strategy	2
3. Data and descriptive statistics	3
4. Results	6
5. Discussion	12
References	13
Appendix	16

Abstract

This paper presents an analysis of the role of parental aspirations in determining private school choice in Andhra Pradesh, using quantitative and qualitative data from the Young Lives cohort study over two rounds. Aspirations are measured using a range of indicators of what educational attainment level and future occupational status parents desire for their children. We find robustly, across all measures of aspirations and different empirical specifications, that parental aspirations have a significant positive impact on the probability that the child is enrolled in a private school. This finding is further supported by qualitative evidence that also suggests that higher parental aspirations for the future situation of their child will lead to higher investment in education because parents perceive education as key to future success. Thus, our findings suggest that parental aspirations are among the demand factors that may explain the recent dramatic increase in private school enrolment in Andhra Pradesh among the poorest groups. This is mainly because parents believe that private schools can provide a better future for their children, which motivates them to make the necessary investment.

Acknowledgements

The authors would like to thank Gina Crivello, Emma Wilson and Zoe James for their help and comments, especially with regard to the qualitative research.

The Authors

Professor S. Galab is Principal Investigator for Young Lives India and is based at the Centre for Economic and Social Studies (CESS) in Hyderabad. He is a development economist with a postgraduate degree in economics and statistics and a doctorate in economics. He has carried out research on the effectiveness of public policies related to poverty alleviation, in areas including social capital, women's empowerment, child work and livelihoods. He has also conducted research on the welfare impact of public sector reforms and is responsible for teaching and supervising MPhil and PhD students at CESS.

Uma Vennam is a Professor of Social Work at Sri Padmavathi Women's University, Tirupati, India. She trained at the Tata Institute of Social Sciences, Mumbai and the University of East Anglia, Norwich, UK. The focus of her research has been rural poverty, NGOs and rural development, and children in difficult situations (including trafficking). Uma is currently the Lead Qualitative Researcher for Young Lives India.

Anuradha Komanduri is a Professor of Social Work at Sri Padmavathi Women's University, Tirupati, India, from which she holds a PhD in child mental health. She is an Assistant Qualitative Researcher for Young Lives India.

Liza Benny is a Quantitative Research Assistant at Young Lives in Oxford, where she currently works mostly on the health and nutrition aspects of the research. She completed her master's degree in economics from the London School of Economics in 2012.

Andreas Georgiadis is a Quantitative Research Officer in Young Lives with a background in labour economics and public policy. His current work focuses on the causes of malnutrition in early childhood and its implications for human capital formation in low- and middle-income countries.

About Young Lives

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in 4 countries (Ethiopia, India, Peru and Vietnam) over 15 years. www.younglives.org.uk

Young Lives is funded from 2001 to 2017 by UK aid from the Department for International Development (DFID), and co-funded by the Netherlands Ministry of Foreign Affairs from 2010 to 2014.

The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

1. Introduction

Research shows there is a well-documented performance gap in educational outcomes in favour of private schools as opposed to government schools, across developing and developed countries (Cox and Jimenez 1990; Hanushek 2002). Drèze and Sen (2002) and Kingdon (1996a, 1996b, 2007) find that for India, there exist significant gaps in the efficiency and effectiveness of private schools over government schools. Tooley and Dixon (2003, 2006) echo these findings for Andhra Pradesh.

There are two main potential explanations given for these performance gaps – differential levels in the quality of schooling provision between private and government schools (Coleman and Hoffer 1987; Hanushek 1995; Jimenez et al. 1991), and the existence of ‘cream-skimming’ that implies that children with higher educational potential are sorted into private schools (Epple and Romano 1998, 2008; Pandey and Goyal 2012). Alternatively, the observed gap may be due to a combination of these two mechanisms. In particular, the latter reason, which is related to the selection mechanism by which children are sorted into different types of schools, has received considerable attention in the literature. Some of the purportedly important determinants of parental school choice have pointed to supply factors such as school characteristics, availability and location (Chakrabarti and Roy 2010; Chumacero et al. 2011; Hastings and Weinstein 2008), while among demand factors, household resource constraints feature among the most prominent (Wolfe and Behrman 1984; Yang and Kayaardi 2004).

However, a potential driver of parental school choice that has not received much attention in the literature is the role of parental aspirations and preferences for their children’s future. Ray (2006) puts forward a theoretical mechanism through which aspirations play a significant role in determining human capital investment, particularly in resource-constrained environments. In general, there has been limited evidence relating parental preferences and aspirations to educational outcomes and school choice. A recent exception is the paper by Woodhead et al. (2013), which finds, using data from the Young Lives study in Andhra Pradesh, that parents with higher aspirations for their children’s educational attainment are more likely to enrol their children in private school. Some other researchers also make this connection, in particular, Drèze and Sen (2002), who propose that parental motivation and aspirations have a significant influence on schooling attainment in India, while Chiapa et al. (2012) find a positive correlation between parental aspirations and children’s educational attainment, by investigating the effect on parental aspirations of exposure to professionals via the Mexican anti-poverty programme *PROGRESA*. Further evidence is required, however, to understand the role played by parental aspirations in determining school choice.

This paper seeks to address this gap by investigating the impact of parental aspirations on parents’ choice to enrol their children in private school, using data from the Young Lives study in Andhra Pradesh. Andhra Pradesh is of particular interest because it has seen large increases in the supply of more affordable private schools in recent years (Kingdon 1996b; Tooley 2004), which has been accompanied by a dramatic increase in the share of children from even the poorest socio-economic groups who are enrolled in private schools (Muralidharan and Kremer 2007; Tooley and Dixon 2003; Tooley 2004; Tooley et al. 2007). These patterns are related to parents’ perceptions that private school education is of higher quality than that provided by government schools (Baird 2009; Drèze and Sen 2002; James and Woodhead (forthcoming, 2013); PROBE Team 1999). Therefore, given these recent

trends in Andhra Pradesh and the indicative evidence in Woodhead et al. (2013), it is important to examine whether aspirations systematically play an important role as a demand factor that explains private school enrolment and that is also robust across different measures, accounting for a range of other determinants of school choice.

The longitudinal nature of our analysis allows us to control for a wide range of confounding factors including child and family fixed effects. This makes our results less prone to omitted variable bias compared to other studies – though the concern over omitted variables is not completely eliminated. Another novel characteristic of our analysis is that we use complementary qualitative evidence to illustrate the mechanisms by which high parental aspirations lead to a higher probability of private school enrolment. We find that across four measures of parental aspirations for their children’s future in terms of both educational attainment and occupation, aspirations have a significant positive influence on private school enrolment. The qualitative case studies support this conclusion by suggesting that parents’ high aspirations for their children, along with their belief that private schools provide higher-quality education that will enable their children to achieve these aspirations, motivate them to make higher investments in their children’s education. Thus, our findings suggest that parental aspirations may be among the key demand factors that explain the recently observed increases in private school enrolment even among low-income households in Andhra Pradesh.

The paper is organised as follows: the next section begins by discussing our empirical strategy, while Section 3 gives a description of the data used in our analysis. Section 4 presents our results and Section 5 offers a discussion of our findings and concludes.

2. Empirical strategy

Based on the standard framework used to model parents’ demand for children’s education (Glewwe and Miguel 2007), parents are assumed to choose the level of education inputs that maximise their utility, subject to household budget constraints and the education production function that models how education inputs (e.g. private school enrolment) are converted into education outputs (e.g. test scores). The solution of the parents’ constrained optimisation problem yields the parental demand for educational inputs. In particular, the demand for private school can be expressed as follows:

$$PS = PS_D(W_0; SC, PE, p_C, p_{EI}; \alpha; \mu) \quad (1)$$

where α is a vector that represents parental tastes for children’s education and includes parental aspirations for the level of education they wish for their children to achieve, and μ represents children’s innate ability and is an important unobserved factor that determines a variety of educational outcomes. Finally, W_0 is the initial level of wealth available for parents to allocate, SC represents school characteristics, and PE is parental educational attainment. p_C and p_{EI} represent price vectors that denote the prices of consumer goods and educational inputs respectively.

Equation 1 forms the basis for our empirical analysis and therefore, under certain assumptions, by using a reduced-form demand specification for private school choice, we are able to obtain a causal relationship through which parental aspirations can affect the school choice decision. The empirical analogue of Equation 1 can be estimated using a binary choice or probit model with private school choice representing the binary outcome variable,

and measures of child and household background characteristics representing the right-hand-side variables.

However, because this is a reduced-form model, it only allows us to identify the overall effect of higher parental aspirations on enrolment in private schools and does not allow us to isolate the particular behavioural channels through which this effect is realised. We try to overcome this problem by including qualitative case studies that describe suggested behavioural channels through which parental aspirations are linked to the choice of a private school.

3. Data and descriptive statistics

The analysis in this paper is conducted using quantitative data and complementary qualitative case studies from Young Lives, which is an international cohort study that collects data on two cohorts of children (one born in 1994/5 and the other in 2001/2) across four countries (Ethiopia, the state of Andhra Pradesh in India, Peru and Vietnam) over 15 years in order to understand the causes and consequences of child poverty.

The study was designed to conduct five major survey rounds collecting data on both cohorts of children at three-year intervals with pre-designed survey questionnaires that collect detailed information on a variety of indicators of children's well-being, health and education, and their household and community characteristics. As of 2012, three rounds of data have been collected – Round 1 in 2002, Round 2 in 2006/7 and Round 3 in 2009, while Rounds 4 and 5 of the survey are scheduled for 2013 and 2016 respectively. For the purpose of this paper, we will be focusing on 733 Older Cohort children from the 20 sentinel sampling sites, 15 of which are rural and five urban, in Andhra Pradesh in Rounds 1 and 2 of the survey (when the children were aged around 8 and 12).

We also incorporate qualitative case studies of Older Cohort children from a sub-sample of these sites in order to further explore the link between parental aspirations and school choice and the mechanisms underlying the quantitative results. The two case studies are drawn from the qualitative sub-sample of 48 Young Lives children from the third round of qualitative research in 2010, when the Older Cohort children were aged between 16 and 17 years old. The first case study is of Keerthi, a Scheduled Tribe girl from a remote tribal village near Patna.¹ In 2010, Keerthi was in her second year of higher secondary education in a private institution, staying in a hostel far from her home. She used to be enrolled in the government college (Andhra Pradesh Residential Junior College) funded by the Integrated Tribal Development Agency (ITDA) where her mother worked.² The second study is of Saifuddin, a Backward Class boy from the Charminar district of Hyderabad, whose parents demonstrate a high level of interest his education and future prospects. Neither Keerthi nor Saifuddin was in private school in 2002 but both were enrolled in private school in 2006. In both cases, their parents' desire to give their children a life better than their own motivated them to make sacrifices to send Keerthi and Saifuddin to private schools. Though these case studies are

1 All names of respondents and sites are pseudonyms. 'Scheduled Tribes' is the name given to a caste grouping defined by the Government of India with a view to addressing the discrimination and disadvantage suffered by them. Other government-designated groupings referred to in this paper are Scheduled Castes, Backward Classes and Other Castes.

2 The ITDA is a government agency that aims for socio-economic development of tribal communities through income-generating schemes combined with infrastructure development.

not necessarily representative, we feel that they provide an illustration of the extent to which parents' high aspirations lead them to invest heavily in their children's education in order to secure a better future for them.

Information on parental aspirations used in our analysis is drawn from the responses to the following two questions in the quantitative survey:

'What level of education would you like your child to complete?'

'What job would you most like your child to do in the future?'

Educational levels are coded categorically, from 'no education' taking the value 0 to 'university education' taking the value 14 (see Table A1 in the Appendix). Details of the occupations aspired to by caregivers are given in Table A2. Based on this information, we construct three measures of aspirations. The first is a continuous measure of years of schooling that parents wish their children to achieve (see Table A1). The second is a binary indicator of whether parents aspire for their children to attain a university education – this measure is informative because there is clustering of aspirations around secondary and above secondary education and furthermore, allows us to account for a non-linear effect of caregivers' educational aspirations on school enrolment (Table A1). The third measure we use is a binary indicator indicating whether parents aspire for their child to have a high-status/income occupation in the future (Table A2). We classified occupations into two groups for the following reasons: first of all, as this method of classification is somewhat arbitrary, depending on parents' beliefs and aspirations, we can only safely categorise them as to whether they have high status or not. Secondly, there is also a sample concentration towards high-status occupations, which facilitated this grouping into two categories. When we consider the effect of occupational aspirations on private school enrolment we do not consider those children whose parents reported occupations for other, non-specified aspirations, as they could not be classified by income and/or status.

Table 1 presents descriptive statistics for the characteristics of children and parents in our sample, disaggregated by school type. The majority of our sample (73 per cent) was enrolled in government schools. Compared to government school students, the average private school student is more likely to be male, be older than his/her siblings, live in an urban community, come from the Telangana region, come from a wealthier household, belong to the Other Castes grouping, and have more educated parents. As caste, income and parental education capture different dimensions of socio-economic status, these descriptive patterns of differential private school enrolment suggest a selection mechanism that results in children being sorted into schools based on income and ability. Log real per capita household expenditure is calculated using self-reported expenditure on a range of items, adjusted for community inflation. Parents with higher aspirations for their children's educational and occupational attainment were more likely to enrol their children in private schools. Table 1 also shows that compared to 2002, a higher proportion of the sample were enrolled in private schools in 2006. This increase is quite small, but this might be due to the pro-poor nature of the sample. This pattern is consistent with empirical findings in Andhra Pradesh that suggest that there were large increases in enrolment in private schools between 2001 and 2006, which may also be partly explained by large increases in the supply of affordable private schools (Tooley et al. 2007).

Table 1. *Descriptive statistics by school type (%)*

	Government school	Private school	Total
School type in 2006	73.0	27.0	100
School type in 2002	75.2	24.8	100
Educational aspirations: categorical			
Below university	49.0	21.7	41.6
University	51.0	78.3	58.4
Occupational aspirations: categorical			
Low income/status	33.5	12.1	27.7
High income/status	66.5	27.7	72.3
Average years of child's schooling aspired to by parents	12.9	14.3	13.3
Average years of father's education	3.7	8.5	5.0
Average years of mother's education	2.1	5.9	3.1
Average birth order	2.4	1.9	2.3
Gender: Male	46.4	58.1	49.5
Caste/Ethnicity			
Scheduled Castes	23.9	7.6	19.5
Scheduled Tribes	9.9	7.6	9.3
Backward Classes	51.2	44.4	49.4
Other Castes	15.0	40.4	21.8
Location			
Rural site	86.7	44.4	75.3
Coastal Andhra	35.9	37.9	36.4
Rayalaseema	34.6	28.8	33.0
Telangana	29.5	33.3	30.6
Average real per capita household consumption expenditure (rupees)	832.0	1,162.4	921.3
Absolute poverty: Below poverty line households	22.6	7.6	18.6
Total	535	198	733

Source: Young Lives, Rounds 1 and 2, Older Cohort.

Table 2 (see overleaf) takes a closer look at the variation in private school enrolment rates across different levels of aspirations within income groups, and shows that within income groups, there is a consistent positive correlation of higher aspirations with private school enrolment. Among children with parents from the same income group, those who have parents with higher educational and occupational aspirations are more likely to be enrolled in private schools, across all income groups. Given that the Young Lives sample in Andhra Pradesh is non-representative as it is pro-poor (Kumra 2008), it is quite remarkable that a non-negligible share (roughly 12 per cent) of the poorest households in our sample have children enrolled in private schools. This is consistent with other evidence that the incidence of private school enrolment among low-income households is increasingly high (Baird 2009; Tooley 2004).

Table 2. *Percentages of children enrolled in private school, by parental aspirations and socio-economic status (%)*

Income measures	Aspirations				Total %	N. of obs.
	Below university	University	Low income/status	High income/status		
Household log real per capita consumption						
Quartile 1 (poorest)	8.6	17.7	2.9	18.4	12.5	184
Quartile 2	3.6	19.2	6.8	14.5	12.0	183
Quartile 3	13.6	42.7	15.4	36.8	32.2	183
Quartile 4	44.0	54.1	34.3	55.4	51.3	183
Absolute poverty						
Below poverty line	8.8	14.3	1.9	16.7	11.0	136
Above poverty line	16.0	39.5	15.2	35.9	30.7	597
Total	14.1	36.2	11.8	32.8	28.3	
Number of observations	305	428	203	530		733

Source: Young Lives, Round 2 (2006).

4. Results

The clear positive correlation between aspirations and private school enrolment identified in the descriptive analysis may be due to unobserved factors that are positively associated with both parental aspirations and private school enrolment. Therefore, in order to investigate the robustness of this pattern to the inclusion of other factors that also determine private school enrolment, we estimate the empirical analogue of equation (1) using a multivariate probit model. The dependent variable in our estimated specification is a binary indicator taking the value 1 if the child is enrolled in a private school at the age of 12 and 0 otherwise.

We present estimates of marginal effects from four models, each including a different measure of aspirations. As controls we include standard child and household characteristics as well as locality characteristics that capture some of the regional variation in prices and costs of living.

Our preferred specification for each measure of aspirations additionally includes a lagged dependent variable that indicates whether the child was enrolled in private school at the age of 8 (in Round 1), as this controls for endogeneity arising from time-invariant unobserved factors such as children's innate ability and household characteristics (Wooldridge 2010). However, the interpretation of the model changes with this value-added specification, to become the marginal effect of parental aspirations and other controls on the probability of the child being enrolled in private school at the age of 12, given the type of school the child was enrolled in at the age of 8.

Table 3 shows that the effect of parents' educational aspirations on private school enrolment is positive and significant throughout. According to specification 2, an additional year of schooling aspired to by parents for their children results in a marginal increase in the probability of private school enrolment at the age of 12 of around 3 per cent, given school choice at the age of 8. Specification 4, on the other hand, shows that parents who aspire for their children to achieve a university education, are about 8 per cent marginally more likely to

enrol them in private school at the age of 12, given their enrolment status at the age of 8, than parents who aspire to education lower than university level.

Table 3. *Relationship between parental educational aspirations and private school enrolment: marginal effects*

Independent variables	(1)	(2)	(3)	(4)
	Dependent variable: private school enrolment in Round 2			
Educational aspirations: years of schooling	0.0276** (0.0109)	0.0243** (0.00973)		
Educational aspirations: university			0.0976*** (0.0371)	0.0809** (0.0352)
Gender: Male	0.103*** (0.0351)	0.0944*** (0.0365)	0.109*** (0.0362)	0.101*** (0.0372)
Scheduled Caste	-0.138** (0.0670)	-0.115 (0.0719)	-0.143** (0.0661)	-0.120* (0.0711)
Scheduled Tribe	0.0328 (0.0799)	0.0132 (0.0888)	0.0414 (0.0826)	0.0214 (0.0912)
Backward Classes	-0.0906* (0.0492)	-0.0642 (0.0556)	-0.0918* (0.0489)	-0.0647 (0.0554)
Child's birth order	-0.0353** (0.0141)	-0.0302** (0.0147)	-0.0350** (0.0143)	-0.0300** (0.0149)
Father's years of education	0.0161*** (0.00530)	0.0131*** (0.00501)	0.0160*** (0.00520)	0.0131*** (0.00499)
Mother's years of education	0.00659 (0.00603)	0.00175 (0.00619)	0.00752 (0.00621)	0.00262 (0.00632)
Household log real per capita consumption	0.147*** (0.0360)	0.136*** (0.0328)	0.149*** (0.0360)	0.138*** (0.0328)
Rural site	-0.281*** (0.0672)	-0.165** (0.0651)	-0.287*** (0.0702)	-0.168** (0.0676)
Coastal Andhra	-0.0259 (0.0544)	0.0308 (0.0559)	-0.0271 (0.0550)	0.0298 (0.0566)
Rayalaseema	-0.0926 (0.0612)	-0.0765 (0.0580)	-0.0861 (0.0629)	-0.0710 (0.0596)
Child enrolled in private school in 2002		0.318*** (0.0706)		0.320*** (0.0705)
Observations	733	733	733	733
Pseudo R-squared	0.321	0.321	0.321	0.321

Notes: Robust standard errors clustered at the community level in parentheses
*** p<0.01, ** p<0.05, * p<0.1.

This quantitative result relating high educational aspirations to increased probability of private school enrolment is corroborated by Keerthi's case study.

As a high school student in 2007, Keerthi wanted to become a doctor, while her mother's aspiration for Keerthi was that she should pursue the highest education possible at the university level, get a job and be independent, so that she would have a comfortable life free from hardships, different from her mother's. She could be a doctor, teacher or an engineer, but the final decision, her mother said, would be made by Keerthi. Her mother also spoke

very proudly of how her daughter could be the first tribal girl in the area to become a doctor, as the opportunities provided by the Government in the form of reserved places in educational institutions, scholarships and reserved jobs could make this possible. When asked if she was prepared to send her daughter to a private school far from home, she answered, referring to her daughter's transfer to a private school:

“Yes, I was prepared to send her ... it was my wish to send her to some big city and get her educated in some good college. My daughter is a bright student and studies well. She is very efficient and hard working so I wanted her to go to a good college on the basis of merit and this wish of mine is also fulfilled now.”

She also said that compared to what she had suffered during her childhood, Keerthi was far better off, and that she didn't want her children to suffer all that she had suffered. She says that

“Nowadays, parents are different from what they were ... one wants the best for one's child and [parents] are prepared to educate them. They are prepared to make sacrifices and work hard to educate their children, and meet all the expenses involved in doing so – all they want is for their children to study. I regret our lack of education. Had our parents taken similar care of us, our lives would have been totally different. We are leading miserable lives now due to a lack of proper education.”

Therefore, Keerthi's mother's belief that a private education would be crucial in ensuring Keerthi's future success, combined with her high educational aspirations for her daughter, led to her high level of investment in Keerthi's education and Keerthi's subsequent enrolment in a private school. The mother's decision to switch her daughter to a private school under a scholarship demonstrates that when resource constraints were no longer an issue and she was able to choose freely between private and government schools, she preferred private schooling because she believed this provided better-quality education.

The results in Table 4 present estimates of the impact of occupational aspirations, as well as a composite variable that combines occupational and educational aspirations on the probability of private school enrolment. Parental occupational and educational aspirations are expected to be strongly but not perfectly correlated, and therefore combining these into a composite measure may provide a more informative indicator of aspirations. Table A3 (see appendix) provides details about the composite variable, which has a scale reliability coefficient or Cronbach's alpha of 0.5956, denoting a considerable degree of congruence between the two aspirational measures. Specification 6 shows how parents who aspire for their children to attain high income/status occupations are 12 per cent more likely to have their children enrolled in private school at the age of 12, given their school type at the age of 8. Specification 8 finds strongly positive and significant marginal effects of the composite normalised variable on private school enrolment at the age of 12 – one standard deviation increase in this composite measure of parental aspirations relative to the mean results in an 8 per cent increase in the probability of the child being enrolled in a private school at the age of 12, given their school type at the age of 8. Saifuddin's case study demonstrates how occupational aspirations have a positive effect on investment in education because Saifuddin's father expects higher returns to this education for the whole family if his son gets a secure and well-paid job in the future.

Table 4. *Relationship between parental occupational and educational aspirations and private school enrolment: marginal effects*

Independent variables	(5)	(6)	(7)	(8)
	Dependent variable: private school enrolment in Round 2			
Aspirations: high income/status job	0.146*** (0.0421)	0.124*** (0.0433)		
Composite of occupational and educational aspirations			0.0975*** (0.0261)	0.0828*** (0.0258)
Gender: Male	0.118*** (0.0335)	0.110*** (0.0343)	0.109*** (0.0339)	0.101*** (0.0346)
Scheduled Caste	-0.138** (0.0648)	-0.113 (0.0691)	-0.137** (0.0646)	-0.114* (0.0691)
Scheduled Tribe	0.0340 (0.0857)	0.0188 (0.0939)	0.0306 (0.0846)	0.0156 (0.0930)
Backward Classes	-0.0791 (0.0490)	-0.0551 (0.0551)	-0.0809 (0.0493)	-0.0569 (0.0553)
Child's birth order	-0.0333** (0.0145)	-0.0284* (0.0151)	-0.0331** (0.0143)	-0.0283* (0.0150)
Father's years of education	0.0163*** (0.00502)	0.0137*** (0.00488)	0.0158*** (0.00502)	0.0133*** (0.00485)
Mother's years of education	0.00768 (0.00604)	0.00280 (0.00618)	0.00665 (0.00601)	0.00194 (0.00617)
Household log real per capita consumption	0.151*** (0.0354)	0.139*** (0.0328)	0.146*** (0.0356)	0.135*** (0.0329)
Rural site	-0.294*** (0.0696)	-0.178*** (0.0670)	-0.294*** (0.0696)	-0.180*** (0.0670)
Coastal Andhra	-0.0201 (0.0549)	0.0337 (0.0561)	-0.0180 (0.0545)	0.0352 (0.0559)
Rayalaseema	-0.0785 (0.0623)	-0.0659 (0.0589)	-0.0794 (0.0623)	-0.0664 (0.0590)
Child enrolled in private school in 2002		0.309*** (0.0691)		0.305*** (0.0692)
Observations	733	733	733	733
Pseudo R-squared	0.327	0.327	0.327	0.327

Notes: Robust standard errors clustered at the community level in parentheses
*** p<0.01, ** p<0.05, * p<0.1.

Saifuddin's father aspires for Saifuddin to be a "good child" and to become a computer engineer, so plans to invest in life insurance schemes and such like in order to accommodate the increasing cost of private schooling as his children move up the grades. He says that

"a 'good child' means he has to be successful in [his] life, and in whatever project he is in, he has to be successful ... that's better life for him ... any deviations from that are a waste for him and for us also ... if his future is bright that means ours is too."

Saifuddin thinks that he is fortunate to have a father like his, who is so caring and concerned about the children's future.

We expect that resource constraints, as denoted by the household consumption level, would impact the school choice decision significantly, as private schools are fee-paying, unlike

government schools, and place a monetary burden on households. The inclusion of the community-inflation-adjusted log consumption variable as well as the indicators for location captures some degree of the regional variation in pricing as well as an indirect measure of the 'implicit' price of schooling. In the added value model, the probability of private school enrolment at the age of 12, given enrolment status at the age of 8, increases by up to 1.5 per cent with a 10 per cent increase in the log household per capita consumption expenditure.

Even under severe resource constraints, Saifuddin's parents invest in a private school education for him by living in a small house in an expensive area close to the children's school. The family cannot really afford to live in that area, but according to Saifuddin's mother, they as parents are willing to make sacrifices in order to make sure that their children obtain a good education. When asked if he had planned for any savings to meet the growing expenses, Saifuddin's father answered that he had "not yet, because of the prevailing tensions here ... we do when we shift from here ... it might be after two, three months, later we might ... we might start that through any scheme, like life insurance ...", suggesting that he did have a plan in mind to ensure Saifuddin could remain at his private school.

The course material also gets tougher as the children get older and parents who cannot manage to coach their children at home often send them for private tuition at an additional cost. Meeting the costs not only of the school fees but also the after-school coaching has not been easy for Saifuddin's father, who works as a medical assistant in a hospital. He does extra work as a Registered Medical Practitioner after his regular working hours in order to earn an additional income to help finance the tuition fees and living in an area near Saifuddin's school. When probed further about their plan for when Saifuddin completed his secondary education, allowing for the possibility that there may not be much change in the household's financial situation, both parents answered that they "will do something or the other, madam, now we are doing something, then [we] will have to do more ... have to do more and solve the problem [We] will do our level best".

The willingness of Saifuddin's parents' willingness to live in an expensive area and pay relatively large amounts in tuition and other fees reveals that their preference for the perceived higher-quality private education means they are prepared to invest significant proportions of their income in their children's education. Therefore, the observed behaviour of the parents in the qualitative case studies implicitly reinforces the evidence seen before in suggesting that parents perceive private schools to represent a better investment in education, in terms of the quality of schooling provided, than government schools. For example, James and Woodhead (forthcoming, 2013) find, using qualitative data from the Young Lives school survey, that parents tend to believe that provision of education in the private sector is of better quality than that under the public sector.

The other controls in the regression results have the expected sign of association with private school enrolment. For example, male children are around 10 per cent more likely to be enrolled in private school at age the age of 12, given their school type at the age of 8. Children belonging to traditionally ethnically disadvantaged social classes also tend to have a lower probability of attending private school, although, of the ethnicity dummies, only the one indicating that the child belongs to a Scheduled Caste in comparison with other classes (not one of the traditionally disadvantaged classes) is significant – children from this caste are about 12–14 per cent marginally less likely to be enrolled in private school at the age of 12. The birth order of the child remains significant in determining private school enrolment in some contexts as children born later into a family are less likely to be enrolled in private school. The results show that a child born one rank later in the birth order has a 3 per cent

lower chance of being enrolled in private school on average. This could indicate either financial constraints or parental preferences.

Keerthi's case shows how parental aspirations can overcome even these supposed setbacks – Keerthi is the eldest of three children, and her two younger brothers also go to private school. Therefore, in her case, the lower likelihood of being enrolled in a private school due to her being a Scheduled Tribe girl may be outweighed by her being the first-born. On the other hand, her mother also mentions in the interview, that Keerthi, unlike her two younger brothers, “will live up to our expectations” which surprises her, but also makes her happy, as she believes that “[Keerthi] is capable of realising our dreams...[as she] has some commitment” and “wants to get a good name for the parents”.

Our estimates suggest that maternal education has no effect on the probability of a child being enrolled in private school, whereas paternal education has a positive and significant effect. This may be explained by evidence that suggests that fathers traditionally have more bargaining power with regard to intra-household decision-making than mothers (World Bank 2001: 163). The lack of association between maternal education and private school enrolment may be also explained by multicollinearity of maternal education with other included controls (Behrman et al. 1999; Kambhampati 2009; Schultz 2001), and also by the fact that part of the maternal education effect is expected to be picked up by the lagged dependent variable as parental education is fixed over time.

The positive effect of paternal education is especially obvious in Saifuddin's case study. Though Saifuddin's mother is educated up to Grade 5, cultural norms limit her ability to work and therefore she spends her time as a housewife managing the household, actively engaging in all matters involving her children. She is very supportive of her husband's views on the children and their future and tries to create a home environment conducive of the children pursuing their father's goals for them. Therefore Saifuddin's father, who was educated up to the tenth grade, plays a more important part than his wife in determining aspirations for their children's future, and appears to be the key influence in Saifuddin's private school enrolment.

The case of Keerthi's mother exhibits how access to information about educational opportunities may play a role in overcoming situations with low levels of maternal educational attainment. Looking back at her own life, Keerthi's mother reflects,

“We are doing these kind of jobs because we haven't gone to school – that is our bad luck. I have been working here [in the school]; hence I came to know a few things, madam. Otherwise if we had gone to work as daily wage labourers, we might not have known many things. Good education begets good jobs. We get to know so many things only when we work, that is how our knowledge is increased. But if we go to work in the fields, we only get to know how to sweep and weed out or else get to know about hillside jobs.”,

highlighting how her desire to improve her children's lots in life was born out of a greater access to information about schooling opportunities, as well as how she came to realise the importance of schooling through information received through her job. Making use of the contacts that she had established over the years as part of her work, Keerthi's mother obtained admission for all three of her children to the ITDA-supported schools. She believes that the goodwill she has accumulated at her workplace is very helpful to her children, and when asked about how she managed to access the services provided by the ITDA, she answered, “They [staff at the workplace] say ‘This is Lakshmi's son, this is Lakshmi's

daughter. She is a very nice lady, very hard working and is always worried about her children.' That's what they say about me." While Keerthi was at high school, her mother often visited the school and asked her teachers about her performance, and also gathered information from different sources about the various educational schemes available for her children, such as reserved places or quotas allowing tribal and other socially disadvantaged children to enrol in higher education at lower fees. Therefore, the fact that Keerthi's mother works at an ITDA-run school, combined with her colleagues' goodwill towards her, enabled her to find out more about the possibility of enrolling Keerthi in private school. Hence access to information about schooling opportunities, along with the government scholarship that allowed her to access these opportunities, has proved very important in Keerthi's case in determining her enrolment in a private school.

5. Discussion

This paper set out to investigate empirically whether parental aspirations play a significant role as a determinant of private school choice, using data from the Young Lives cohort study in the state of Andhra Pradesh in India. Although previous theoretical analysis has suggested that aspirations are an important determinant of investment in education, there is limited empirical evidence that supports this.

We find evidence of a strong positive impact of parental aspirations on private school enrolment across different measures and specifications. Parents who aspire for their children to achieve more years of schooling are more likely to enrol their children in private school, but the magnitude of this increase in probability of enrolment in private school is much higher for those parents who wish for their children to achieve a university education. Similarly, parents who wish for their children to work in a high-status or high-income occupation are also much more likely to enrol their children in a private school than those who only aspire for their children to be in a low-income or low-status occupation.

We also draw on case studies to better understand the pathways through which this strong positive link between parental aspirations and private school enrolment may have been realised. The two case studies suggest that parents who perceive that education is an important determinant of future success, and who have the highest levels of aspiration for their children's future occupational status, are willing to make higher investments in education. The qualitative evidence also suggests that parents' access to information about educational opportunities affects both the formation of their aspirations and the probability of private school enrolment.

On the whole, our findings seem to indicate that parental aspirations form a key demand-side factor that, taken together with the increased supply of affordable private schools in Andhra Pradesh, could explain recent trends in the increasing incidence of private school enrolment even among low-income households. This is because parents believe that high investment in better-quality education, as perceived to be provided by private schools, could allow their children to achieve these high aspirations and secure a better future.

References

- Baird, R. (2009) *Private Schools for the Poor: Development, Provision, and Choice in India*, Report for Gray Matters Capita, (<http://www.dise.in/Downloads/Use%20of%20Dise%20Data/Ross%20Baird.pdf>) (accessed 26 October 2012)
- Behrman, J., Andrew Foster, Mark Rosenzweig and Prem Vashishtha (1999) 'Women's Schooling, Home Teaching, and Economic Growth', *Journal of Political Economy* 107.4: 682–714
- Chakrabarti, R. and J. Roy (2010) 'The Economics of Parental Choice' in P. Peterson, E. Baker and B. McGaw (eds) *International Encyclopedia of Education* (third edition), Oxford: Elsevier
- Chiapa, C., J.L. Garrido and S. Prina (2012) 'The Effect of Social Programs and Exposure to Professionals on the Educational Aspirations of the Poor', *Economics of Education Review* 31.5: 778–98
- Chumacero, R.A., D. Gómez and R.D. Paredes (2011) 'I Would Walk 500 Miles (If It Paid): Vouchers and School Choice in Chile', *Economics of Education Review* 30.5: 1103–14
- Coleman, J. and T. Hoffer (1987) *Public and Private High Schools: The Impact of Communities*, New York: Basic Books
- Cox, D. and E. Jimenez (1990) 'The Relative Effectiveness of Private and Public Schools: Evidence from Two Developing Countries', *Journal of Development Economics* 34.1–2: 99–121
- Drèze, J. and A. Sen (2002) *India: Development and Participation*, Oxford: Oxford University Press
- Epple, D. and R.E. Romano (2008) 'Educational Vouchers and Cream Skimming', *International Economic Review* 49.4: 1395–435
- Epple, D. and R.E. Romano (1998) 'Competition between Private and Public Schools, Vouchers, and Peer-Group Effects', *The American Economic Review* 88.1: 33–62
- Glewwe, P. and E.A. Miguel (2007) 'The Impact of Child Health and Nutrition on Education in Less Developed Countries' in T.P. Schultz, and A.S. John (eds) *Handbook of Development Economics*, Amsterdam: North-Holland
- Hanushek, E. (2002) 'Publicly Provided Education' in A.J. Auerbach and M. Feldstein (eds) *Handbook of Public Economics*, Amsterdam: North-Holland
- Hanushek, E. (1995) 'Interpreting Recent Research on Schooling in Developing Countries', *The World Bank Research Observer* 10.2: 227–46
- Hastings, J.S. and J.M. Weinstein (2008) 'Information, School Choice, and Academic Achievement: Evidence from Two Experiments', *The Quarterly Journal of Economics* 123.4: 1373–414
- James, Zoe and Martin Woodhead (forthcoming) 'Choosing and Changing Schools in India's Private and Government Sectors', *Oxford Review of Education*

- Jimenez, E., M.E. Lockheed and V. Paqueo (1991) 'The Relative Efficiency of Private and Public Schools in Developing Countries', *The World Bank Research Observer* 6.2: 205–18
- Kambhampati, U. (2009): 'Child Schooling and Work Decisions in India: The Role of Household and Regional Gender Equity', *Feminist Economics* 15.4: 77–112
- Kingdon, G.G. (2007): 'The Progress of School Education in India', *Oxford Review of Economic Policy* 23.2: 168–95
- Kingdon, G.G. (1996a): 'The quality and efficiency of private and public education: a case-study of urban India', *Oxford Bulletin of Economics and Statistics* 58.1: 57–82
- Kingdon, G.G. (1996b): 'Private Schooling in India: Size, Nature, and Equity-Effects', *Economic and Political Weekly* 31.51: 3306–14
- Kumra, N. (2008) *An Assessment of the Young Lives Sampling Approach in Andhra Pradesh, India*, Young Lives Technical Note 2, Oxford: Young Lives
- Muralidharan, K. and M. Kremer (2007) 'Public and Private Schools in Rural India', [http://www.economics.harvard.edu/faculty/kremer/files/Public%20and%20private%20schools%20in%20rural%20india%20\(Final%20Pre-Publication\).pdf](http://www.economics.harvard.edu/faculty/kremer/files/Public%20and%20private%20schools%20in%20rural%20india%20(Final%20Pre-Publication).pdf), (accessed 20 November 2012)
- Pandey, P. and S. Goyal (2012): 'How Do Government and Private Schools Differ?', *Economic and Political Weekly* 47.22: 67–76
- PROBE Team (1999) *Public Report on Basic Education in India*, New Delhi: Oxford University Press
- Ray, D. (2006) 'Aspirations, Poverty, and Economic Change' in A.V. Banerjee, R. Bénabou and D. Mookherjee (eds) *Understanding Poverty*, Oxford: Oxford University Press
- Schultz, T.P. (2001) 'Women's Roles in the Agricultural Household: Bargaining and Human Capital Investments' in L.G. Bruce, and C.R. Gordon (eds) *Handbook of Agricultural Economics*, Amsterdam: North-Holland
- Tooley, J. (2004) 'Private Education and "Education for All"', *Economic Affairs* 24.4: 4–8
- Tooley, J. and P. Dixon (2006) "'De Facto' Privatisation of Education and the Poor: Implications of a Study from Sub-Saharan Africa and India', *Compare: A Journal of Comparative and International Education* 36.4: 443–62
- Tooley, J. and P. Dixon (2003) *Private Schools for the Poor: A Case Study from India*, Reading: Centre for British Teachers (CfBT), <http://cfbtstaging.cfbt.com/cfbt/PDF/91001.pdf> (accessed 31 October 2012)
- Tooley, J., P. Dixon and S. Gomathi (2007) 'Private Schools and the Millennium Development Goal of Universal Primary Education: A Census and Comparative Survey in Hyderabad, India', *Oxford Review of Education* 33.5: 539–60
- Wolfe, B.L. and J.R. Behrman (1984) 'Who is Schooled in Developing Countries? The Roles of Income, Parental Schooling, Sex, Residence and Family Size', *Economics of Education Review* 3.3: 231–45
- Woodhead, M., M. Frost and Z. James (2013): 'Does Growth in Private Schooling Contribute to Education for All? Evidence from a Longitudinal, Two Cohort Study in Andhra Pradesh, India', *International Journal of Educational Development* 33.1: 65–73
- Wooldridge, J.M. (2010): *Econometric Analysis Of Cross Section And Panel Data, Second Edition*, Cambridge, M.A and London: MIT Press

World Bank (2001): *Engendering Development*, World Bank Policy Research Report, Washington, DC: World Bank

Yang, P.Q. and N. Kayaardi (2004) 'Who Chooses Non-public Schools for their Children?', *Educational Studies* 30.3: 231–49

Appendix

Table A1. *Educational aspirations of caregivers for their children, by type of school (public/private)*

Educational aspirations	Government school	Private school	Total
0 = None	1	1	2
1	1	0	1
5	2	0	2
7	6	0	6
10	153	11	164
12	55	11	66
13 = Post-secondary/ vocational	44	20	64
14 = University	273	155	428
Total	535	198	733

Source: Young Lives, Round 2 (2006), Older Cohort. Answers to the question 'What level of education would you like your child to complete?'

Table A2. *Categorisation of occupations aspired to by caregivers for their children, by type of school (public/private)*

Occupational aspiration	Government school	Private school	Total
High income/status			
Accountant	21	2	23
Artist	1	0	1
Civil servant	0	1	1
District magistrate	3	5	8
Doctor	34	39	73
Engineer	30	56	86
Lawyer	1	2	3
Lecturer	0	1	1
Pilot	1	2	3
Politician	1	0	1
Teacher	260	64	324
Trader/Businessman/woman	4	2	6
<i>Total</i>	<i>356</i>	<i>174</i>	<i>530</i>
Low income/status			
Bus conductor	7	0	7
Computer operator	2	9	11
Domestic worker	1	0	1
Driver	8	1	9
Farmer	16	1	17
Full-time parent/housewife	78	2	80
Labourer	9	0	9
Market trader/shop assistant	2	0	2
Mason	4	0	4
Mechanic	3	0	3
Nurse	20	0	20
Policeman	16	9	25
Soldier	2	1	3
Tailor	8	0	8
Traditional occupation	3	1	4
<i>Total</i>	<i>179</i>	<i>24</i>	<i>203</i>
Total	535	198	733

Source: Young Lives Round 2 (2006), Older Cohort. Answers to the question 'What job would you most like your child to do in the future?' (Answers were chosen from a list of suggestions.)

Table A3. *Composite aspirational variable*

Items used in scale construction	Item coding	Item means			Cronbach's alpha
		Government school	Private school	Total	
Caregivers' ambitions for children's future occupations, ranked by income and status	Measure is binary with 1=high income/ status jobs and 0=low income/ status jobs	.6654	.8788	.7231	0.5956
Caregivers' aspirations for children's educational achievement	Measure is categorical with 1=university education and 0 = no education	.8611	.9519	.8856	

Notes: Average interitem covariance: 0.0565971
Number of items in the scale: 2
Scale reliability coefficient/Cronbach's alpha: 0.5956

The two items measure the caregivers' aspirations for their children's future in terms of their future occupations and the number of years of education they complete, respectively. In order to combine the two items into one composite quantitative measure, we classified all reported occupations into two categories and ranked the categories based on the level of income/status accorded to each occupation. The levels of income and status mapped to the occupations are classified as high and low.

The Impact of Parental Aspirations on Private School Enrolment: Evidence from Andhra Pradesh, India

This paper presents an analysis of the role of parental aspirations in determining private school choice in Andhra Pradesh, using quantitative and qualitative data from the Young Lives cohort study over two rounds. Aspirations are measured using a range of indicators of what educational attainment level and status of their future occupational status parents desire for their children. We find robustly, across all measures of aspirations and different empirical specifications, that parental aspirations have a significant positive impact on the probability that the child is enrolled in a private school. This finding is further supported by qualitative evidence that also suggests that higher parental aspirations for the future situation of their child will lead to higher investment in education because parents perceive education as key to future success. Thus, our findings suggest that parental aspirations are among the demand factors that may explain the recent dramatic increase in private school enrolment in Andhra Pradesh among the poorest groups. This is mainly because parents believe that private schools can provide a better future for their children, which motivates them to make the necessary investment.



About Young Lives

Young Lives is an international study of childhood poverty, involving 12,000 children in 4 countries over 15 years. It is led by a team in the Department of International Development at the University of Oxford in association with research and policy partners in the 4 study countries: Ethiopia, India, Peru and Vietnam.

Through researching different aspects of children's lives, we seek to improve policies and programmes for children.

Young Lives Partners

Young Lives is coordinated by a small team based at the University of Oxford, led by Professor Jo Boyden.

- *Ethiopian Development Research Institute, Ethiopia*
- *Centre for Economic and Social Sciences, Andhra Pradesh, India*
- *Sri Padmavathi Mahila Visvavidyalayam (Women's University), Andhra Pradesh, India*
- *Grupo de Análisis para el Desarrollo (Group for the Analysis of Development), Peru*
- *Instituto de Investigación Nutricional (Institute for Nutrition Research), Peru*
- *Center for Analysis and Forecasting, Vietnamese Academy of Social Sciences, Vietnam*
- *General Statistics Office, Vietnam*
- *Child and Youth Studies Group (CREET), The Open University, UK*
- *Oxford Department of International Development (ODID), University of Oxford, UK*
- *Save the Children*

Contact:

Young Lives

Oxford Department of International Development (ODID), University of Oxford, Queen Elizabeth House, 3 Mansfield Road, Oxford OX1 3TB, UK
Tel: +44 (0)1865 281751
Email: younglives@younglives.org.uk
Website: www.younglives.org.uk