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School choice and parental preferences in a poor area of Monrovia.  


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Abstract
This household survey was conducted in a slum of Monrovia, Liberia. It found 72% of children aged 6-14 were in private school, 9.1% in government school and 18.8% out of school. Half of children aged 3-5 (i.e. below compulsory school age) were enrolled in schools. The research did not find any evidence that girls were more likely to be out of school than boys or that families differentially choose to send their boys to school in preference to their girls. Whatever school their children attended, the educational decision makers generally viewed the private schools more favourably than the government alternative.

Keywords
Out of school children, Girls’ education, Low-cost private schools, Liberia, School choice, Schooling decisions.

Bullet Points

- 72% of school-aged children went to private school, 9% went to government school
- There was no evidence of gender bias in school enrolment in these families
- Half the children aged 3-5 were enrolled in pre-school education
- Key school-choice factors were teacher quality, academic performance and discipline
- Most parents preferred a private school over a government school for their children
1. Introduction

There is a paucity of reliable information about the numbers of children out of school in Liberia with different sources (UNESCO Institute of Statistics, 2011; Tsimpo and Wodon, 2012; Ministry of Education (EMIS), 2013) giving very different proportions. In addition the extent to which low-cost private schools are being accessed by the poor is a matter of debate (Day Ashley et al., 2014; Tooley and Longfield, 2015). Little is known of the attitudes of parents towards the different school types in Liberia or the reasons why some parents make the choice to send their children to a low-cost private school rather than a free government school.

The aim of the research was therefore to investigate school access for the children in a slum community in Monrovia and to probe the nature of the choices made by the families as well as their perceptions of the different school types available to them. A household survey on families with children aged 3 to 14 was used to make sure that the research adequately covered the children who were not in school and the families with out of school children as well as the children who were in school.

1.1. Liberia and its education

Liberia which became an independent country in 1847 is Africa’s oldest republic. It is a country of around 4 million (CIA, 2014) with a rapidly growing population. Administratively Liberia is divided into 3 regions and 15 counties. The capital city, Monrovia, where this research took place, is in Montserrado County in the South-Western region.

Liberia was ranked 174 (out of 187 countries) in the Human Development Index in 2013 (United Nations Development Programme, 2014) and low educational levels are a part of that weak human development. A Demographic and Health Survey estimated, in 2007, that “one-third of the population had no education at all; 32 percent had only some primary education (the majority incomplete), 32 percent had some secondary education (the majority incomplete) and only 4.1 percent had any higher education” (Global Partnership for Education, 2010, p. 1).

Civil war severely curtails a state’s ability to provide even basic social services (Lai and Thyne, 2007; Batley and Mcloughlin, 2010). And this has certainly been the case in Liberia where, during the two part civil war (1989-1996 and 1999-2003), education was disrupted across the country and many schools were destroyed. Estimates for the extent of the disruption vary from 30 percent of public schools and 24 percent of community schools (Inter-Agency Network for Education in Emergencies, 2011) to 80 percent of schools (GoL (Government of Liberia), 2007). However it is widely recognised that in conflict and post-conflict situations education rarely ceases completely because communities and individuals step into the gap left by the destruction of the government system (UNESCO IIIEP, 2004; World Bank, 2005; Buckland, 2006; Batley and Mcloughlin, 2010; UNESCO, 2011). But the extent to which this has occurred is not fully clear in the case of Liberia.

The growth of these locally initiated, non-government schools appears to be confirmed in the Appraisal of the 2010-2020 Education Sector Plan that reported “growth in provisions and enrolment at school level has been phenomenal for Community schools” (Global Partnership for Education, 2010, p. 19) with 1370 community schools in 2007/8 up from 54 in 1989 the year when the conflict started. However this is not supported by the EMIS data that reports only 174 community schools in the country in 2013 (Ministry of Education (EMIS), 2013, p. 14).

Within this weak and challenging environment there is a strong desire on behalf of the government to establish an education system that “fully meets the needs and aspirations of the people individually and collectively as a nation” (Ministry of Education, 2010, p. i).
To that end there have been some major developments in the education sector. This includes public-private partnerships where private foundations (such as the Soros Foundation) have made contributions to the development of public education (i.e. private funding of public provision) (Brannelly et al., 2009; Schmidt and Taylor, 2010), public and private sector involvement in the provision of education (Ministry of Education, 2010) and more controversially the government has brought in Bridge International Academies, an international chain, to run some of its primary schools (All Africa, 2016). Thus the government has initiated, in the words of Liberian education minister George Werner, “a partnership with private providers to manage some schools on behalf of the government” (Butty, 2016).

The Liberian government acknowledges and makes use of a wide range of education providers in the form of public, mission-sponsored, concession-sponsored (i.e. by large companies), private-sector, public-private partnership, and community-funded self-help schools. The government in its Draft National Budget 2009–2010 states that non-public schools account for approximately half of the country’s schools, and for 43 percent of primary and 71 percent of secondary school enrolments (Quoted in European Commission, 2009). The 40 percent of primary pupils in non-government schools is confirmed through the analysis of the household survey (Tsimpo and Wodon, 2012). While the School Census of 2007-2008 put the figure at 43 percent of schools being private (World Bank, 2010), the EMIS data gives a much lower figure (26.2 percent or 746 out of 2849 schools) being non-government (Ministry of Education (EMIS), 2013).

Concern is expressed about the low enrolment rates and the unbalanced gender ratio, with different research suggesting that there are many children out of school and that there are fewer girls in school than boys. UNESCO (UIS) (2011) state that only 42 percent of boys and 40 percent of girls were in primary school in 2011 (Net enrolment figures). The EMIS figures for 2013 report a national GER figures of 50 percent for girls and 53.9 percent for boys or 52 percent overall2). However analysis of the household survey data from 2007 suggests a higher figure of 60.1 percent net enrolment in primary schools at the national level (with a gross enrolment rate of 120.7 percent) (Tsimpo and Wodon, 2012)3. Their household survey found that girls were more likely to go to private schools and boys more likely to attend government schools. This is confirmed in the EMIS data for 2013 (Ministry of Education (EMIS), 2013) where the government schools had more boys than girls and the non-government schools, of all types, had more girls than boys. This finding, together with the results from our household survey, may go some way to allay the fears of those who are concerned that parents will differentially chose to send their boys to a fee-charging private school (Day Ashley et al., 2014).

This paucity of reliable information; the apparent omission of schools from the official EMIS statistics as well as the acknowledged absence of information on the extent and role of private schools in post-conflict or fragile states (“No material was found on conflict-affected or fragile states”, (Day Ashley et al., 2014, p. 3) was one of the lacunae that this study set out to fill.

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1 The Soros Foundation made a contribution of $5million conditional on other donors’ commitments.
2 Rather confusingly the EMIS report while using the figures for the total pupils in all school types states “The primary gross enrolment rate (GER in public schools is 52% overall” (emphasis added).
3 The large difference between net and gross enrolment rates is due to many overage pupils attending primary school.
2. **Methodology**

The household survey results that are reported here were part of a larger research into the educational provision in poor areas of Monrovia, a study which itself forms part of research conducted in the post-conflict countries of Liberia, Sierra Leone and South Sudan. The research was funded by the John Templeton Foundation and in Liberia the project was undertaken by Development Initiatives Inc. Liberia, under the directorship of Abraham Boimah Karnley, supervised by the EG West Centre, Newcastle University.

Seven designated slum areas in Monrovia were included in the overall school survey research: Doe Community, Clare Town, Westpoint, New Kru Town, Logan Town, Chicken Soup Factory and St Paul Bridge Community which had formed the basis of the schools’ research. The household survey was conducted in Doe Community, one of the largest of these slums.

The survey involved a team of 40 researchers being trained in data collection and then visiting all households in the selected locality of Doe Community, during a week at the end of February 2013. In consultation with community leaders, we selected one defined geographical locality within this slum, with the aim of locating around 2,000 families in the designated area. In the end we located 1,981 families with 4,224 children aged 3 to 14.

The researchers went from house to house to complete the questionnaires with the family member responsible for the education of the children. The purpose of the research as well as the voluntary nature of participation and the anonymous use of the data was explained to the interviewee. As the literacy rate was expected to be poor, all the questions were read by the interviewer (and explained where necessary), and the responses recorded immediately in the questionnaire by the interviewer. The data researchers marked the houses from where they had collected the data to ensure coverage and avoid duplication. Each researcher returned at the end of the day for their work to be checked and collected for data entry. Occasionally where it was necessary the researcher returned to sort out a misunderstanding or gain clarification.

3. **Results and Discussion**

The Household Survey was designed to explore the proportions of children from the chosen slum who are attending public and private schools as well probe factors concerning school choice. We only conducted this research in the one specific locality in Monrovia and we are not implying that the results can be transferred to other places or situations, but they are perhaps suggestive of the attitudes, experiences and decisions of the urban poor in Monrovia.

3.1. **Government and private school enrolment and out of school children**

The household survey showed that the vast majority of children (aged from 3 to 14) were in private school – 65.4 percent. Only 6.9 percent of children went to government school and 27.7 percent were out of school.

However, this includes all children who were aged 3 and above and many parents indicated that the younger ones were too young to be sent to school. For children aged 6 to 14, for whom school attendance is compulsory in Liberia, the proportions are 18.8 percent out of school, 9.1 percent in government school and 72 percent in private school.

Considering three to five-year olds only, we find that nearly half (48.5 percent) is in private school while almost exactly half (50.3 percent) is out of school. Only a tiny 1.2 percent is in government
The importance of early childhood education is recognised but it is perceived to be lacking in Sub-Saharan Africa (where 83% of young children are reported as having no access to pre-school (The Consultative Group on Early Childhood Care and Development, 2013, p.1)). Nearly half of these children, for whom schooling is not compulsory, are actually in school, with the overwhelming majority of those in school attending private schools. While many parents regard those under 5 or 6 as too young for school many others are already sending their young children to school giving them the possibility of a better start to their education. Almost all the early childhood education here is privately provided and enrolment is initiated by the families without any government intervention or legal compulsion. Clearly the study cannot comment on the quality of provision but it does reveal that the families of half of these children are already actively pursuing early childhood education.

The families were disaggregated by expenditure quintile according to the expenditure data provided by the interviewee. Thus these expenditure quintiles separate those (in the survey) who are relatively better off from the poorest in the survey. Figure 1 shows the results: children from the poorest families were the most likely to be out of school, the proportion of children in private school was higher for the families which were relatively less poor while the proportion in government school remained between about 5 and 10 percent across the income spectrum within the sample. Tsimpo and Wodon (2012) report that the families in the lower quintiles have a higher proportion of children in government school and lower proportion in private school, something slightly different is seen here. Here going up the quintiles we do find an increasing number in the private schools but this is accompanied by a decrease in the numbers out of school, not in the numbers in the government schools. The higher probability of being out of school when the income is low is also seen clearly in section 3.5 below. The choice for families appears to be between private school and out of school with financial considerations being important in the decision making. It would appear that the government schools are only considered an option by a small proportion of families in this slum regardless of their financial circumstances.

![Figure 1 School type by survey expenditure quintile](image-url)
3.2. Gender and schooling

National government and international agencies have placed an emphasis on increasing girls’ access to schooling (for example, the Girls’ Education National Policy initiated by the Liberian Government with the help of UNICEF and DFID’s Girls Education Challenge). With this backdrop, it is of interest to note the proportion of girls and boys from this poor area of Monrovia who are enrolled in schools.

Table 1 shows that overall there were more girls than boys in the household survey (51.4 percent girls compared to 48.6 percent boys). In each of the three categories there were also more girls than boys (government 51.9 percent girls, private 50.8 percent girls and out of school 52.6 percent girls). (A Chi-square test showed no significant difference between genders for these categories). These data indicate that overall there is no evidence of gender disparity in the uptake of education.

<table>
<thead>
<tr>
<th>Table 1 Doe Community – gender and school type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Government</strong></td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>% Gender</td>
</tr>
<tr>
<td><strong>Private</strong></td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>% Gender</td>
</tr>
<tr>
<td><strong>Out of School</strong></td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>% Gender</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>% Gender</td>
</tr>
</tbody>
</table>

(Chi-square = 1.14, df = 2, p=0.566 (>0.05))

The research can also look at those families that have some but not all their children in school as it has been suggested that families lacking the resources to send all their children to school are likely to choose to send the boy(s) to school and keep the girl(s) at home (Heward and Bunwaree, 1999; Day Ashley et al., 2014; Muedini, 2015; Plan Canada, 2015). The data allow an assessment of whether there is any evidence of such a societal preference in the survey families.

3.3. The families who have children out of school

There are 571 children aged 6 and above who are out of school out of the 3033 children of that age in the survey. These 571 children belong to 408 families and overall these 408 families have 723 children (571 out of school and 152 in school).

Looking in more detail at these families who have children of generally accepted school going age who are not at school we find that there are 315 families where all the children are out of school and these families account for a total of 457 children (215 boys and 242 girls). The proportion of girls (52.9 percent) is not significantly different from the overall proportion of girls (51.4 percent) in the survey.

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4 In a parallel study all the schools in seven designated slums were visited and the number of children in the schools was counted. This showed there are more girls than boys in school – combining all three levels of schooling, there are 51.6% girls, and 48.4% boys. Also at each level, nursery, elementary and junior secondary, girls were in a majority. Indeed, at every grade of schooling, apart from Junior High 2, there were more girls than boys. As both Junior High 1 and 3 contain more girls than boys, this suggests the JHS 2 figure is an anomaly rather than indicative of a trend.
We are most interested in those families who have made a choice to send one (or more) but not all their children to school. These 93 families with 266 children have a variety of compositions and have made different choices. Some have only boys or only girls and have chosen to send some but not others to school for one reason or another. Those families that have both boy(s) and girl(s) have also made a choice and we are interested to see if there is any evidence that gender forms the basis of that choice as some analysts state. The numbers of boys and girls are shown in Table 2.

Table 2 Children in families with some but not all the children in school

<table>
<thead>
<tr>
<th></th>
<th>In School</th>
<th>Out of school</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>69</td>
<td>55</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>55.6%</td>
<td>44.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Girls</td>
<td>83</td>
<td>59</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>58.5%</td>
<td>41.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>114</td>
<td>266</td>
</tr>
</tbody>
</table>

(Chi-square (with Yates correction) = 0.114, p= 0.736 (> 0.05))

There is no evidence to suggest that gender is not independent of the child being in or out of school even in the families which have made the decision to send only some children to school.

Table 3 shows the 93 families (with in and out of school children) arranged according to the gender of the children who are in and out of school.

Table 3 Families with only some of their children in school

<table>
<thead>
<tr>
<th></th>
<th>No boys out of school</th>
<th>Boys out of school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No boys in school</td>
<td>Boys in school</td>
</tr>
<tr>
<td>No girls out of school</td>
<td>8 (b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Girls in school</td>
<td>19 (d)</td>
</tr>
<tr>
<td>Girls out of school</td>
<td>No girls in school</td>
<td>18 (c)</td>
</tr>
<tr>
<td></td>
<td>Girls in school</td>
<td>3 (g)</td>
</tr>
<tr>
<td></td>
<td>20 (a)</td>
<td>9 (e)</td>
</tr>
<tr>
<td></td>
<td>1 (h)</td>
<td>5 (i)</td>
</tr>
</tbody>
</table>

Looking at this in detail:

a. 20 families have only girls, with some in school and some out of school.
b. 8 families have only boys, with some in school and some out of school.
c. 18 families have their boy(s) in school and their girl(s) out of school.
d. 19 families have their girl(s) in school and their boy(s) out of school.
e. 9 families have their boy(s) and some but not all their girls in school.
f. 10 families have their girl(s) and some but not all their boys in school.
g. 3 families have some of their boys in school but not their girl(s).
h. 1 family has some of their girls in school but not their boy(s).
i. 5 families have some of their boys and some of their girls in school.
Other cells are empty: one represents “families” with no children, one represents families with all their children out of school and a number represent families where there all the children (boys or girls or both) are in school. None of these families are relevant for this analysis; hence the empty cells.

The cells are of particular interest are those (in bold) which suggest that the families favour their boys: cells (c), (e) and (g), and those (in italics) which suggest that the families favour their girls: cells (d), (f) and (h).

These are illustrated in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>Boys apparently favoured</th>
<th>Girls apparently favoured</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of other gender in school</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Some of other gender in school</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Some in school, but none of other gender in school</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

This analysis does not show any gender bias towards families sending their boys to school in preference to their girls (or indeed any preference for girls over boys) when they choose to send some but not all their children to school. This stands in contrast to reports of gender bias towards boys in such situation (Day Ashley et al., 2014). It is not clear if there is anything significant in the fact that there are more girls-only families (20) than there boys-only families (8) with some of their children out of school.

3.4. Reasons for school choice

The survey found that there were a large number of schools (well over a hundred) that the families in the community used, some were within the slum area and others were further away. Parents had a range of schools from which to choose and the research looked at the reasons that the parents gave for the school choices that they had made.

This section looks at the most important reason given by the families and also considers the three key reasons that the parents gave.

The most important reason

Figure 2 show that three factors dominate the most important reason for the choice of school: better quality teachers, good discipline and good academic performance.

The quality of the teachers is the dominant reason for school choice for over a third of the parents. It is the most important factor in school choice for more girls’ parents (38.9%) than boys’ parents (33.0%). It is important to note that what the respondents understood by our term “Better quality teachers” was not investigated, so it is possible that this is not solely a consideration of the teachers being better at teaching but may include a wider understanding of “quality”. The situation in some
schools in Liberia is not always safe particularly for girls who can be taken advantage of by unscrupulous teachers. Some male teachers are even reported as demanding sex in return for better grades (Dahn, 2008; Atwood et al., 2011; UNICEF, 2012). Taken in this light it is understandable that “better quality teachers” figured as the key reason for school choice for nearly 40 percent of girls.

The issue of discipline is the second most common key factor overall; the most important factor in school choice for a quarter of boys’ parents (24.7%) and also the key factor for the parents of 16.7% of girls. The academic performance was the third most important factor, with all others being the key factor for at most 6 or 7 percent of the parents.

Safety (5.6%) and proximity to home (6.6%) are the key factor for a small proportion of families. These are more important to families for their girls than their boys (nearly 30 percent more girl’s families than boy’s families indicating that these were the most important reasons).

![Figure 2 The one most important factor for school choice](image)

**The three most important factors**

The three factors influencing school choice were considered and the results are shown in Figure 3.
The other factors that parents are taking into account when choosing the school for their children include closeness to home, school fees, safety, and to a lesser extent, the reputation of the school and the quality of English learning.

The data was also analysed for the girls according to the type of school that they were attending (see Figure 4), and this showed that a slightly greater proportion of parents sending their girls to non-profit or profit schools than government school do so on the basis of proximity to home, teacher quality, safety and English learning while lower fees are a key factor for over half of the parents of girls in the government schools.
When these results for the girls were disaggregated by income quintile it became apparent that lower fees and close to home were particularly important to the lower income families and that academic performance was increasing important as a factor in the higher income quintiles.

There were similar results for the boys with regard to the fees and proximity to home, where lower fees was a factor for nearly half those boys going to a government school and closeness to home was a factor for a smaller proportion of the boys going to government schools than to private schools.

The key differences appear to relate to the fact that the government schools are free but are located outside the community, while most of the non-government schools are in the community (and hence not only closer but also potentially better known to these families living in the community). The parents who send their children to a private school do so on the basis of the school's proximity to home more than twice as often as the parents who send their children to a government school. Low fees were a factor for many more of the parents who sent their children to the government school. Easy transport was also a factor for those attending government schools, possibly because having chosen a government school the children have to travel to the school outside the community. The recommendation of others or the presence of relatives and friends in these more distant (and presumably less well-known) government schools were factors for the parents who send their children there.

3.5. Factors influencing schooling decisions
Regression analysis was conducted to create statistical models to explain some of the findings about school choice. We used the ‘step forward’ approach, which works as follows:

1. Fit a ‘null model’ with no explanatory variables.
2. Consider all variables not in the model, and estimate their statistical significance if each in turn were included in the model.
3. Find the one with the lowest significance, below a certain cut-off (say 5%), and include it in the model.
4. If no variable meets this condition, end the process; otherwise, repeat from step 2.

Although this does not guarantee the ‘best’ model out of all $2^n$ possible models, it normally finds one which is ‘good enough’, striking a balance between data fit and parsimony.

Based on findings from the survey and earlier research, it was decided to use the following variables:

1. Sex: girl (1) v. boy (0)
2. Age (years)
3. Family order (1 to 8, 1 being the eldest, 8 the youngest)
4. Total household income
5. Highest educational level of respondent
6. Measures of wealth as indicated by possessions, based on three factors

The researchers had recorded whether the families owned different household items such as TVs, cycles, mobile phones, land, cattle etc. These were entered into a factor analysis procedure in order to derive composite wealth variables. Examination of the eigenvalues showed that a good solution was to extract three factors. When these factors were rotated, three factors emerged: one factor loaded heavily on the possession of mobile phones, TVs, DVD players, generators, cable connections, refrigerators, freezers and PCs. The second factor loaded on ownership of forms of transportation, while the third factor loaded heavily on the possession of land, cattle, pigs, goats etc. and property.

These variables were used to explore the factors that were significant in children being out of school and to the choice to send to a private rather than a public school.

**Children out of school**

These eight background variables were first included in a logistic regression model where the binary outcome was whether a child in school or out of school (outcome = 1 if out of school). A step-forward process was used, so that the final model in each case contained significant variables only. The middle column in Table 5 shows the significant variables included in the model.

**Table 5 Out of school: logistic regression model**

<table>
<thead>
<tr>
<th>Background variable</th>
<th>Logistic Regression Coefficients</th>
<th>Logistic Impact Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.159</td>
<td>0.628</td>
</tr>
<tr>
<td>Sex (girls = 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family order</td>
<td>-0.204</td>
<td>0.813</td>
</tr>
<tr>
<td>Highest education</td>
<td>-0.14</td>
<td>0.761</td>
</tr>
<tr>
<td>Total income (1000s)</td>
<td>-0.112</td>
<td>0.438</td>
</tr>
<tr>
<td>Wealth 1 (modern)</td>
<td>-0.031</td>
<td>0.732</td>
</tr>
<tr>
<td>Wealth 2 (transport)</td>
<td>-0.021</td>
<td>0.812</td>
</tr>
<tr>
<td>Wealth 3 (land)</td>
<td>-0.015</td>
<td>0.861</td>
</tr>
</tbody>
</table>

(Blank cells indicate non-significant variables.)
An increase in the variables whose coefficients are positive make the probability of a child being out of school more likely and an increase in those which are negative make the probability of being out of school less likely.

While these logistic regression coefficients are all significant (at the 5% level), the relative size of the impact depends not only on the magnitude of the coefficient but also the scale of the background variable. ‘Logistic impact indicators’ are based on the above coefficients and the standard deviation of each background variable and give a measure of the impact. These are \( \exp(\text{coefficient} \times \text{standard deviation}) \), and can be considered to be the multiplying factor for the odds of a particular outcome if the underlying variable increases by one standard deviation. (For example, suppose a given outcome has a probability of 50%, i.e. an odds ratio of 1.0. If the multiplying factor associated with an increase in a certain variable is 2.0, this means the odds ratio changes to 2.0, which is a probability of 67% for the given outcome. On the other hand, a factor of 0.5 would give an odds ratio of 0.5, equivalent to a probability of 33%). With this explanation in mind, the third column in Table 5 shows the ‘logistic impact indicators’ derived from the coefficients in the second column.

In this case all the coefficients are negative so an increase in any of these significant variables reduces the likelihood of “being out of school”. Thus a child is less likely to be out of school if they are: older, are lower down the family order, have better educated parents, come from families earning more, and have more of any of the wealth asset factors.

It is important to note that gender was not a significant variable in this regression, so there is no evidence to suggest that whether a child is male or female makes any difference to whether or not he or she is out of school.

These results confirm what has been seen in the earlier analysis. The lack of wealth is a significant factor in children being out of school, generally older children are more likely to be in school and that boys and girls are equally likely to be out of school. It also confirms the influence of parental education on school enrolment which has been recorded (Inoue et al., 2015) as the children of more educated parents were less likely to be out of school.

**Private versus government**

The same process was used to explore variables which led to a child going to private rather than government school. A logistic regression analysis of the ‘in-school’ children was carried out against the same set of background variables. Again, the tables show the significant logistic regression coefficients and the corresponding logistic impact indicators.

**Table 6 Private versus public school: logistic regression model**

<table>
<thead>
<tr>
<th>Background variable</th>
<th>logistic impact indicators</th>
<th>logistic impact indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.349</td>
<td>0.366</td>
</tr>
<tr>
<td>Sex (girls = 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family order</td>
<td>-0.277</td>
<td>0.752</td>
</tr>
<tr>
<td>Highest education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total income (1000s)</td>
<td>0.068</td>
<td>1.655</td>
</tr>
<tr>
<td>Wealth 1 (modern)</td>
<td>0.028</td>
<td>1.351</td>
</tr>
<tr>
<td>Wealth 2 (transport)</td>
<td>-0.013</td>
<td>0.865</td>
</tr>
<tr>
<td>Wealth 3 (land)</td>
<td>0.016</td>
<td>1.181</td>
</tr>
</tbody>
</table>

(Blank cells indicate non-significant variables.)
This time an increase in the variables with negative coefficients indicate that the child is less likely to be in a private school and an increase in the variables the positive coefficients indicates that the child is more likely to be in a private school. We can interpret these results as follows: younger children, those older in the family order, and those from families with greater incomes and more wealth (modern and land), are more likely to be in private schools. (Families with more transport-related wealth seemed less likely to send children to private schools).

Two variables that were not significant can be identified: first, gender was not significant in this regression. It is irrelevant whether a child is a boy or girl in whether he or she goes to private or government school. Second, the highest education of the parents was also not significant – whatever the education level of the parents, they were equally as likely to send their children to private or public schools.

These results are not unexpected. It has been seen that the older children are more likely to be in the government schools with almost none of the pre-school aged children attending a government school, compared to over 20 percent of those aged 14. As the government schools are located out of the community, one can see that the families with access to transport may be more likely to send their children to government schools. As government schools are nominally free it is to be expected that those less wealthy may choose to send their children there for financial reasons. It may be that families with more than one child are more likely to send their first children to the private schools leaving less resources when the younger ones come to school-going age and hence they may be more likely to be sent to the government school.

3.6. Attitudes to government and private schooling

3.6.1. Overall preference

Overall 82 percent of the families indicated that they preferred private schools over government schools, with just 13 percent preferring the government schools (others had no preference, didn’t know or preferred different schools for different children). This high proportion might be expected given the majority of families send their children to the private school, but over half (54 percent) of the families sending children to government schools still indicated a preference for the private schools. However the preference for private schools was not universal even among the parents sending their children to them. Nearly 7 percent of those sending their children to private school indicated a preference for the government schools, with the inaccessible the government school being the majority reason given for their child not attending a government school when they preferred them.

3.6.2. Perception of different school types

This section explores the issue of how families perceive the government and private schools and how that relates to the type of school that their children attend.

In the household survey, a question posed to the interviewee asked about 15 issues and sought the respondents view as to whether the issue applied to “public schools only”, “private schools only”, “both public and private schools”, “neither public nor private schools”, or that they didn’t know. The 15 issues have been grouped into three “Personal requirements”, “Quality issues – positive” and “Quality issues – negative”. We have also taken where the eldest child in each of these families goes to school (government, private or out of school) to show differences between family choice.

For the majority of the issues, all groups of respondents, whether using government or private schools for their eldest child, or if their (eldest) child is out of school, refer more favourably to private schools. For example, all categories of parents more often indicate that ‘A safe place for girls’, ‘near to my
home’, ‘class size good’ ‘discipline good’, ‘responsive to my complaints’, ‘children are well looked after’, apply to private schools only. Conversely, all categories of parents indicate substantially more often that ‘overcrowded’ and ‘teachers go on strike’ apply to government schools only.

Overall the perceptions in the community (among those making the educational decisions for the children) are much more positive about the private schools than the government schools. Over twice as many regards the teaching as good, the discipline as good, and the private schools as safe for girls than say the same of the government schools. Over three times as many believe the children are well looked after and that the private schools are near to their home. Less than a quarter regard the private schools as overcrowded or believe the teachers go on strike compared to those that say the same of the government schools.

The following percentage of respondents indicated that these statements were true of the private schools, (figures for government schools in brackets afterwards):

A safe place for girls: 90.6% (31.3%)
Near to my home: 88.0% (17.7%)
Good quality teaching: 89.2% (39.5%)
Discipline good: 91.4% (39.5%)
Children well looked after: 90.8% (28.6%)
Girls are encouraged academically: 89.2% (47.6%)
Overcrowded: 20.4% (87.9%)
Teachers go on strike: 16.8% (86.9%)

On only the issues, ‘teachers are well trained’ and ‘open the hours I require’ do the greatest proportion of all categories of parents suggest this applies to both public and private schools.

On one issue, affordability to the family, parents with the eldest child in government school or out of school generally suggest that this applies to public schools only, while those with their eldest child in private school indicate that both government and private are affordable. On some other issues (quality of teaching and good facilities) a greater proportion of the parents sending their children to the government schools are equally positive about the government as well as the private schools (perhaps understandably so, as they have made the choice for the government school).

4. Conclusion

This household survey was conducted in Doe Community, one of the poorest slums in Monrovia, Liberia. Data was collected from nearly 2,000 families. The results show that the number of out of school children in our survey was much lower than the official EMIS data (for Liberia as a whole and Monrovia in particular) indicate (Ministry of Education (EMIS), 2013); one reason for this difference may be due to some of these children attending private schools that are not registered or known to the government. The proportion of out of school children was also less than the figures produced by Tsimpo and Wodon (2012) which were based on household survey data from 2007, suggesting that perhaps a greater proportion of children were attending school at the time of our survey in 2013 than were in 2007 or possibly less likely that the schooling situation in the slum is better than that for the country as a whole. In this survey it is the local private schools within the community which are having the positive effect on enrolment.

The official data also indicated that there are more boys than girls out of school; we did not find the same in our household survey. Suggestions that parents preferentially choose to send their boys to
school at the expense of their girls are also not substantiated in this study in Doe Community. There was no evidence in any of the different analyses that girls were being discriminated against.

Regarding parental preferences, the vast majority of parents prefer a private school over a government school for their children, with even parents with children in the government schools generally expressing a preference for the private schools. Generally perceptions of the private schools were positive (especially when compared to government schools). About 90 percent of respondents recording positive responses to the private schools with regard to safety for the girls, being good quality, encouraging girls academically, having good discipline and looking after children well. While these are just the perceptions and individuals’ responses (there is no objective evidence to substantiate the claims). However they do come from those who are personally involved, through their children, with the education in the area and these perceptions are informing the choices that the families are making.

These findings help to clarify that the aspirations of the people in Doe Community are for education that has good quality teachers, high academic standards and good discipline. Unfortunately they do not see the government schools as providing these and are choosing local low-cost private schools in preference to the government alternative as a result. It is important for the government to recognise and respond to this as it seeks to provide an education system that “fully meets the needs and aspirations of the people” (Ministry of Education, 2010, p. i).

These schools clearly do have a positive role in development in Doe Community, despite the misgivings of some in development circles about private schools for the poor. This is evidenced by the high proportion of families using them, their preference for them and the regard with which they are held by the decision makers in the community.

With understanding of their contribution comes an appreciation of the power of the private sector in education to contribute to improved educational access for the poor in Liberia. Perhaps a major conclusion could be that the sector can be recognised as making a positive contribution to development, and therefore is entitled to nurture and encouragement, not sanction and censure.


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