

HOW SCHOOL CHOICE IS FRAMED BY PARENTAL PREFERENCES AND FAMILY CHARACTERISTICS: A STUDY IN POOR AREAS OF LAGOS STATE, NIGERIA

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Abstract

This research set out to investigate how, in a low-income area of Nigeria, parental preferences and household characteristics affect school choice for their children. A household survey was undertaken in Lagos State, Nigeria, gathering data for 556 children attending government and low-cost private primary schools. Descriptive data show that poor parents investigate a wide range of sources to inform the decision-making process. These include school visits, networks of relatives, friends and neighbours, and school observations. Discrete choice theory is used to model how school choice is framed by parental preferences and family characteristics. The results show a large statistically significant preference for low-cost private schools where quality of teaching, proximity to home and strong school leadership are important to parents. The child's birth order in the family and the older the child increased the likelihood of parents choosing a government school for that child. Children living in a family unit where the father has achieved a higher level of occupation or education are more likely to attend a private school. Family income and higher maternal educational attainment are not significant characteristics in this school choice model.

JEL codes: I21, I24, I28.

Keywords: developing countries; low-cost private schools; Nigeria; primary education; school choice.

1. Introduction

Lagos State is the geographically smallest of the 36 Nigerian states. With around 15m people, it is the sixth largest global conurbation. Over the past ten years, research around education provision has burgeoned in Lagos State, owing in part to our earlier work (Tooley et al. 2005; Tooley et al. 2011; Tooley and Dixon 2005; REF 2014). The latest research shows that private schools account for 57 per cent of all enrolments in Lagos State, serving approximately 1.4m children, half of whom are girls (Härmä 2011c). Of the 11,226 primary schools, 10,235 (91 per cent) are private with 991 (9 per cent) being government.

In many areas of the developing world poor parents are sending their children to a variety of school management types. Over the past few decades research has revealed that in many sub-Saharan African countries, as well as in India, low-fee private schools have become an option for poor parents (Tooley 2009; Dixon 2013; Dixon et al. 2015; Stanfield 2015; Alderman et al. 2001; Ngware et al. 2009; Rose 2009; Tooley et al. 2005; Mehrotra and Panchamukhi 2007; Walford and Srivastava 2007; Stern and Heyneman 2013; Härmä 2015). Parents in developing countries are making decisions and choices about where to educate their children.

There is a paucity of research around choice and schooling in developing contexts. However, a number of studies of household choice and schooling have been carried out in African countries including Nigeria, Ghana, Liberia and Kenya (Härmä 2013, 2011a,b; Nishimura and Yamano 2013; Akaguri 2014; Rolleston and Adefeso-Olateju 2014; Siaplay and Werker 2013).

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Some research in Nigeria, typically school-based interviews with parents, has been carried out in order to investigate perceptions of schooling and the reasons behind private and government school choice (Härmä 2011a,b). Private school choosers rated quality as a main preference criterion (64 per cent Kwara State and 77 per cent Lagos). Government choosers did not rate quality so highly (21 per cent Kwara and 44 per cent Lagos). Around one-third of all parents interviewed in Lagos, and one-third in government schools in Kwara, expressed the importance of affordability. In Lagos one-third of parents stated a preference for schools being close to their homes. The same study found that a school's reputation and the relationships between school owners and parents were also important when making choices (Härmä 2011a,b).

Some state that research is mixed around gender and the likelihood of boys and girls being equally represented across school types. According to Day Ashley et al. (2014, p. 24):

Several studies reviewed indicated that girls are less likely to access private schools than boys. However, the evidence is context specific with some studies ambiguous on the issue and a minority of studies finding in certain contexts private school reduce the gender gap that is found in state schools.

Research in Tanzania, Ghana and Kenya found that the proportion of girls attending private schools was roughly equivalent to boys (Hartwig 2013; Tooley et al. 2007; Tooley et al. 2008).

Affordability is regarded as an issue for choice in rural Kenya and Ghana. Children from poorer households have a lower probability of attending private schools due to low family income (Nishimura and Yamano 2013; Akaguri 2014). Parents in Ghana and Nigeria were shown to prefer private over government schools because of perceived quality (examination results) and attention children received in class (Rolleston and Adefeso-Olateju 2014). Class size has been shown to be important with regards to choice in Kenya (Nishimura and Yamano 2013). As the pupil–teacher ratio increased in government schools, there was an increased likelihood of children transferring to private schools.

One piece of research from Liberia considered the association between wealth and the likelihood of attending different school management types (Siaplay and Werker 2013). Using secondary data from the Liberian Ministry of Education and the West African Examination Council, the findings show that children from most income quintiles are able to access private and religious schools where standardised test results are stronger than those in government schools. Being richer and living in urban areas decreases the likelihood of attending a government school; the opposite is true for the poor in rural areas.

To summarise the literature set out above, parental choice places emphasis on school quality, reputation, proximity to home, and affordability. However, the research shows mixed findings regarding income effects and wealth.

2. Method

This article presents data that were gathered for a research project funded by the Department for International Development (DFID).¹ This research had two aims:

- to explore the school choice process undertaken by disadvantaged families;
- to investigate how school choice is framed by parental preference and household characteristics.

This study differs from the majority of school choice research carried out in developing countries in three ways. First, the data were gathered in the household itself with the parent who stated they made the decisions around schooling. Schools, therefore, were not used as a springboard to find parents from particular school types. Second, this article sets out a more sophisticated statistical technique than used in previous research carried out in developing countries, that is discrete choice theory, to try to gain a deeper understanding of how, by whom and why schools are chosen. Third, this research looks at the choice process (that is the investigative journey) parents take before making final decisions concerning the school their child will eventually attend.

All parents were informed before the start of the household questionnaire that the purpose of the assessment exercise was to investigate parental choice around different types of school management, that participation was voluntary, and that the results of the assessment would be kept confidential and for research use only.

The data reported in this article were collected for a total of 556 children from 352 households in poor areas of Lagos State, Nigeria. All households reported in this study were located in poor areas of Lagos State, lacking infrastructure, with roads in poor repair and with insufficient water and sanitation.

A team of survey administrators under the supervision of researchers from Newcastle University collected the data. The administrators had been given training specifically for this project. The enumerators interviewed the person who made the decisions about education within the household. The interview lasted about one hour in total. The administrators read out the household questionnaire to the participants in their local language to avoid any literacy issues.

3. Results

This article sets out to consider how parents choose schooling for their children. It is therefore divided into two parts. The first part sets out descriptive data to investigate the school choice process undertaken by disadvantaged families. The second uses discrete choice theory to test whether household preferences and characteristics affect the choice of attending different school management types.

3.1. School choice process

The first aim of the research was to explore the school choice process undertaken by disadvantaged families. This part of the results section sets out the descriptive statistics to consider the information parents gather in order to make school choice decisions. It also looks at the characteristics of the child's household.

Of the 352 households surveyed all had at least one child of school age. The mean number of children in the household was 3.8 with a standard deviation (SD) of 1.9. The mean age for these children was 8.43 years (SD 2.33 years). Table 1 shows the school management type attended by gender. The gender split is relatively equal for this set of 556 children. Roughly equal proportions of boys and girls attend low-cost private schools, but a greater proportion of boys attend government schools.

Per capita income was calculated as the sum of the total reported family income for all earning members in the family divided by the number of reported members of the household both adults and

Table 1: Gender and school-management type

Gender	Government		Low-cost private		Total	
	N	%	N	%	N	%
Boy	168	55.0	128	51.0	296	53.2
Girl	137	45.0	123	49.0	260	46.8
Totals	305	100.0	251	100.00	556	100.0

children. The caveat needs to be raised that in a questionnaire/interview setting some parents may intentionally or otherwise misreport family income. Figure 1 shows similar patterns for government and low-cost private school choices with comparable levels at each per capita income. The percentage represents the proportion of total households in each corresponding decile.

There are a number of characteristics that clearly show that the households attending government and private schools are similar (see Table 2). These include the average number of adults in the home (2.5 for both); average monthly household income (₦40,400 (£96.84) compared to ₦39,400 (£94.45)); the percentage having mothers with no schooling (19 per cent for both); the average number of bedrooms (1.8 compared with 1.6); and the percentage of households with an outside toilet (70 per cent for both). Regarding possessions, again households are relatively similar with 98 per cent of families owning at least one mobile phone (mean two per household); with 6.8 per cent having computers; fewer than 10 per cent possessing a motorbike but around 60 per cent owning a generator.

There are a few family characteristics that distinguish students in low-cost private schools from their peers in government schools. Private school students are more likely to have a father who has up to a senior secondary school education (54.2 per cent compared to 42.3 per cent); a father who is working (92 per cent compared to 77 per cent); and are more likely to speak English at home (16.3 per cent compared to 8.3 per cent).

Most parents concentrate their school search activity within the school sector they ultimately select for their child. Almost 82 per cent of parents of children enrolled in low-cost private schools stated that they did not visit any government schools, and 71 per cent of parents of children enrolled in government schools likewise reported they did not visit any private schools (see Table 3). For parents of children enrolled in government schools, 54 per cent said they visited at least one

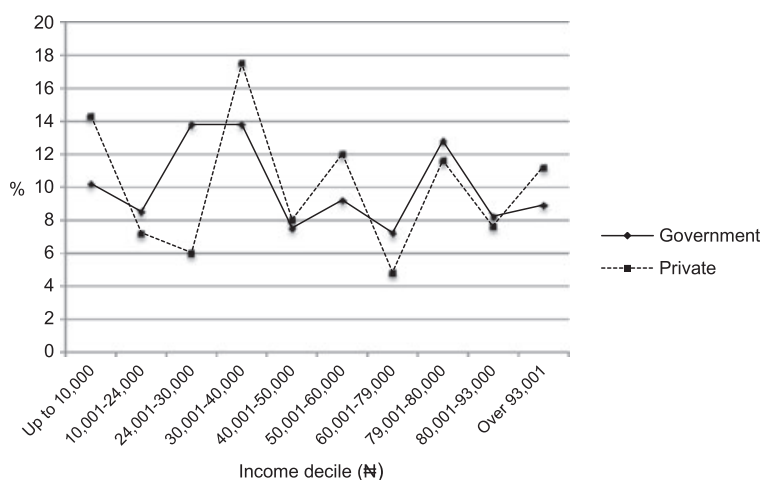
**Figure 1:** School choice by family income decile.

Table 2: Characteristics of child's household by type of school attending

Item	Low-cost private	Government	Total
Language spoken at home			
English	16.3	8.2	11.9
Yoruba	54.6	64.6	60.1
Igbo	11.2	13.4	12.4
Egun/Awori	8.4	4.3	6.1
Hausa	0.0	3.6	2.0
Other	9.6	5.9	7.6
Adults in household*	2.5	2.5	2.5
Children in household*	3.7	3.8	3.8
Household size*	6.2	6.3	6.3
Employment status of father			
Not working	8.0	23.0	16.2
Unskilled	43.8	37.4	40.3
Skilled	48.2	39.7	43.5
Employment status of mother			
Not working	11.6	12.1	11.9
Unskilled	75.7	72.1	73.7
Skilled	12.7	15.7	14.4
Father's highest education level			
None	14.3	26.2	20.9
Primary	15.9	17.7	16.9
Junior secondary	4.0	8.2	6.3
Senior secondary	54.2	42.3	47.7
Higher education	11.6	5.6	8.3
Mother's highest education level			
None	19.1	19.0	19.1
Primary	25.1	31.5	28.6
Junior secondary	10.4	11.1	10.8
Senior secondary	40.6	34.8	37.4
Higher education	4.8	3.6	4.1
Total Monthly Household Income (Naira 10 k)*	4.04	3.94	3.98
Meals eaten per day			
Two	4.8	9.3	7.2
Three	84.5	81.5	82.8
More than three	10.8	9.3	9.9
Bedrooms*	1.8	1.6	1.7
Toilet access			
Shared	0.0	5.9	3.2
Own (outside)	70.5	70.2	70.3
Own (inside)	29.5	23.9	26.4
Number of TVs*	1.27	1.07	1.16
Number of cell phones*	2.3	2.2	2.2
Other household assets			
Generator	61.0	60.3	60.6
Refrigerator	45.8	37.7	41.4
Computer	6.8	6.9	6.8
Motorbike	11.2	8.5	9.7
Car	15.6	13.1	14.2

Note: *denotes results that are averages; all others are percentages.

government school, with over one-quarter visiting two or more. About equal proportions of low-cost private and government school parents visited one school in their school sector. However, low-cost private school parents were much more likely than government school parents to report visiting more than one school in their chosen sector (41 per cent compared to 28 per cent).

Table 3: Number of schools visited by school attending

	Private (attending) (%)	Government (attending) (%)	Total (%)
<i>Number of government schools visited</i>			
0	81.7	46.1	62.2
1	12.4	26.0	19.8
2	4.8	19.7	13.0
3	0.8	6.3	3.8
More than 3	0.4	2.0	1.3
Totals	100.0	100.0	100.0
<i>Number of private schools visited</i>			
0	35.1	71.1	54.8
1	23.9	19.7	21.6
2	23.5	7.6	14.8
3	14.7	1.3	7.4
More than 3	2.8	0.3	1.4
Totals	100.0	100.0	100.0

With regard to who makes decisions within the family, and in this case for the eldest child attending primary school, mothers are described as education decision-makers for about three-quarters of private and government school families. Fathers are reported as such for 77.5 per cent of government school families and 86.6 per cent for low-cost private school families. Over 65 per cent of all families say that school visits are an important source of information used in their schooling decisions. Around half of the families report relying on their network of relatives, friends and neighbours to inform their schooling decisions. A third of families say they observe lessons at the school and a fifth report they talk to students already attending the school. Families that choose low-cost private schools for their oldest child are similar to families that choose government schools regarding most of the information sources that inform their decisions (see Table 4).

Table 4: Schooling decision-making process by type of school oldest child attends – household level

	Government (%)	Private (%)	Total (%)
<i>Schooling decision makers</i>			
Staff of previous school	0.5	0.0	0.3
Mother	77.0	77.5	77.2
Father	77.5	86.6	81.2
Child	9.0	0.0	1.1
Grandmother	5.3	2.8	4.3
Grandfather	2.4	0.7	1.7
Other relative	2.9	2.1	2.6
Legal guardian	1.4	1.4	1.4
Other	1.9	4.9	3.1
<i>Sources of information about the school</i>			
Relatives/friends/neighbours	49.8	53.5	51.3
Religious/community leaders	8.6	7.0	8.0
Children who attended that school	26.3	16.2	22.2
School visit	62.7	69.0	65.2
Observed lessons at the school	27.8	36.6	31.3
Talked to teachers at the school	17.7	23.9	20.2
Schools examination performance	14.4	14.1	14.2
School prospectus	7.2	18.3	11.7
Information on the internet	0.0	0.0	0.0
Worked at the school	1.0	0.0	0.6
Attended the school	3.3	0.0	2.0

Out of the 352 households 120 parents indicated they moved at least one of their children in the last two years. They were told they could provide up to a maximum of three reasons regarding their decision to move. However, the majority of parents gave just one reason. Most of the movers originally attend private schools, with the majority being moved to other private schools. Children attending government schools tended to move within that sector. Parental dissatisfaction with school quality as highlighted by three of the items (dissatisfaction with the school; poor teachers; poor academic performance) was given for each type of school move. Parents will move between government and government, and private and private, owing to quality considerations. School cost is highlighted as an issue for parents who move their child either between low-cost private schools or from a low-cost private school to a government school. The movement of children within the low-cost private school system may indicate that some parents are discriminating between private schools on the basis of cost as well as quality, as noted above (see Table 5).

3.2. Parental preferences and household characteristics

The second aim of the research was to investigate how school choice is framed by parental preference and household characteristics. Parents were asked to select their 'three main reasons' for choosing their child's school. The percentage of parents selecting each one of the eight given preferences is given in Table 6. Parents most frequently list 'close to home' as being an important preference (59.5 per cent), followed by four other characteristics: 'academic performance' (41.5 per cent), 'quality of teaching' (41.0 per cent), 'affordability' (41.4 per cent) and 'strong disciplinary environment' (39.6 per cent).

Table 5: Reasons for moving a child (three reasons per move)

Reason	Government to government	Government to private	Private to government	Private to private	Total
School was too expensive	2	0	36	19	57
Moved to a new area	7	0	7	22	36
Dissatisfaction with the school	3	1	4	8	16
School too far	4	3	2	22	31
School overcrowded	1	0	1	0	2
Poor teachers	4	1	2	8	15
School closed	0	0	0	2	2
Poor academic performance	1	4	8	10	23
Poor discipline or safety	1	0	1	0	2
Child expelled	4	1	2	8	15

Table 6: Parent's preferences (%) for various school characteristics

Preference (important, not important)	Government		Private		Total	
	Yes	No	Yes	No	Yes	No
Academic performance	38.7	61.3	45.0	55.0	41.5	58.6
Quality of teaching	35.4	64.6	47.8	52.2	41.0	59.0
Affordability	43.9	56.1	38.2	61.8	41.4	58.6
Close to home	58.7	41.3	60.6	39.4	59.5	40.5
Safe school environment	15.1	84.9	15.5	84.5	15.3	84.7
Strong disciplinary environment	47.2	52.8	30.3	69.7	39.6	60.4
Strong school leadership	0.7	99.3	18.7	81.3	8.8	91.2
School reputation	40.0	60.0	27.9	72.1	34.5	65.5

In order to investigate influences that possibly affect school choice, it is necessary to define household, parent and child demographic characteristics from the data. The variables used are set out below:

- Gender of the pupil (boy = 0, girl = 1)
- Pupil's age in years and fractions of a year
- Order in the family (Eldest =1)
- Total number in the family
- Total earning family members
- Total monthly household income
- Father's level of education (0 = No Education; 1 = Primary Education; 2 = Junior Secondary; 3 = Senior Secondary; 4 = Further Education)
- Mother's level of education (0 = No Education; 1 = Primary Education; 2 = Junior Secondary; 3 = Senior Secondary; 4 = Further Education)
- Father's occupation (0 = Not working; 1 = Unskilled; 2 = Skilled)
- Mother's occupation (0 = Not working; 1 = Unskilled; 2 = Skilled)

The household survey asked a number of questions about family possessions and wealth. It was necessary to collapse some of them into a smaller set of combined factors, otherwise there would be too many independent variables to fit a sensible model to the data. These have been combined into a smaller set of measures using principal factor analysis, rotated using the Varimax procedure. A 2-factor solution was found to be optimal. The combined factors were given the following descriptions:

- Factor 1: Wealth 1 – Electric: Cell Phone, Computer, TV, Fridge, Generator;
- Factor 2: Wealth 2 – Transport and farming: Motorbike, Cattle, Farm Animals, Cultivated Land.

These two factors explain 32 per cent of the variation in this set of data. Factor scores for these wealth factors were derived for each pupil and standardised to a mean of 50 and standard deviation of 10. To investigate how school choice is framed by parental preferences and household characteristics, discrete choice theory is used to estimate the following equation:

$$C_i = \alpha + \beta \mathbf{D}_i + \gamma \mathbf{P}_i + \varepsilon_i$$

C_i is the type of school that parent i has selected for their child. \mathbf{D}_i is the vector controlling for household, parent and child demographic characteristics. These include gender, age, number in the household, order of the child in the family, the number of earning family members, parent's occupation and highest education, two wealth factors, and total family income. \mathbf{P}_i is a vector of each household's preferences for a set of school characteristics and ε_i is the unobserved factors. This research sets out the results of the logistic regression model:

$$\Pr(C_i = s) = \frac{\exp(\alpha_s + \beta_s \mathbf{D}_i + \gamma_s \mathbf{P}_i)}{\sum_{s=0}^1 \exp(\alpha_s + \beta_s \mathbf{D}_i + \gamma_s \mathbf{P}_i)}$$

where s is the choice of enrolments: Government ($s = 0$); Low-cost private ($s = 1$).

By estimating this model we can directly test whether the household preferences and demographics affect the choice of attending different school management types. This model assumes that all parents had the option to select either a low-cost private or a government school.

Table 7 displays the coefficient estimates of the logistic regression model² in terms of odds ratios with the base group being government schools. Each coefficient indicates the change in the odds that a parent selects a low-cost private school instead of a government school for a one standard deviation increase in the preference for the respective school characteristic.³

Three parental preferences around school choice are shown to be statistically significant. Parents who stated a preference when selecting schools for their children by quality of teaching are more likely to send their children to a low-cost private school. The results show that the likelihood of parents selecting a low-cost private school is approximately 2.5 times as large as the likelihood of selecting a government school for every 1 SD increase in the preference rating ($p < 0.01$). Parents who state that the proximity of the school is a preference are more likely to send their child to a low-cost private school. All else equal, a 1 SD increase in the preference indicator of 'close to home' is associated with an increase in the likelihood of selecting low-cost private schools instead of government by a factor of 2.175 ($p < 0.05$). Finally, regarding strong school leadership, parents are more likely to send their children to low-cost private schools rather than government schools when stating this preference ($p < 0.01$). It must be noted that only 8.8 per cent of parents selected this preference as important. The confidence interval on the odds ratio is wide due to there only being two parents from government schools and 47 from low-cost private schools stating this as one of their three preferences.

Table 7: Estimates of the empirical model

Variable	Coeff.	Std. err.	\widehat{OR}	95% CI	
				Lower bound	Upper bound
<i>Parental preferences</i>					
Academic performance	0.324	0.34	1.383	0.710	2.692
Quality of teaching	0.914***	0.337	2.494	1.289	4.828
Affordability	0.117	0.321	1.124	0.599	2.109
Close to home	0.777**	0.332	2.175	1.135	4.169
Safe school environment	0.612	0.385	1.844	0.867	3.922
Strong disciplinary environment	-0.109	0.317	0.897	0.482	1.669
Strong school leadership	4.652***	0.856	104.794†	19.575	561.022
School reputation	-0.293	0.311	0.746	0.406	1.372
<i>Household characteristics</i>					
Gender	-0.076	0.209	0.927	0.615	1.396
Age	-0.408***	0.057	0.420	0.331	0.532
Birth order in the family	-0.896***	0.185	0.511	0.390	0.671
Total number in the family	0.121**	0.061	1.338	1.003	1.788
Wealth 1	0.021*	0.012	1.231	0.975	1.561
Wealth 2	0.003	0.011	1.030	0.831	1.278
No. earning family members	-0.173	0.201	0.891	0.686	1.158
Total family income	-0.048	0.047	0.873	0.674	1.132
Father's level of education	0.34***	0.104	1.545	1.190	2.005
Mother's level of education	-0.057	0.1	0.930	0.726	1.192
Father's occupation	0.323*	0.169	1.227	0.995	1.514
Mother's occupation	-0.068	0.23	0.967	0.774	1.208
Constant	0.92	1.288			

Notes: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ Base group government schools. \widehat{OR} odds ratio = $EXP(SD * Coeff.)$

†Regarding the size of the odds ratio for 'strong school leadership': one of the cells in the contingency table is small and causes a large OR (Private, Government) = $[47/2] / [204/303] = (47 \times 303) / (2 \times 204) = 34.90$. Coefficient value of $\ln(34.90) = 3.55$ SE = $[1/2 + 1/47 + 1/204 + 1/303]^{1/2} = 0.53$.

Diagnostic check showed no sign of collinearities.

Individual characteristics show there is a decrease in the likelihood of parents sending a child to low-cost private schools as the child gets older. With regards to birth order, there is a decrease in the likelihood of a child attending a low-cost private school by a factor of 0.511 ($p < 0.01$) the lower the child is in the birth order. The greater the family size the more likely the child will attend a low-cost private school rather than a government one. In developing countries households often include extended family members. Therefore, the number of family members may be an indicator of a family's willingness to pay for education. The likelihood of selecting a low-cost private school is 1.338 times as large as the likelihood of selecting a government school. The Wealth 1 (possession of electrical goods) indicator suggest that households are 1.231 ($p < 0.10$) times more likely to select a low-cost private school than a government school for every 1 SD in this wealth rating. Finally, in households where the father has achieved a higher level of education or occupation, children are 1.545 ($p < 0.01$) or 1.227 ($p < 0.10$) times respectively more likely to attend a low-cost private school.

4. Conclusion

There is little written about parental choice in developing countries. However, with the growth of the low-cost private school sector in many developing countries, poor parents are demanding the right to select schooling for their children (Tooley 2009; Dixon 2013; Dixon et al. 2015; Härmä 2011c, 2015; Stern and Heyneman 2013).

The literature suggests that quality has been shown to be a main preference criterion for private school choosers (Härmä 2011a,b; Rolleston and Adefeso-Olateju 2014). The research from Nigeria reported here agrees, showing that almost half of private school parents selected this criterion as one of their three main reasons for choosing their child's school. Quality is also shown to be significant in the empirical model. Parents are more likely to send their child to a low-cost private school than a government school if their preferences indicate they value the quality of teaching.

In other African settings preferences have been found regarding the proximity of school to the household and their location within the community (Härmä 2011a,b). The school's reputation, and hence the relationship between the school owners and parents, have an effect on choice (Härmä 2011a,b). In the Nigerian setting parental preference of 'close to home' and 'strong school leadership' were also highlighted as statistically significantly important regarding the likelihood the child attends a low-cost private school.

Certain household characteristics are also indicators of the likelihood of attending certain types of school. In these areas of Lagos State, the older the child the more likely they are to attend a government school. A child's gender does not increase the likelihood of attending different school management types over others in agreement with the literature from sub-Saharan Africa (Hartwig 2013; Tooley et al. 2007; Tooley et al. 2008).

The increased economic well-being of a family (as indicated by 'wealth 1', father's occupation and education) tends to increase the likelihood of the child attending a low-cost private school, agreeing with the findings of Siaplay and Werker (2013) from Liberia.

This research is unique in that it considers the choice process undertaken by poor parents to inform schooling decisions. Although physical visits are typically made to the final management type chosen by the parent, there are a multitude of other sources of information sought during the choice process. This body of information as a whole implies that these disadvantaged parents are making informed choices using a variety of evidence. Over 65 per cent of families stated that school visits were an important

source of information. Networks of households (both social and community) provided half of the families with information to support school decisions. It is not just one parent making school choice decisions. Both the mother and the father were decision makers in three-quarters of the households. Finally, in order to look at choice from the aspect of being able to change school provider, data were gathered around reasons for doing so. Affordability and quality were raised as important considerations when making the decision to move a child from an existing provider.

The right to free primary education and compulsory attendance in Nigeria does not seem to have limited parental choice to fee-free government schooling. Different school management types are offering education provision to parents. Indeed, some suggest that only between 10 and 20 per cent of parents need to be informed in order for the market to be competitive (Thorelli and Engledow 1980; Feick and Price 1987); others suggest that it only requires a subset of parents to be informed to allow for an education market to be effective (Schneider et al. 1998). This research has shown that in Nigeria there are parents who are informed and the school market is burgeoning. Regarding policy implications, both nationally and internationally, further research could address the following policy questions:

- How could strategies be implemented that support parents to become better school choosers for their children?
- How can policies be designed to ensure that all families have real choices, that is, through the implementation of school vouchers or cash transfers?
- What policies can governments implement to facilitate the growth in the supply of schools of different management types that provide quality education for all?

This research suggests that parents living in difficult circumstances in Nigeria are active choosers and, owing to the grass-roots community-led initiative of low-cost private schools, have been given the opportunity to do so.

Notes

1. The data reported in this article cover 556 children from 352 of the 1,001 households, which originally participated in the DFID project. The criteria for their inclusion in this paper were as follows: attending a government or 'low-cost' private primary school with costs less than or equal to ₦25,000 (£59.93) per year; a household income that allowed the choice between 'low-cost' private or government schooling (i.e. if a child was attending a government school they were only selected for the subsample if their household income was equivalent to or greater than that of a household income of a child attending a low-cost private school); the household was located in the poor areas of Lagos State.
2. Measures show that the model fits the data well, with the likelihood ratio test ($\chi^2(20) = 201.088, p < 0.001$), implying that the model as a whole fits significantly better than an empty model with no predictors. The Pearson statistic for the measure of goodness of fit ($\chi^2(533) = 566.285, p > 0.05$) implies that there is no significant difference between the expected and actual values (Train 2009; Long 1997; Hosmer et al. 2013). Pseudo- R^2 likelihood ratio indices: 0.264 (McFadden 1974), 0.304 (Cox and Snell 1989) to 0.407 (Nagelkerke 1991).
3. For continuous independent variables the odds ratio is $\exp[\text{SD} \times \text{Coeff.}]$. This gives an estimated odds ratio for an increase of 1 SD where a one standard deviation is a meaningful change in the respective continuous variable. Within this definition the dichotomous variables were taken to have a standard deviation of 1, giving the odds ratio of $\exp[\text{Coeff.}]$. Each of the coefficients indicates the change in the odds that a parent selects a given type of school instead of a government school for a 1 SD increase in his or her importance rating of the respective school characteristic.

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