



## LEONARD CHESHIRE DISABILITY INTERNATIONAL (LCDI), LEONARD CHESHIRE DISABILITY AND INCLUSIVE DEVELOPMENT CENTRE (LCC), LCD REGIONAL OFFICE FOR EAST AFRICA (ENARO)

## **GIRLS' EDUCATION CHALLENGE**

# PIONEERING INCLUSIVE EDUCATION STRATEGIES FOR DISABLED GIRLS IN THE LAKE REGION IN KENYA

## DRAFT REPORT

Baseline secondary data analysis

December 2014

# Foreword

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Data were collected by the Ipsos-Synovate on behalf of LCD's Inclusive Education project team, Leonard Cheshire Disability East Africa Regional Office.

This research has been funded by UKAID from the UK Government. However, the views expressed do not necessarily reflect the UK Government's official policies.

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#### Introduction

This paper presents results from a secondary data analysis of baseline data collected by Ipsos Synovate (Kenya), which focused on data collected from girls with disabilities and their families in five districts in the Lake region (formerly Nyanza Province) of Kenya: Mbita, Migori, Kisumu East, Kuria East and Siaya. The survey collected household and education-focused information from an adult member (or the head) of household and from carers, as well as from girls with disabilities both in and out of school (n=1142 girls with disabilities in 1109 households)<sup>2</sup>. Details on the sampling and data gathering procedure can be found in the GEC baseline report (6627 LCD Baseline Report) and will not be reiterated here.

Data were obtained on the number of girls identified through the survey who were both in and out of school; for those girls currently out of school, information was also obtained on whether they had been in school previously and subsequently dropped out.

However, there is little information of the reasons why they dropped out of school, which warrants further exploration. The aim of this secondary analysis is to identify characteristics of girls (and their families) both in school and out, identify patterns or trends, and to enable more in-depth interviews and follow up to take place.

Most of the information in the baseline report is based on girls with disabilities in school – including questions around attendance, learning, and the child's journey to and from school, as well as caregiver aspirations and decision making processes of the caregivers. The questions asked to the girl child focused mainly on difficulties at school (including with boys); teachers; efforts in class; what is good and bad about school and aspirations.

In addition, a series of 10 focus group discussions (FGDs) were also undertaken by lpsos: two per district - five with all female members (total of 39 participants), and five with all male (total of 40 participants). These were aimed at parents and the community. A further total of 16 key informant interviews (KIIs) were undertaken: five with religious leaders; four with head teachers and seven with local administrative officials, including district education officers, a social development officer, a county representative, a chief and a sub-chief.

Much of the background data in the baseline report, in particular the barriers identified, seems to come from the FGDs, which contain a large amount of rich information that could be further mined for additional data, as well as form the basis for further qualitative research.

<sup>&</sup>lt;sup>2</sup> Surveys were administered in both intervention and control areas; by default, all girls with disabilities identified as out of school in the project areas will be enabled to go to school, so there can be no comparison within the intervention areas, only between intervention and control areas.

In addition to building on previous work in the region and to corroborate findings from Ipsos, LCD also undertook a research-focused workshop during the inception meeting (February 2014), with programme partners and academics specialising in education and/or gender from Maseno and Bondo Universities in Lakes Region.

A number of themes emerged during these discussions, particularly around:

1. Access – including to learning and other support materials; environment; curriculum; cultural factors (including early and arranged marriages; rites of passage such as Female Genital Mutilation (FGM); witchcraft; albinism; inheritance); and parental beliefs;

2. Transition – between classes as well as onto secondary school;

3. Policy – currently SEN, not IE; awareness of child rights and child protection; links between gender policy and disability policies; implementation (barriers);

4. Training of teachers - teachers have no training in IE;

5. Quality of learning – e.g. between special schools and inclusive schools; continuum of learning between school/home; academic achievement/attainments;

6. Vulnerable girls (identified as adolescents, orphans, girls with disabilities, those from low socio economic background, street girls, girl headed households, working children, child prostitution, pregnant girls, and unattended children). They were identified as being vulnerable to dropping out of school; psycho/emotional and other abuse; pregnancy; hunger; malnutrition; illness; HIV/AIDS; STDs; trafficking; domestic work; drugs; early marriage; murder).

It is hoped that this secondary data analysis will generate additional material, as well as identify gaps in current knowledge, for example, around girls not in school, and enable further questions to be generated.

# Methodology

The analysis that follows is based only on data from the household survey undertaken by Ipsos for LCD. These further analyses were aimed at garnering a better understanding of factors associated to the enrolment for girls with disabilities and therefore we included in the sample only girls aged 5 and above.<sup>3</sup> Consistency in responses to all questions related to enrolment was sought.

<sup>&</sup>lt;sup>3</sup> Though formal primary schooling starts at six in Kenya, children may attend pre-primary classes from five years of age. URL: http://data.worldbank.org/indicator/SE.PRM.AGES

Therefore the sample used for this secondary analysis is slightly different from that of the baseline and it amounts to 1066 girls with difficulties from 1042 households, identified as per following steps:

- Sample after dropping girls with disabilities aged 4 or below: 1127 girls in 1096 households.
- Sample after checking for consistency between questions B24 "Is the girl currently enrolled in any school?" and C33 "Is the girl enrolled at school?": 1097 girls in 1070 households.<sup>4</sup>
- Sample after checking for inconsistencies between girls' enrolment (as per questions B24-C33 & B27) and question C59: 1067 girls in 1042 households.
- Final sample after excluding girls out of school for whom the reported reason for not being enrolled is "She had completed school": 1066 girls in 1042 households.

The main objective of this secondary analysis is to provide a picture of the relationship between the level and types of activity difficulties, poverty levels, and enrolment status and the experiences of the girls in the identified sample.

In this report we will discuss domains of difficulty based on the Washington Group questions<sup>5</sup>. These are a set of six short questions (WGSS) around functional limitations that have the potential to limit independent participation in society. The lpsos baseline used these sets of questions to provide information on disabilities for the girls selected in their sample.<sup>6</sup> The activity domains are based on the following questions:

- 1. Do you have difficulty seeing, even if wearing glasses?
- 2. Do you have difficulty hearing, even if using a hearing aid?
- 3. Do you have difficulty walking or climbing steps?
- 4. Do you have difficulty remembering or concentrating?
- 5. Do you have difficulty (with self-care such as) washing all over or dressing?

6. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?

For the purpose of this report we will only present and discuss results that are significant.

<sup>&</sup>lt;sup>4</sup> All question references here are to the baseline questionnaire – please see baseline report for copy of survey form.

<sup>&</sup>lt;sup>5</sup> http://www.cdc.gov/nchs/washington\_group/wg\_rationale.htm

<sup>&</sup>lt;sup>6</sup>It should be noted that a screening phrase was added prior to administration of the WGSS questions. Further information about the sampling and administration of the baseline questionnaire is available in the baseline report.

# **Domains of difficulty**

The following information was provided by the primary caregiver and illustrates the number and percentage of girls with difficulties disaggregated by domains and degrees of difficulty based on the Washington Group Short Set (WGSS) questions.

	Difficulty seeing		Difficulty seeing Difficulty hearing		Difficulty walking or climbing stairs		Difficulty remembering or concentrating		Difficu witl self-c	ulty h are	Difficulty with communicating		
	N	%	N	%	N	%	N	%	N	%	N	%	
Yes, cannot x at all	7	0.7	67	6.3	66	6.2	146	13.7	133	12.5	142	13.3	
Yes, a lot of difficulty	87	8.2	121	11.4	213	20.0	245	23.0	120	11.3	185	17.4	
Yes, some difficulty	90	8.4	120	11.3	153	14.4	201	18.9	239	22.4	248	23.3	
No, no difficulty	877	82.3	756	70.9	633	59.4	462	43.3	573	53.8	491	46.1	
Do not know	5	0.5	2	.2	1	.1	12	1.1	1	.1	0	0	
Total	1066	100.0	1066	100.0	1066	100.0	1066	100.0	1066	100.0	1066	100.0	

Table 1 Number and percentage of girls with difficulties, by domains

The responses to the WGSS questions were re-coded in the next table by aggregating 'Yes, cannot do x at all' and 'Yes, a lot of difficulties' with new label Difficulty and 'No, no difficulty' and 'Do not know' with new label No Difficulty. This was undertaken to simplify further analysis and to compute an additional indicator on difficulty<sup>7</sup>.

Table 2 Number and percentage of girls with difficulties, simplified levels of difficulty by domain of difficulty

	Difficulty seeing		Difficulty seeing Difficulty hearing		Difficulty walking or climbing stairs		Difficulty remembering or concentrating		Diffic wit self-c	ulty h are	Difficulty with communicating		
	N	%	N	%	N	%	N	%	N	%	N	%	
No Difficulty	882	82.7	758	71.1	634	59.5	474	44.5	574	53.8	491	46.1	
Some Difficulty	90	8.4	120	11.3	153	14.4	201	18.9	239	22.4	248	23.3	
Difficulty	94	8.8	188	17.6	279	26.2	391	36.7	253	23.7	327	30.7	
Total	1066	100.0	1066	100.0	1066	100.0	1066	100.0	1066	100.0	1066	100.0	

<sup>&</sup>lt;sup>7</sup> Differences between table 1 and table 2 are due to approximations

Previous research has highlighted that difficulty in the self-care domain below the age of 10 years old does not automatically reflect the fact that children have any functional impairments but rather could signify that they are still in the process of reaching their developmental milestones.

A significant association between age and levels of difficulty in the self-care domain was evident with further analysis (in particular among girls aged between 5 and 10 years there is a greater proportion of girls reported as having difficulty). Therefore in order to avoid any misrepresentation the self-care domain is systematically excluded from any further analysis in this report.



Figure 1 Girls' difficulty with the self-care domain, by age

The responses to the WGSS questions were further combined in order to identify girls with one prevalent difficulty domain (by prevalent meaning 'a lot' or 'cannot do at all'); those girls with at least a lot of difficulties in two or more domains; those with mild difficulties in one or more domains; and those with unidentifiable difficulty (i.e. no difficulties in all the domains included), as the figure below shows.

#### Figure 2 Girls distribution, by domain



However, in order to obtain a category of difficulty that was more manageable, this variable was further aggregated to obtain percentages based on 'mild or not identifiable difficulty'; 'one prevalent domain' difficulty; or 'two or more prevalent domains' difficulty.

Based on primary caregiver reporting, the majority of girls, 500, (46.9%) had a difficulty in one prevalent domain; 330 (31.0%) in two or more prevalent domains; and 236 (22.1%) had a mild or not identifiable difficulty.

Throughout this report, data were then disaggregated both by using the category of difficulty, which combined domains as explained above, and by each difficulty domain as per WGSS questions (with the exception of the self-care domain).

#### **School enrolment**

The figures below were generated by combining and cross- checking the information provided by both the member (or head) of the household and the caregiver regarding girls enrolled in school as per question B24 "Is the girl currently enrolled in any school?"; question B27 'Has the girl ever been enrolled in any school?'; question C33 "Is the girl enrolled at school?"; and question C59 'Since age 5 has the girl ever been enrolled in school?

208 girls (19.5%) were declared never in school; 210 (19.7%) dropped out of school and 648 (60.8%) were declared currently enrolled in school. That is, 418 (39.2%) girls were reported as being out of school (either never enrolled or dropped out) and 648 (60.8%) were currently enrolled.

The next set of analysis will focus on establishing whether there is an association between enrolment and the category of difficulty.

The figure below shows the significant association between category of difficulty and enrolment status. In particular, in the group of girls with mild difficulties there is a lower proportion of girls never in school or dropped out; in the group of girls with difficulties in one prevalent domain there is a lower proportion of girls never in school; while in the group of girls with difficulties in two or more domains, there is a higher proportion of never in school and a lower proportion of enrolled.





Findings are even more striking when comparing in and out of school girls by category of difficulty. In particular, in the group of "out of school" girls, there is a lower proportion of those with a mild difficulty, while there is a greater proportion of those with a "two or more prevalent domains' difficulty. In the "in school" group of girls, the situation is exactly the opposite, as figure 4 highlights.





This graph highlights the higher percentage of girls who are out of school who have multiple difficulties that should be addressed by the school system when they enter school.

#### **Differences by domains of difficulty**

The next section shows the association between domains of difficulty and enrolment (based on whether the girls are out of school (either never having been in school or dropped out) or enrolled in school, as it was further explored by considering the specific domains of impairment included in the WGSS questions.

Significant associations were then found for the following domains: walking, remembering, and communicating, reported in table 4.

	Difficulty walking						Difficulty remembering						Difficulty communicating					
	Never		Dropped out		Enrolled		Never		Dropped out		Enrolled		Never		Dropped out		Enrolled	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	N	%
No Difficulty	99	47.6	129	61.4	406	62.7	55	26.4	55	26.2	364	56.2	46	22.1	89	42.4	356	54.9
Some Difficulty	30	14.4	24	11.4	99	15.3	38	18.3	46	21.9	117	18.1	37	17.8	51	24.3	160	24.7
Difficulty	79	38	57	27.1	143	22.1	115	55.3	109	51.9	167	25.8	125	60.1	70	33.3	132	20.4
Total	208		210		648		208		210		648		208		210		648	

Table 3 Number and	percentage o	f girls,	level of	difficulty	by	difficulty	domain
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In particular, with regard to the walking domain, in the 'never in school' group there is a lower proportion of girls with no difficulty and a greater proportion of girls with difficulty. In the 'enrolled' group there is a lower proportion of girls with walking difficulties. This is shown in the figure below.



Figure 5 Percentage of girls, domain of difficulty (Walking), by enrolment status

With regard to the remembering domain, in the 'never in school' group there is a lower proportion of girls with no difficulties and a greater proportion of girls with difficulties. The situation is the same for the "dropped out" group. Finally, in the 'enrolled group' there is a greater proportion of girls with no difficulty and a lower proportion of girls with remembering difficulty, as revealed by figure 6.



Figure 6 Percentage of girls, domain of difficulty (Remembering) by enrolment status

Concerning the communicating domain, in the 'never in school' group there is a lower proportion of girls with no difficulties and a greater proportion of girls with difficulties. Furthermore, in the 'enrolled' group there is a greater proportion of girls with no difficulty and a lower proportion of girls with communicating difficulty, as demonstrated by figure 7.





# **Household characteristics**

#### Respondent and Head of the household (HoH)

Out of the 1042 respondents 907 indicated their sex and were overwhelmingly female (651, 71.8%). Only 28.2% were male.

All respondents had to specify whether they were the head of household. 678 (65.1%) agreed. The 364 (34.9%) who said no were asked to specify their relationship to the head of household and 56.6% answered 'spouse' but nonetheless 36.8% stated that they were head of household so there may have been some confusion over terminology here. Others specified other relationships such as 'child of HoH' (2.7%), 'parent of HoH' (1.4%) or 'other relative' (1.9%).

Respondents were asked about the gender of the head of household. The majority were reported as being male (69.8%).

Respondents were also asked whether the head of household had a 'job or business or work outside the home': 59.2% said yes. However this implies that a high

percentage did not have any (40.5%). With regard to the main occupation of the head of household, the majority were reported as being farmers (36.5%).

The occupational status of the head of household was significantly associated with the enrolment status of girls and it is shown in the figure below. In fact, if the head of household works 64.2% of girls are in school; if the head of household does not work, only 57.1% of girls are enrolled in school.





Completion of primary school (41.0%) was the most frequently met level of education attained by the head of household, though 39.8% had not completed school; 12.7% completed secondary school; 4.5% went onto tertiary education (college, polytechnic, etc.). Only 1% attained a university level education and 1.1% did not know the level of education of their head of household.

Tertiary and University levels were further aggregated (as 'further education') in order to define the level of education of the head of household in subsequent analysis.

While the level of education of the head of household was not significantly associated with girls' enrolment status, it was associated with their own occupational status, as the figure below reveals.





In the 'employed' group, there is a lower proportion of heads of household with no education while there are a greater proportion of those with further education. The reverse happens in the 'unemployed' group.

We further explored whether and how the gender of the HoH was associated with their educational and occupational status. In both cases, there was a significant association to the detriment of female heads of household.

The figure below reveals that particularly among male HoH, there is a lower proportion of those with no education, while there is a greater proportion of those with secondary or further education. In the female HoH group, there is a higher proportion of those with no education, while the proportion of those with any other educational level is lower.







Figure 11 Percentage of HoH, employment status by gender

However, further analysis revealed that the gender of head of household was not significantly associated with the girls' enrolment status (i.e. in or out of school).

### **Household composition**

Respondents were asked to report the number of adults (people aged 16 or over) who normally lived and ate together in the household. The average number of adults was 2.3 (s.d. 1.48) with a minimum of 0 and a maximum of 13 adults. In particular, the average number of adult females was 1.51, with a minimum of 0 and a maximum of 6 per household.

However, in 40 cases the reported number of females was greater than the number of adults in the household - and when removing these inconsistent cases, the percentage of adult females was on average 60.7% (of all reported adults).

Respondents were asked to report on the number of children who lived in the household<sup>8</sup>. On average 4.39 (s.d. 2.04) were reported living in the household, with a minimum of 1 and a maximum of 15.

When asked about how many were girls/females, respondents reported that on average 2.55 were girls (s.d. 1.32) with a minimum of 1 and a maximum of 9 per household.

<sup>&</sup>lt;sup>8</sup> The upper age limit for the survey was set at 22 years, as the baseline survey results showed that there were girls over 15 years of age still in primary school.

However, three inconsistent cases were reported with the number of female children being greater than the number of children, so after removing these inconsistencies, the percentage of female children was 61.8%.

Respondents were also asked to report how many of these girls in the household had a disability and 97.1% said one girl, 2.7% said 2 girls, and 0.2% said 3 girls.

Households were composed by 6.7 members (s.d. 2.8) on average with a range from 1 to 21 members.

Total number of members in the household, total number of female children and total number of female adults were associated with girls' enrolment in school. The results showed that only the latter was significant. In particular in the "out of school" group, there are a greater proportion of girls out of school in household where female adults are the majority.





# **Poverty level indicator**

The primary caregivers were asked a set of questions about their household and assets. For the purpose of this analysis a score was assigned to these questions in order to compute an aggregated indicator of poverty. The following table provides details about the specific assets and the assigned score.

The average score among the 1042 respondents was 6.3 (s.d.= 2.7), ranging from 0 to 16. A three-level **'poverty'** variable/indicator was computed recoding the poverty score of households as 'severely deprived' (22.1%, lowest 25<sup>th</sup> percentile), 'deprived' (54.4%) and 'less deprived' (23.4%, highest 75<sup>th</sup> percentile).

Caregivers were also asked to describe the situation of their household in terms of their capacity to meet basic needs. Their responses are summarised in the following pie chart. According to caregivers' perception, the majority (62.4%) of households were unable to meet basic needs without charity. 32.7% reported being able to meet basic needs and 4.4% reported being able to meet basic needs with some non-essential goods.

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2							
2							

Main	light							
Fire	0							
Generator	1							
Battery	1							
Oil lamp	1							
Electricity	2							
Solar lamp	2							
Toi	ilet							
Private (dwelling)	2							
Shared	1							
Open/no fixed	0							
Radio/TV								
None	0							
Radio	1							
TV	2							
Both	3							
Any means of	transportation							
No	0							
Yes	1							
Any kind	of phone							
No	0							
Yes	1							

#### Table 4 Household assets and assigned score





Caregivers' self-perception of their poverty level depicts unsurprisingly a worse picture than the poverty level indicator computed on the basis of the responses provided to the set of questions on household assets. However the association between self-perceived/self-reported poverty<sup>9</sup> and poverty level indicator is significant and supports the adequacy of the latter. In particular, among those who reported that their household is unable to meet basic needs, there is a greater proportion of severely deprived households (accordingly to the poverty level indicator), while there is a lower proportion of less deprived households. This situation is reversed for those who are able to meet basic needs or are also able to purchase some or most non-essential goods. This means that the association between self-reported poverty and the new aggregated indicator seems reasonably coherent for the purposes of analysis.



Figure 14, Percentage of households, poverty level indicator by self-reported economic situation of the household

<sup>9</sup> After aggregating the variables "able to meet basic needs with some non-essential goods" and "able to purchase most non-essential goods".

The adequacy of the poverty level indicator was further attested by the significant association with the occupational status of the head of the household, as highlighted in the following figure.



Figure 15 Percentage of HoH, poverty level indicator by employment status

The figure above shows that when the head of household is employed, there is a lower proportion of severely deprived households and there is a greater proportion of less deprived households. The situation is reversed when the head of household is unemployed.

The poverty level indicator was also significant when associated with the educational level of the head of the household, as demonstrated in the following figure.



Figure 16 Percentage of heads of household, poverty level indicator by educational level

The figure above shows that when the head of the household has no education there are a greater proportion of severely deprived households and there are a lower proportion of less deprived households. The situation is reversed when the head of household has secondary level education. Finally, when the head of the household has further education, there are a greater proportion of less deprived households, while there are a lower proportion of both severely deprived and deprived households.

The poverty level indicator is also significantly associated with the gender of the head of the household, and it is shown in the following figure.



Figure 17 Percentage of HoH, poverty level indicator by gender

The figure above reveals that when the head of household is male there is a lower proportion of severely deprived households, and a greater proportion of less deprived households. The reverse is true when the head of household is female.

The poverty level indicator was also significantly associated with the number members of the household as figure 18 reveals. In particular in households with up to 5 members there is a lower proportion of less deprived households. On the contrary, in households with 9 or more members, there is a lower proportion of severely deprived households.



Figure 18 Percentage of households, poverty level indicator, by number of people living in the household

One of the possible explanations for this is that there is a safety net mechanism in more numerous households (especially if more adults are present).

The poverty level indicator resulted also significantly associated with girls' enrolment status, as per figure below.



Figure 19 Percentage of households, poverty level indicator by girls' enrolment status

The figure above shows that in the "never enrolled" group of girls there is a greater proportion of severely deprived households while in the "dropped out" group of girls there is a greater proportion of less deprived households. The association between the poverty level indicator and indicator of difficulty was then explored to elucidate the frequently discussed relationship between poverty and disability.



#### Results attested for a significant association as shown in the following figure.

Figure 20 Percentage of households, poverty level indicator, by category of difficulty

The figure above shows that among those with a mild or not identifiable difficulty there is a lower proportion of girls in severely deprived households, while there is a greater proportion of girls in less deprived households. Conversely, among those girls with difficulties in two or more prevalent domains, there is a greater percentage of girls in severely deprived households.

## Caregivers

1042 household respondents were asked about the gender of carers and 91.2% stated that carers were females.

Respondents were asked to specify their relationship to the head of household and 58.3% answered 'spouse'. Others specified other relationships such as 'parent of HH' (3.1%) or 'other relative' (2.1%).

Caregivers reported their educational level. In particular a worryingly 46.9% had not completed school, 43.4% completed primary, 7.1% completed secondary school, 2.0% went on to tertiary education (college, polytechnic, etc.). 0.3% attained a University level and 0.3% was not able to report the level of education.

Tertiary and University levels were further aggregated (as 'further education') in order to define the level of education of the head of household in subsequent analysis.

The level of education of the caregiver resulted significantly associated with the poverty level indicator, as the figure below reveals.



Figure 21 Percentage of households, poverty level indicator by caregivers' educational level

It is clear from the figure above that when the caregiver has no education there is a greater proportion of severely deprived household, and a lower proportion of less deprived households.

When the caregiver has primary education, there are a lower proportion of households categorised as severely deprived. When the caregiver has secondary education there are a greater proportion of households categorised as less deprived. Finally, when the caregiver has a 'further education' there is a lower proportion of both severely deprived and deprived households, and there are a greater proportion of less deprived households.

47.0% of the caregivers stated that they have a job or business outside the home, with the majority identifying as farmers (36.5%).

Having a job or a business outside the home was significantly associated with the poverty level indicator, as revealed in the following figure.



Figure 22 Percentage of households, poverty level indicator by caregivers' employment status

The figure above shows that when the caregiver has a job or a business outside the home there is a lower proportion of severely deprived households, and there are a greater proportion of less deprived households. The reverse is true when the caregiver does not have a job or a business outside the home.

Unsurprisingly having a job outside the household resulted in an association with the category of difficulty for girl they are caring for, as shown in the following figure:



Figure 23 Percentage of caregivers, employment status by girls' category of difficulty

With regards to activities outside the house, 58.5% of caregivers stated they are free to decide to visit friends or relatives, while 36.4% reported their duties to take care of the disabled girl would not let them travel. In addition 3.7% said that they had no-one else to visit, 1.2% refused to answer and 0.2% stated they do not know.

After selecting those who provided a valid answer ("I can decide" or "My duties.... would not let me travel"), it was tested whether there was a significant association with the category of difficulty. Results are presented in the following figure.



Figure 24 Percentage of girls' category of difficulty, by caregivers' possibility to visit friends/relatives

The figure above shows that among those who stated that they can visit friends and relatives, there is a lower proportion of girls (they are taking care of) who have difficulties in two or more domains. On the other hand, among caregivers who stated that they cannot visit friends or relatives, there are a lower proportion of girls with mild difficulties, and there are a greater proportion of girls with difficulties in two or more prevalent domains.

This association was further explored for each domain of difficulties included in the WGSS questions, and a significant result was found for the walking, remembering and communicating domains.

For the walking domain, among caregivers who stated they cannot visit friends or relatives there is a greater proportion of girls with difficulties in two or more prevalent domains, as demonstrated in the following figure.



Figure 25 Percentage of girls' level of difficulty (WALKING), by caregivers' possibility to visit friends/relatives

The next figure concerns the remembering domain and among caregivers who stated they can visit friends/relatives there is a greater proportion of girls with no difficulty, and there is a lower proportion of girls with difficulty. The reverse is true among caregivers who stated they cannot visit friends/relatives.

Figure 26 Percentage of girls' level of difficulty (REMEMBERING), by caregivers' possibility to visit friends/relatives



Finally, for the communicating domain, among those who stated they can visit friends/relatives there is a greater proportion of girls with no difficulty. On the contrary, among those who stated they cannot visit friends/relatives there is a lower proportion of girls with no difficulty, and a greater proportion of girls with difficulty.



Figure 27 Percentage of girls' level of difficulty (COMMUNICATING), by caregivers' possibility to visit friends/relatives

Furthermore, the association between the possibility to visit friends/relatives and poverty level indicator was explored and was found to be significant. Results are presented in the following figure.

Figure 28 Percentage of households, poverty level indicator by caregivers' possibility to visit friends/relatives



Results highlighted that among caregivers who can visit friends/relatives there is a lower proportion of severely deprived households. On the other hand, among caregivers who cannot visit friends/relatives there is a greater percentage of severely deprived households, and a lower proportion of those deprived.

# Impact of Difficulties<sup>10</sup>

Primary caregivers were interviewed about whether the difficulties experienced by their children (girls) made a difference to how much time their child spent at school. 38.4% of caregivers recognised that the girl spent less time in school because of these difficulties but an interestingly 27.1% declared that she spent more time in school. 15.7% stated that the difficulties did not make any difference to how much time she spent in school. Perhaps worrying, 18.9% did not know or did not have an opinion.

However, although the question was meant to be directed to all caregivers, regardless of the specific enrolment status of the girls with difficulties, we specifically focused on responses related to girls who were currently enrolled in schools. This seems more coherent with the specific focus of the research.

Therefore the following analysis is based on the responses provided by primary caregivers who were interviewed about whether the difficulties experienced by their girls who were *enrolled in school* made a difference to how much time their child spent at school.

41.2% of caregivers recognised that the girl spent less time in school because of these difficulties, with 34.7% declared that she spent more time in school because of her difficulties. 22.7% stated that the difficulties did not make any difference to how much time she spent in school; and only 1.4% did not know or did not have an opinion about this.

The extent to which girls' difficulties interfered with the time spent at school according to the caregiver, associated with the category of difficulty, is highlighted in the following figure:





<sup>10</sup> Questions C22-C32

In particular, among the girls with mild difficulties there are a lower proportion of those who are reported to spend more time at school, and a greater proportion of those who are reported to spend the same time. Among the girls with two or more prevalent domains of difficulty, there are a lower proportion of those who are reported to spend the same time.

These findings were further explored taking into account the specific domains of difficulty included in the WGSS questions. Results highlighted significant associations with the time spent at school for the hearing, remembering and communicating domains.

With regards to the hearing domain, among those who have difficulty, there are a greater proportion of girls spending more time at school, and a lower proportion of girls spending the same time, as illustrated in the figure below.



Figure 30 Percentage of girls' time spent in school, by level of difficulty (HEARING)

Concerning the remembering domain, there is a greater proportion of those who spend the same time at school among those with no difficulties, while this proportion is lower for both those with some difficulty or difficulty.



#### Figure 31 Percentage of girls' time spent in school, by level of difficulty (REMEMBERING)

Among those who have no difficulty in the communicating domain, there is a greater proportion of girls spending the same time at school; but a lower proportion of girls spending the same time at school among those with some difficulty. Finally among those who have difficulties, there is a greater proportion of girls spending more time at school, and a lower proportion of girls spending the same time. This is highlighted in the figure below.



Figure 32 Percentage of girls' time spent in school, by level of difficulty (COMMUNICATING)

Caregivers also recognised that the functional limitations experienced by the girl might have an impact on how much school work she can do. 70.7% maintained that she did less school work because of these difficulties, whereas 7.7% stated that she did more school work because of these difficulties. However, 19.9% reported that her

activity difficulties did not make any difference to how much school work she could do.

The amount of school work the girl is able to do was significantly associated with the category of difficulty as shown in the following figure.



Figure 33 Percentage of girls' school work, by level of difficulty (COMMUNICATING)

The figure above highlights in particular that among girls with mild difficulty, there is a lower proportion of those able to do less school work. On the contrary among girls with two or more domains of difficulties there is a greater proportion of those who do less school work, and there is a lower proportion of those who do the same amount of school work.

These findings were further explored taking into account the specific domains of difficulties included in the WGSS questions. Results highlighted significant associations with the quantity of school work school for the hearing, remembering and communicating domains.

For the hearing domain, among the girls who have difficulty, there is a lower proportion of those able to do the same amount of school work.



Figure 34 Percentage of girls' school work, by domain of difficulty (HEARING)

With regards to the remembering domain, the proportion of those able to do the same school work is greater among girls who have no difficulty, but is lower among girls who have 'some difficulty' or 'difficulty'.





Concerning the communicating domain, there is a lower proportion of girls able to do the same school work among those who have difficulty communicating.



#### Figure 36 Percentage of girls' school work, by domain of difficulty (COMMUNICATING)

Caregivers recognised that the activity difficulties experienced by their girl might have an impact on how much she learned, with 73.8% maintaining that she did learn less because of these difficulties, whereas (perhaps unsurprisingly) only 6.0% stated that she learned more because of these difficulties. However, 19.0% reported that her activity difficulties did not make any difference to how much she learned.

A significant association was found with the indicator of difficulty. In particular, the figure below highlights the quantity of learning that girls can achieve, accordingly to caregivers, based on their levels of difficulty



Figure 37 Percentage of girls' quantity of learning, by category of difficulty

In particular, among girls with mild difficulties, there are a greater percentage of those able to learn the same as other girls. On the contrary, among girls with two or

more domains of difficulties there are a lower proportion of those able to learn the same as other girls.

These findings were further explored taking into account the specific domains of difficulties included in the WGSS questions. Results highlighted significant associations with the quantity of learning for the hearing, remembering and communicating domains, as demonstrated in the following three figures.

With regards to the hearing domain, among those who have difficulty, there are a lower proportion of girls able to learn the same as other girls.



Figure 38 Percentage of girls' quantity of learning, by domain of difficulty (HEARING)

For the remembering domain, there is a greater proportion of those able to learn the same as other girls within the group with no difficulty. This proportion is lower among girls who have some difficulties or belong to the difficulty domain.



#### Figure 39 Percentage of girls' quantity of learning, by domain of difficulty (REMEMBERING)

Concerning the communicating domain, there are a greater proportion of those able to learn the same as other girls within the group with no difficulties. On the contrary, this proportion is lower among girls who have difficulties. This is shown in the figure below.



Figure 40 Percentage of girls' quantity of learning, by domain of difficulty (COMMUNICATING)

When asked to compare with other girls of her age, 66.2% caregivers think that their girl child with difficulties communicating is less confident than other girls; 11.9% think they are more confident; and 15.6% think they have about the same confidence as other girls. 6.3% do not know.

Notwithstanding the high percentages of girls who were regarded by caregivers as being less confident than their peers, the following considerations can be made, and
these results significantly associated with the category of difficulty, as presented in the following figure.



Figure 41 Percentage of girls' confidence, by category of difficulty

In particular, among girls with a mild difficulty there is a greater proportion of those recognised as confident as other girls. On the other hand, among girls with difficulties in two or more domains, there are a greater proportion of those who are less confident, and there are a lower proportion of those who are as confident as other girls.

This finding was further explored by domains of difficulty included in the WGSS questions. Significant results were found for the hearing, remembering and communicating domains.

For the hearing domain shown in the following figure, among those with difficulty, there is a lower proportion of girls who are as confident as other girls.



Figure 42 Percentage of girls' confidence, by domain of difficulty (HEARING)

As pertains to the remembering domain, among girls with mild difficulty, there are a greater proportion of those as confident as other girls and of those more confident than other girls. The opposite happens for girls with two or more difficulties. Finally, among those with some difficulty (one prevalent domain), there is a lower proportion of those as confident as other girls.



Figure 43 Percentage of girls' confidence, by domain of difficulty (REMEMBERING)

With regards to the communicating domain, among girls with mild or no difficulty, there are a lower proportion of those less confident than other girls and a greater proportion of those regarded as confident as other girls. The opposite is true among girls with two or more difficulties. Finally among girls with some difficulty, there are a lower proportion of those as confident as other girls.



#### Figure 44 Percentage of girls' confidence, by domain of difficulty (COMMUNICATING)

Girls' self-confidence reported by caregivers is also significantly associated with school enrolment.



Figure 45 Percentage of girls' confidence, by enrolment in schools

In particular, among the group of girls who were never enrolled in school, there is a lower proportion of girls who are reported as being more confident is. Among the group of dropped out girls, there is a lower proportion of girls who are reported as being as confident as other girls. Among the group of enrolled girls, there is a greater proportion of girls who are reported as being as confident as other girls. Finally, when comparing in and out of school girls, among those out of school (disregarding whether they were never in school or dropped out at some point) there is a greater proportion of those who were reported as being less confident and there is a lower proportion of those who were reported as being less confident and there is a lower proportion of those who were reported as confident as other girls.

The reported girls' confidence was also associated with poverty level indicator. In particular, among severely deprived households there is a lower proportion of girls as confident as other girls is lower than expected.



Figure 46 Percentage of girls' confidence, by poverty level indicator

Caregivers were asked whether their child had had any serious illnesses during the last year (the interview guide defined 'serious illness' as an illness from which she could have died), and 55.7% said yes. Further analysis established that this was not associated significantly with the indicator of difficulty, nor with the enrolment status or the poverty level indicator - however it was significantly associated with the water source the household had access to.



Figure 47 Percentage of girls, illness by water source

Caregivers were asked whether the girl spent time helping in the household with chores like caring for younger or older family members, doing housework, or in the farm, business or work outside home and 633 (59.4%) said yes.

The question 'Helping in the household' was significantly associated with the level of category of difficulty. In particular, among girls with difficulties in two or more domains there is a lower proportion of girls helping and a higher percentage of girls not helping. The reverse is true among girls with mild difficulties or difficulty in one domain.





This association was further explored taking into account the single domains of difficulties included in the WGSS questions. Results were significant for the walking, remembering and communicating domains.

In particular, for the each single significant domain, among those who help in the household, there is a greater proportion of girls with no difficulty and a lower proportion of girls with difficulties. The reverse happens among those who do not help.



### Figure 49 Percentage of girls' domain of difficulty (WALKING), by help provided in the household







Figure 51 Percentage of girls' domain of difficulty (COMMUNICATING), by help provided in the household

When testing the association between 'helping in the household' and enrolment status, interestingly among those who do help, there is a lower proportion of never enrolled and there is greater proportion of enrolled girls, while the opposite happens among those who do not help. Helping in the household was not significantly associated with the poverty level indicator.

Caregivers of girls enrolled in schools and helping in the household (n=458) were asked whether providing this help stopped girls from going to school (C29) as much as they could. 448 caregivers provided an answer. 92.4% said no, 6.0 said "yes sometimes" and 1.6% say "yes all the time".

Caregivers were asked whether the girls had had any bad or dangerous experiences while travelling around their area in the past year – for example going to school or other places (C30): 80% said no, 16.5 said yes, 2% specified that the question was not applicable to the girl and 1.5% said they did not know. No significant associations were found with enrolment status or the category of difficulty. However, when considering the single domains of difficulty included in the WGSS questions, results highlighted a significant association between this question and the remembering domain, as revealed in the figure below.

In particular among those who reported having had a negative experience, there is a lower proportion of girls with no difficulty and a greater proportion of girls with some difficulties.



Figure 52 Percentage of girls' domain of difficulty (REMEMBERING), by negative experience or not

Having negative experiences while travelling in their area was associated with the poverty level indicator, as shown in the next figure. In particular, among those who had had a bad experience there is a greater proportion of girls in a severely deprived household. This is to be followed up in qualitative research to ascertain what kinds of problems, extent, etc.





Caregivers were asked whether girls had had any problems with local people being hostile or unfriendly. Although 72.0% said no, 21.8% specified "yes, some" and 5.1% said "yes, a lot". Finally 1.1% was not able to answer ("don't know").

No significant association was identified with the indicator of difficulty, however when considering the domains included in the WGSS questions, a significant association was found with the remembering domain. In particular, there are a lower proportion of girls with no difficulty in the remembering domain among those having a lot of problems with local people. On the contrary, there are a higher proportion of girls with difficulty in the remembering domain among those having a lot of problems with local people.





The question exploring 'problems with local people' was also associated with girls' enrolment status. In particular, among girls who dropped out there are a greater proportion of those who have a lot of problems with local people being hostile or unfriendly, caregivers reported, as the figure below reveals.



Figure 55 Percentage of girls, problems with local people by enrolment status

Caregivers were asked whether the girls had some good friends in their village. Although 79.7% said yes, 19.3 indicated "no", and 0.9% was not able to reply (I don't know). This resulted significantly associated with the category of difficulty, as highlighted in the figure below.



Figure 56 Percentage of girls, friendship levels by category of difficulty

The figure above demonstrates that in particular, there is a lower proportion girls with no friends among girls with mild or some difficulties. On the contrary, among girls with difficulties in two or more domains, this proportion is greater.

Data were further explored looking at each domain included in the WGSS questions. Results highlighted a significant association between having friends in their village and the remembering and communicating domains of difficulties.



Figure 57 Percentage of girls' domain of difficulty (REMEMBERING), by friendship levels



#### Figure 58 Percentage of girls' domain of difficulty (COMMUNICATING), by friendship levels

In particular, in both domains of difficulties, among girls who have no friends, there is a lower proportion of girls with no difficulties, and there is a greater proportion of girls with difficulties. The reverse happens for those who have some friends.

'Having friends' was also associated with enrolment at school, as highlighted in the figure below. In particular among 'never enrolled' girls or 'dropped out' girls, there is a greater proportion of girls with no friends and a lower proportion of those with some friends. The reverse is true for girls enrolled in school, possibly indicating that schools are socialisation environments.



Figure 59 Percentage of girls, friendship levels by enrolment status

Furthermore, having friends resulted associated with poverty level indicator.



#### Figure 60 Percentage of households, friendship levels by poverty level indicator

## School experience (enrolled girls)

Caregivers of enrolled girls were asked whether girls attended school on most of the days that the school was open and 88.4% said yes, while 11.4% said no and 0.2% were not able to provide an answer ("don't know"). Upon further analysis, this was not significantly associated with poverty, or the category of difficulty or school distance.

The 1042 caregivers were asked to specify whether they knew which was the closest primary school that local girls could attend. While the large majority (94.8%) did know the closest school in their area, 3.4% did not know and 1.8% were not aware of any school that local girls can attend. When considering girls whose caregiver chose the last two options (n=56): 18 (32.1%) have been never enrolled in school, 12 (21.4%) dropped out, and 26 (46.4%) are currently enrolled.

Those who knew about the closest school local girls could go to, were asked to report on the walking distance from household to the school, and on average they (n=984) reported 20.3 minutes  $(s.d=12.9)^{11}$ .

Caregivers were also asked whether the closest school was able to accommodate girls with 'disability'. 50.7% said yes, 1.4% didn't know, and the remaining 47.9% said no. After excluding those who were not able to provide a specific answer, it was explored whether the ability of the school to accommodate girls with 'disability' was

<sup>&</sup>lt;sup>11</sup> up to 10 minutes=1 (31.9%); up to 20 minutes=2 (34.3%); up to 30 minutes=3 (24.7%); more than 30 minutes=4 (9.0%).This was also further recoded into a 2-class variable: up to 20 minutes (1) and more than 20 minutes (2).

associated with enrolment status or/and indicator of difficulty. In both cases, the association was significant.

In particular, in relation to enrolment, among caregivers of girls never enrolled there is a greater proportion of those who think that school cannot accommodate people with disability The reverse happens for enrolled girls.



Figure 61 Percentage of caregivers, ability of the school of accommodating pupils with disability by girls' enrolment status

Interestingly, there is a greater proportion of respondents caring for girls with difficulties in two or more domains who think that local schools cannot accommodate pupils with a disability. On the contrary, there is a greater proportion of respondents caring for girls with difficulties in one prevalent domain who think that local schools can accommodate pupils with disabilities, as the figure below reveals.



Figure 62 – Percentage of caregivers, ability of the local school to accommodate pupils with disability, by girls' category of difficulty

Caregivers of girls currently enrolled in school were asked whether the girl attended the closest school.

Table 5 Caregivers responses to whether girls attended closest school and whether school can accommodate girls with 'disability'

Does the girl attend the closest school?		Is the closest school able to accommodate girls with 'disability'?	
Yes	553 (85.3%)	yes	324 (58.6%)
		no	222 (40.1%)
		don't know	7 (1.3%)
No	95 (14.7%)	yes	41 (43.2%)
		no	52 (54.7%)
		don't know	2 (2.1%)
Total		648 (100%)	

It was further explored whether attending the closest school was associated with the (perceived or known) capacity of the school to accommodate girls with disability, and the result was significant.



Figure 63 Percentage of caregivers, ability of the school to accommodate pupils with disability, by girls' attendance of the closest school

Caregivers were also asked "How much time in minutes does it take the girl to get to school?" Responses to this question were recoded into a 4-category variable: up to 10 minutes=1; (25.9%); up to 20 minutes=2 (27.2%); up to 30 minutes=3 (27.8%); more than 30 minutes=4 (19.1%). And then further recoded into 2-class variable up to 20 minutes (1) and more than 20 minutes (2).

Please note that in the question above it is specified that the information should refer only to the journey to the school, even considering cases in which the girls do not attend the closest school, do stay overnight closer to the school, or may not walk to school. No significant association was found between this question and the poverty level indicator or the category of difficulty.

Caregivers were asked to indicate how easy the journey to school was for the girls. 14.2% said very easy, 42.7% said fairly easy, 30.4 said fairly difficult, and finally 12.3% said very difficult. 2 respondents (0.3%) stated they did not know.

Easiness of the journey was significantly associated with the time to get to school, as shown in the following figure.



#### Figure 64 Percentage of caregivers, degree of difficulty of journey by time to go to school

In particular, the figure above reveals that among caregivers who reported a distance up to 10 minutes, there is a greater proportion of those saying the journey is very easy and a lower proportion of those saying the journey is fairly difficult. On the contrary, among those reporting a distance of 30 minutes or more, there is a greater proportion of those saying the journey is fairly or very difficult and a lower proportion of those saying the journey is fairly or very easy.

Easiness of the journey is also associated with the category of difficulty, as highlighted in the following figure.





In particular, among girls with mild difficulties there is a lower proportion of caregivers saying the journey is very difficult. On the contrary, this proportion is higher among those with difficulty in one prevalent domain.

Caregivers were asked whether their child's classrooms were satisfactory and 393 (60.6%) said yes. This resulted significantly associated with the category of difficulty, as highlighted in the figure below.



Figure 66 Percentage of caregivers, classroom satisfaction by girls' category of difficulty

In particular, among caregivers of girls with mild difficulties there is a higher proportion of respondents satisfied with the classroom.

Further analysis revealed that satisfaction with classroom is also associated with the poverty level indicator.



Figure 67 Percentage of caregivers, classroom satisfaction by poverty level indicator

The figure above highlights in particular that, among caregivers in severely deprived household, there is a lower proportion of respondents satisfied with the classroom.

Caregivers were asked whether their child's school toilets were satisfactory and 375 (57.9%) said yes. Further analysis revealed that this was associated with the poverty level indicator.



Figure 68 Percentage of caregivers, toilet satisfaction by poverty level indicator

The figure above reveals that among caregivers in severely deprived household there is a lower proportion of respondents satisfied with their child's school toilets.

Caregivers were asked whether in their child's school with text book were satisfactory and 319 (49.2%) said yes. Further analysis revealed that this was associated with the poverty level indicator.



Figure 69 Percentage of caregivers, text books satisfaction by poverty level indicator

In particular, among caregivers in severely deprived household there is a lower proportion of respondents satisfied with the text books, as the figure above shows.

Caregivers were asked whether in their child's school with teaching were satisfactory and 396 (61.1%) said yes. Further analysis revealed that this was associated with the category of difficulty and with the poverty level indicator, as shown in the following figures.





The figure above highlights in particular that, among caregivers of girls with mild difficulty there is a lower proportion of those not satisfied with teaching.





Among caregivers living in a severely deprived household there is a greater proportion of respondents not satisfied with teaching. On the contrary, among caregivers living in a deprived household there is a lower proportion of respondents not satisfied with teaching.

These findings were further explored taking into account the specific domains of difficulties included in the WGSS questions.

With regard to the questions related to the child's satisfaction with classrooms, toilets and text books, results highlighted significant associations with the remembering domain. In particular, among caregivers of girls with no difficulty, there is a greater proportion of respondent satisfied with classrooms. The same happens in relation to girls' satisfaction with toilets. When considering satisfaction with text books, among caregivers of girls with some difficulty there is a higher proportion of respondents who are unsatisfied. This is shown in turn in the next three figures.



Figure 72 Percentage of caregivers, classroom satisfaction by girls' domain of difficulty (Remembering)







Figure 74 Percentage of caregivers, text books satisfaction by girls' domain of difficulty (Remembering)

The findings on caregivers of girls' satisfaction with teachers were further explored taking into account the specific domains of difficulties included in the WGSS questions. Results highlighted significant associations with the visual, remembering and communicating domains, as explained in turn with the following figures.

Concerning the visual domain, among caregivers of girls with difficulty, there is a higher proportion of respondents unsatisfied with the teaching, as presented in the following figure.





As pertains to the remembering domain, among caregivers of girls with no difficulty, there is a higher proportion of respondents satisfied with teaching. On the contrary, among caregivers of girls with difficulty there is a greater proportion of respondent unsatisfied with teaching, as presented in the following figure.



Figure 76 Percentage of caregivers, satisfaction with teachers by domain of difficulty (Remembering)

Finally, concerning the communicating domain, among caregivers of girls with some difficulty, there is a higher proportion of respondents unsatisfied with teaching, as presented in the following figure.



Figure 77 Percentage of caregivers, satisfaction with teachers by domain of difficulty (Communicating)

Caregivers of girls enrolled in school were asked whether girls had seen any hostility or discrimination against girls with disability in their school and 188 (29.0%) said yes, with 14 (2.2%) who were not able to provide an answer ("don't know").

No significant association was identified with the category of difficulty. However, when considering the specific domains of difficulty included in the WGSS questions, a significant association with the remembering domain was highlighted, as per the following figure.



#### Figure 78 Percentage of caregivers, hostility by girls' domain of difficulty (Remembering)

The figure above shows that, among caregivers of girls with some difficulties, there is a higher proportion of those who said that the girl had seen hostility or discrimination.

There is also a significant association between witnessing hostility or discrimination and the poverty level indicator, as presented in the following figure.



Figure 79 Percentage of caregivers, hostility by poverty level indicator

The figure above shows that in particular among caregivers living in severely deprived households, there is a higher proportion of those who said that the girl had seen hostility or discrimination.

87.7% of caregivers of girls enrolled in school stated that it is difficult for caregivers of the girls to afford school. Unsurprisingly, this is significantly associated with the poverty level indicator, as highlighted in the following figure.



#### Figure 80 Percentage of caregivers, school affordability by poverty level indicator

In particular among caregivers of girls in severely deprived households there is a lower proportion of those saying it is not difficult to afford the school. The reverse happened among caregivers in less deprived households.

## **Expectations**

Caregivers were asked what level of schooling they wanted for their girls when they were young. Only 3 respondents (0.3) said none, and 17 (1.6%) were not able to provide an answer. Interestingly, 75.4% of caregivers said they were expecting girls to reach a college or university level education, with only 7.6% expecting them to attend only primary and 15.1 expecting them to attend secondary school.

These expectations are significantly associated with enrolment. In particular, among caregivers of girls never enrolled in schools, there is a higher proportion of those expecting girls to reach a primary or secondary educational level, and a lower proportion of those expecting girls to attain a college or university level education.



#### Figure 81 Percentage of caregivers, girls' expected schooling by enrolment status

Although there is not a significant association with the indicator of difficulty, expectations were significantly associated with the remembering and communication domains of difficulty.

As pertains to the remembering domain, among caregivers of girls with difficulty there is a lower proportion of those expecting girls going to primary school.



Figure 82 Percentage of caregivers, girls' expected schooling, by domain of difficulty (REMEMBERING)

With regards to the communicating domain, among caregivers of girls with difficulty, there is a slightly higher proportion of those expecting girls going to primary schooling.



Figure 83 Percentage of caregivers, girls' expected schooling, by domain of difficulty (COMMUNICATING)

Expectations about schooling were also associated with the poverty level indicator. In particular, among caregivers living in less deprived households there is a lower proportion of respondents expecting girls to reach a secondary level education.



Figure 84 Percentage of caregivers, girls' expected schooling by poverty level indicator

We further explored differences by domains of difficulty within the group of "out of school" girls and we found a significant association between expectations and the remembering domain of impairment.

In particular, among caregivers of girls with no difficulty, there is a higher proportion of those expecting them go reach a primary level education. On the contrary, this proportion is lower among caregivers of girls with difficulty in the remembering domain, as presented in the following figure.



Figure 85 Percentage of caregivers, out of school girls' expected schooling, by domain of difficulty (REMEMBERING)

A similar range was found when looking at the group of enrolled girls.

Caregivers were then asked to specify their schooling expectations for the girls, considering their actual situation. 20 respondents (1.9%) said "none"<sup>12</sup>, and 36 (3.4%) were not able to provide an answer. Then interestingly 72.4% were expecting girls to reach a college or university level education. Finally, 9.6% said primary level, and 12.8% said secondary level.

There is a significant association with the enrolment status, and among caregivers of girls never enrolled there is a lower proportion of those stating 'college or university' (although it is still 63.5%) and a higher proportion of those saying 'primary or secondary'.

<sup>&</sup>lt;sup>12</sup> The 20 cases saying none are: 13 never enrolled girls, 7 dropped out, 11 with difficulties in 2 or more domains, 8 one domain prevalent, only one mild.



Figure 86 Percentage caregivers, current schooling expectations for girls by enrolment status

No significant association with the indicator of difficulty was found, but when considering the domains of difficulty included in the WGSS questions, a significant association was found with the communicating domain. In particular, the proportion of respondents expecting girls to attend up to primary level was higher among caregivers of girls with difficulty and lower among caregivers of girls with some difficulties, as revealed in the figure below.



Figure 87 Percentage of caregivers, current schooling expectations for girls, by domain of difficulty (Communicating)

Further analysis revealed a significant association with the poverty level indicator, with the proportion of caregivers expecting the girls to attend up to secondary education being lower among those from less deprived households, as shown in the following figure.



Figure 88 Percentage of caregivers, current schooling expectations for girls by poverty level indicator

Caregivers were also asked to think about the future, after their child's completion of primary school, and state whether it would be better if she continued to secondary education or rather she got married or rather went on to working. Of the 1066 respondents, the overwhelming majority (981), 92.0% stated 'continue to secondary school', 11, 1.0% said married, 34, 3.2% said working, and 40, 3.8% did not know. It should be noted that there was a similarly relatively high proportion who opted for 'continue to secondary', despite current enrolment status.

# **Attitudes/Perceptions toward schooling**

Caregivers were asked about the amount of learning girls acquired (D13). Of 1066 respondents, 69.7% said that when girls 'with disability' go to school do they usually learn less than other children, 14.6% said about the same as other children and 5.6% stated they learned more. 1.9% did not know and 8.2% said it depended (though this should be interpreted with caution, as there is not further information regarding what it depends on).

Associations with the category of difficulty, the poverty level indicator, and/or WGSS questions domains of difficulty were further explored but no significant results were found.

Caregivers were asked whether education helps people make better lives for themselves. Of 1066 respondents, the overwhelming majority 1042, 97.7% said that yes.

There was no variability and therefore no further associations were explored.

Caregivers were asked to indicate what they consider important when deciding whether a child should attend school. As summarised in the following figure the main elements listed were ability and age, and less relevantly, disability.



Figure 89 Important elements in deciding whether a child should attend school.

We further explored the association between these elements and the other variables under study (category of difficulty, poverty level indicator, etc.).

A significant association was found between girls' age and the poverty level indicator. In particular among respondents in severely deprived households there is a greater proportion of those saying age is not relevant, as illustrated in the figure below.



Figure 90 Percentage of caregivers, relevance of girls' age by poverty level indicator

A significant association was also found between time of the year and the poverty level indicator. In particular among respondents in severely deprived households there is a lower proportion of those saying time of the year is relevant, as highlighted in the figure below.





A significant association was also found between girls' age and enrolment status, as shown in the figure below.



Figure 92 Percentage of caregivers, relevance of girls' age, by girls' enrolment status

Further analysis revealed that there is an association between girls' age and the category of difficulty, as shown in the figure below. In particular among respondents caring for girls with mild difficulties, there is a lower proportion of those saying age is not relevant. On the contrary, among respondents caring for girls with difficulties in more domains, there is a greater proportion of those saying age is not relevant.



#### Figure 93 Percentage of caregivers, relevance of girls' age by category of difficulty

The next figure shows the significant association between gender and the category of difficulty. In particular among respondents caring for girls with mild difficulties, there is a greater proportion of those saying that gender is relevant.



Figure 94 Percentage of caregivers, relevance of gender by girls' category of difficulty

Caregivers were asked whether it was typical for people in their village to send girls 'with disabilities' to school. 58.5% said that most did not and 38.6 said that most people did. 2.9% did not know.

Further analysis revealed no significant association between this question and the category of difficulty, but rather it resulted associated with the enrolment status of girls, as demonstrated in the figure below.



Figure 95 Percentage of girls, enrolment status by attitude of village people

Furthermore, among caregivers of girls never enrolled in school there was a higher proportion of respondents saying that people in the village did not send girls with disability to school. On the contrary, among caregivers of girls enrolled in school, there was a higher proportion of respondents saying that people in the village sent girls 'with disability' to school, as shown in the figure below.





A significant association was found between this question and the poverty level indicator. In particular, among caregivers living in severely deprived household, there was a higher proportion of respondents saying that people in the village did not send girls 'with disability' to school.



#### Figure 97 Percentage of caregivers, village people attitude by poverty level indicator

## **Perceived support**

Caregivers were asked whether they felt that there was enough support 'around here' for girls 'with disabilities' to succeed in school? The majority 87.4% said no.

A significant association was found between the question above and the category of difficulty. In particular, among caregivers of girls with mild difficulties, there was a higher proportion of those saying that there is enough support.



Figure 98 Percentage of caregivers' perception of available support, by category of difficulty

Further associations were explored for the single domain of difficulty included in the WGSS questions. Significant results were found for the remembering domain, as

shown in the figure below. In particular, among caregivers of girls with no difficulty, there is a higher proportion of those saying that there is enough support. This proportion is lower among the caregivers of girls with difficulty.



Figure 99 Percentage of caregivers' perceived available support, by girls' domain of difficulty (Remembering)

Moreover, a significant association was also established between this question and the enrolment status, as highlighted in the following figure.



Figure 100 Percentage of caregivers' perception of available support, by girls' enrolment status

In addition, there is a significant association with the poverty level indicator, with a lower proportion of respondents saying that there is enough support among caregivers living in severely deprived households, as shown in the following figure.



#### Figure 101 Percentage of caregivers' perception of available support, by poverty level indicator

# School experience - Girl Child interview/Girls' self-perception

This section is about the school experiences of girls, as perceived by themselves. Questions were asked to the group of 648 enrolled girls. Firstly, they were asked whether their school was for girls and boys (97.5%) or girls only (0.5%). 2% did not know or refused to answer this question.

Then, girls enrolled in school (n=646) were asked whether they liked going to school and 92.4% said yes.

The majority of them thought that school is a nice place to be most of the time (73.4%), or at least sometimes (17.3%).

## Do you think going to school is fun?

The majority of enrolled girls thought that going to school is fun either most of the time (63.5%) or sometimes (23.4%). 3.9% thought it is not fun, 4.6% did not want to answer this question and 4.6% did not have an opinion.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. A significant association was found for the enrolled girls between 'thinking that school is fun' and both the remembering and the communicating domains.

In particular, for the remembering domain, among those with difficulty, there is a greater proportion of girls saying that school is fun sometimes, as highlighted in the following figure.


### Figure 102 Percentage of girls, school is fun, by domain of difficulty (Remembering)

As pertains to the communicating domain, among girls with some difficulties there is a higher proportion of those saying that school is fun, as shown in the figure below.



#### Figure 103 Percentage of girls, school is fun, by domain of difficulty (Communicating)

Further analysis revealed a further significant association between this question and the poverty level indicator. In particular the figure below shows that, among girls living in severely deprived household there is a lower proportion of those saying school is fun most of the time in a higher proportion of those saying the school is fun sometimes.



Figure 104 Percentage of girls, school is fun, by poverty level indicator

# Do you feel that your teachers treat you fairly?

When asked 81.6% of girls (n=646) felt that their teachers treated them fairly.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. This is significantly associated with the remembering domain, with a slightly lower proportion of girls saying teachers are unfair among girls with no difficulty.



Figure 105 Percentage of girls, teacher fairness, by domain of difficulty (Remembering)

Further analysis highlighted a significant association with the poverty level indicator. The figure below shows in particular that, among girls living in a severely deprived household, there is a greater proportion of those saying teachers are unfair.



Figure 106 Percentage of girls, teacher fairness, by poverty level indicator

# Do you feel that your teachers respect your opinion?

76.6% of girls feel that their teachers respect their opinion, however 9.8% do not think so, 7.4% do not know and 6.2% refused to provide an answer.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. This was significantly associated with the remembering domain. In particular, the proportion of those saying that teachers do not respect them is greater among girls with difficulty and lower among girls with no difficulty.



Figure 107 Percentage of girls, teacher's respect, by domain of difficulty (Remembering)

There is also an association with the poverty level indicator. Among girls in severely deprived household there is a greater proportion of those saying teachers do not respect them. This proportion is lower among girls in less deprived households.





## Do you feel that your teachers really care about you?

When asked, 81.3% of girls feel that their teachers really care about them.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. This was significantly associated with remembering domain. Among girls with no difficulty there is a lower proportion of those saying the teachers do not care.



Figure 109 Percentage of girls, teacher cares, by domain of difficulty (Remembering)

Furthermore this is significantly associated with poverty level indicator, with the proportion of girls saying teachers do not care being greater among those in severely deprived households.



Figure 110 Percentage of girls, teacher cares, by poverty level indicator

# Would your teachers try to help you when you are sad or upset?

78.3% of girls feel that their teachers would try and help them when they are sad or upset.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. Again this was significantly associated with the remembering domain. With a lower proportion of those saying that teacher does not help among those with no difficulty.



Figure 111 Percentage of girls, teacher helps, by domain of difficulty (Remembering)

Furthermore data revealed that 90.4% of girls want to do well at their school. 88.2% usually pay attention in class. 1.7% reported not paying attention in class, 3.4% do not know, 6.7% refused to provide an answer. 90.4% of girls usually try their best in school.

## How often do you feel happy at school?

Girls were asked how often they feel happy at school. 46.3% of girls feel happy in school all the time, 35.0% most of the time and 18.8% feel happy sometimes or never.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. A significant association was found with the hearing and remembering domains, as the figures below explain in turn.

For the hearing domain, among girls with some difficulties, there is a higher proportion of those saying that they are happy sometimes or never.



Figure 112 Percentage of girls, happy at school, by domain of difficulty (Hearing)

Concerning the remembering domain, among girls with no difficulties there is a lower proportion of those saying that they are happy sometimes or never, as illustrated in the figure below.



#### Figure 113 Percentage of girls, happy at school, by domain of difficulty (Remembering)

# How often do you feel unhappy at school?

Girls (n=576) were also asked how often they felt unhappy at school. 8.3% stated that they are unhappy all or most of the times, 42.5% said that they are unhappy sometimes, and 49.1% said that they are never unhappy at school

Further analysis revealed that this question resulted associated with the category of difficulty. Among girls with mild difficulty, there is a lower proportion of those who say they are unhappy all or most of the times, as the figure below reveals.



Figure 114 Percentage of girls, unhappy at school, by category of difficulty

This question resulted further associated with poverty level indicator. Among severely deprived household there is a lower proportion of girls never unhappy.

Among less deprived household there is a lower proportion of girls who are sometimes unhappy, as shown in the figure below.



Figure 115 Percentage of girls, unhappy at school, by poverty level indicator

The next question asked girls how often they felt afraid at school. 50.5% stated never and 31.5% some of the time, a smaller percentage however declared feeling afraid at school either all the time, 2.5%, or most of the time 4.8%.

Overall, girls felt that school is generally a good place for them (n=646; 89.5%).

# I cannot choose whether to stay in school. I just have to accept what happens

In making decisions on whether or not to stay in school, 37.3% feel they can chose to stay in school while 30.9% feel that they have to accept what happens.

This is significantly associated with the category of difficulty. In particular, among those with a mild difficulty there is a higher proportion of those feeling they can make their choice. On the contrary, among those with difficulty in two or more domains there is a higher proportion of those feeling they cannot choose whether to stay at school.



### Figure 116 Percentage of girls, choosing to stay in school or not, by category of difficulty

# I make decisions about school or my future based on what I think is important

On making future decisions, 51.7% of girls feel that they are able to make decisions about school or their future, based on what they think is important, and 15.3% do not think they can do that.

This question was further explored by considering the specific domains of difficulty included in the WGSS questions. There is a significant association with the remembering domain. The figure below shows that among those with no difficulty there is a lower proportion of girls saying they cannot make decisions about school or their future. On the contrary, among girls with some difficulty there is a greater proportion of those saying they cannot make decisions about school or their future based on what they think is important.



Figure 117 Percentage of girls, making decisions, by domain of difficulty (Remembering)

Further analysis revealed an association between this question and the poverty level indicator, as illustrated in the figure below. Among girls living in severely deprived household, there is a greater proportion of girls saying they cannot make decisions about school or their future based on what they think is important.





# Learning Assessment

According to the Ipsos baseline report, only around half of the pupils/girls passed the UWEZO test in literacy (English, Kiswahili) and numeracy. This section is about learning outcomes of girls, particularly in English and in Math. Focus will be placed on enrolled girls.

# **English reading assessment**

Questions were asked to the group of 648 enrolled girls as well as the group of out of school girls (418). The majority of the 1066 girls 46.5% were reported scoring at 'nothing level', 19.4% scoring at 'letter level', 16.9% at 'word level', 10.1% at 'paragraph level', and 7.0% scoring at 'story level'.

Clearly these results vary greatly depending on the enrolment status, with the following distribution as shown in the figure below, to the detriment of out of school girls (both never in school and dropped out).



#### Figure 119 Percentage of girls, English reading assessment score, by enrolment status

## **Enrolled girls**

In the following section we will focus specifically on girls currently enrolled in school, to further test whether the category of difficulty, the specific domains of difficulty included in the WGSS questions, or the class attended by the girls are associated with their achievements in English reading.

We repeated the previous analysis including only girls currently enrolled in school. With regards to the category of difficulty, among enrolled girls with mild difficulties, there is a greater proportion of those scoring "story level". Among enrolled girls with difficulties in one prevalent domain, there is a greater proportion of those scoring "word level". Finally, among enrolled girls with difficulties in two or more domains there is a greater proportion of those scoring "nothing level" and a lower proportion of those scoring "letter level".



Figure 120 Percentage of enrolled girls, English reading assessment score, by category of difficulty

The association between English reading achievements and the single domains of difficulty included in the WGSS questions were further explored. Results were significant for the visual, walking, remembering and communicating domains which are explained in the next four figures.

As pertains to the visual domain, among girls with some difficulty, there is a greater proportion of girls scoring at 'letter level, A similar tendency is observed for girls with difficulty.





With regards to the walking domain, among girls with some difficulties, there is a lower proportion of those scoring at "word level". Furthermore, among girls with difficulty, there is a lower proportion of those scoring at "nothing level" and a greater proportion of those scoring at "paragraph level".



Figure 122 Percentage of enrolled girls, English reading assessment score, by domain of difficulty (Walking)

As pertains to the remembering domain in the figure below, among girls with no difficulty there is a greater proportion of those scoring at 'letter level' and a lower proportion of those scoring at 'nothing level'. Among girls with difficulty, there is a greater proportion of those scoring at 'nothing level' and a lower proportion of those scoring at 'letter level' or at 'story level'.



Figure 123 Percentage of enrolled girls, English reading assessment score, by domain of difficulty (Remembering)

Concerning the communicating domain, among girls with no difficulties there is a lower proportion of those with 'nothing level' and a greater proportion of those with a 'letter level'. The opposite is true for girls with difficulty in the communication domain, where there is a higher proportion of those at 'nothing level'.



Figure 124 Percentage of enrolled girls, English reading assessment, by domain of difficulty (Communicating)

Further analysis found a significant association between achievement in English reading and class attended by the girls. Although we were expecting achievements to improve over time, findings highlighted a more complex picture.

Among girls attending Class 1 there is a higher proportion of those scoring "nothing level", but there is also a greater proportion of those scoring "word level". Moreover there is a lower proportion of those scoring "letter level".

Among girls in Class 2 there is a higher proportion of those scoring "word level" and "paragraph level". Among girls in Class 3 no specific association was highlighted. Among girls in Class 4 there is a greater proportion of those at "story level".

Among girls attending Classes 5 to 8 there is a greater proportion of girls at "letter level", and respectively a lower proportion of girls at: 'Nothing level' (class 5); 'Word level' (Class 6); 'Word level' or 'Paragraph level' (Class 7); 'Word level' (Class 8).

This might imply that the system cannot cope with educating girls with reading difficulties in English at story level beyond class 5.



Figure 125 Percentage of enrolled girls, English reading assessment score, by class attended

# Math assessment

As for the English reading assessment, math questions were asked to the group of 648 enrolled girls as well as the group of out of school girls (418). The majority of 1066 girls, 45.9% were reported scoring at 'nothing level', 20.6% scoring at 'counting level', 15.8% at 'number recognition level, 10.4% at 'addition level', and 7.3% scoring at 'subtraction level'.

Similarly to for English reading assessment, these results vary greatly depending on the enrolment status clearly, with the following distribution as shown in the figure below, to the detriment of out of school girls (both never in school and dropped out).



Figure 126 Percentage of girls, Math assessment score, by enrolment status

## **Enrolled girls**

In the following section we will focus specifically on girls currently enrolled in school, to further test whether the category of difficulty, the specific domains of difficulty included in the WGSS questions, or the class attended by the girls are associated with their achievements in math.

We repeated the previous analysis including only girls currently enrolled in school. With regards to the category of difficulty, among girls with mild difficulties there is a greater proportion of those scoring at the "counting" or 'subtraction' levels, and a lower proportion of those scoring at the 'nothing' or 'addition' levels.

Among girls with difficulties in more domains there is a greater proportion of those scoring at 'Nothing level' and a lower proportion of those scoring at 'counting level'.



Figure 127 Percentage of enrolled girls, Math assessment score, by category of difficulty

The association between math achievements and the single domains of difficulty included in the WGSS questions were further explored. Results were significant for the visual, walking, remembering and communicating domains, and they are explained in the next four figures.

As pertains to the visual domain, among girls with difficulty there is a greater proportion of girls scoring at 'counting level', as illustrated in the figure below.



Figure 128 Percentage of enrolled girls, Math assessment score, by domain of difficulty (Visual)

Concerning the walking domain, among girls with some difficulties there is a lower proportion of those scoring at the 'addition level'. Furthermore among girls with difficulty there is a lower proportion of those scoring at the 'nothing level' and a higher proportion of girls scoring at the 'addition level', as depicted in the figure below.



Figure 129 Percentage of enrolled girls, Math assessment score, by domain of difficulty (Walking)

With regards to the remembering domain, among girls with no difficulties there is a lower proportion of those scoring at the 'nothing level' and a higher proportion of those scoring at the 'counting level'. The reverse is true among girls with difficulty remembering, as the figure below reveals.





The same situation described for the remembering domain is true for the communicating domain, that is among girls with no difficulties there is a lower proportion of those scoring at the 'nothing level' and a higher proportion of those scoring at the 'counting level'.





Further analysis found a significant association between achievement in math and class attended by the girls. Although we were expecting achievements to improve over time, findings highlighted a more complex picture.

Among girls attending Class 1 there is a higher proportion of those scoring at "nothing level", but there is also a greater proportion of those scoring at "number level" or "addition level". Moreover, there is a lower proportion of those scoring at "counting level" or "subtraction level".

Among girls in Class 2 there is a higher proportion of those scoring at "number level" and "addition level", and a lower proportion of those scoring at "counting level".

Among girls in Class 3 there is a higher proportion of those scoring at 'subtraction level' and a lower proportion of those scoring at 'counting level' or 'number level'.

Among girls in Class 4 there is a greater proportion of those at "subtraction level".

Among girls attending Classes 5 to 8 there is a greater proportion of girls at "counting level", and respectively a lower proportion of girls at: 'Nothing level' (class 5); 'Number and addition level' (Class 6); 'Addition level' (Class 7); 'Number level and 'addition level' (Class 8).

This may imply that the system cannot cope with educating girls with difficulties in math at 'subtraction level' beyond class 5.





# Age distribution

This section will consider the age distribution of the 1066 girls interviewed. 37.1% of girls were reported being in the 5 - 10 years group, 37.8% in 11 -15 years group, 19.7% in the 16 to 20 years group, and 5.3% were reported above 20 years old.

There is a significant association between age and enrolment status. In particular, among the never enrolled girls there is a higher proportion of those aged between 11 and 15 years old. Among the dropped out girls, there is a higher proportion of those aging between 16 and 20 years or more than 20 years old, and a lower proportion of those aging between 5 and 10 or between 11 and 15 years old. Finally, among the enrolled girls, there is a higher proportion of those aged between 5 and 10 or between 11 and 15 years old. Finally, among the enrolled girls, there is a higher proportion of those aged between 5 and 10 years or 10 to 15 years old, and a lower proportion of those aged from 16 to 20 years or older than 20 years. This is shown in the figure below.





## **Enrolled girls**

When considering enrolled girls ranging in age between 5 and 20 years old, there is a significant association between girls' age and class or year they are enrolled in.

In particular, among girls in class 1 and in class 2, there is a greater proportion of girls ranging in age between 5 and 10 years old. On the contrary, there is a lower proportion of those ranging in age between 11 and 15 years old or between 16 and 20 years old.

Among girls in class 3, there is a lower proportion of girls ranging in age between 16 and 20 years old.

Among girls in class 4, there is a greater proportion of girls ranging in age between 11 and 15 years old.

Among girls in class 5 and in class 6, there is a lower proportion of girls ranging in age between 5 and 10 years old and between 11 and 15 years old.

Among girls in class 7 and in class 8 there is a lower proportion of girls ranging in age between 5 and 10 years old and between 16 and 20 years old. This is depicted in figure 135 below.





# **Discussion and Conclusions**

The main objective of the secondary analysis of the baseline data was to provide a more comprehensive picture of the relationship between girls' enrolment status, the levels and types of activity difficulties, poverty levels, and the experiences of the girls – both in and out of school - identified in the sample.

The results give a picture that confirms a number of assumptions, in particular about the interactions between poverty and disability, but also highlight a number of specific areas for follow up in planned in-depth field research. The discussions below will draw out these areas in more detail.

# **Enrolment and Functional Difficulties**

Let's start with the significant association between the category of difficulties of the girl and their enrolment status. In particular, fewer girls who were identified as having mild difficulties (with hearing, seeing, walking, communicating and remembering), have never been in school or dropped out; whereas amongst girls with difficulties in two or more domains, a higher number have never enrolled or been in school. In sum, the more difficulties one has, the less likely one is to be in school. However, it is interesting to note that amongst girls with mild difficulties, or difficulties in one domain, enrolment rates are also relatively high. This may illustrate the point that in the case where a child has one 'dominant' difficulty (for example, with walking), it is seen as relatively 'easy' to place this child in school (even without the necessary support) to achieve 'inclusion', and it is also easier for the school system to identify the immediate specific educational needs of a child. However, these children might be seen as 'low hanging fruit' by schools advocating for inclusive education, or, put differently, easier to include, when compared to children with difficulties in two or more domains - which seems borne out by the results here. In fact, amongst the girls with difficulties in two or more domains, it is as likely they will either never have been enrolled, or be currently enrolled, in school.

School enrolment becomes problematic particularly for the following domains of difficulty: walking, remembering, and communicating.

There are more girls with difficulties walking who have never been to school compared to girls without any difficulties walking. This means there are fewer girls with walking difficulties enrolled in school. There could be a number of reasons for this, some of which are outlined further on.

The number of girls with difficulties remembering is higher amongst those who have never been in school or who have dropped out compared to those without any, or only mild, difficulties with remembering. It follows that the number of girls with difficulties remembering is less in the enrolled group. Given that this domain may be a proxy for a range of issues, including learning difficulties, this is perhaps unsurprising.

Girls with reported communication difficulties stated they are more likely to have never gone to school than those without any communication difficulties; and there are fewer girls with communication difficulties enrolled in school, compared to those with no communication difficulties. Again, communication difficulties could be a proxy for other difficulties (e.g. a hearing difficulty that had not been identified) and some of the reasons why these children are not in school are examined in more detail below.

# Enrolment, Household characteristics and Poverty

Access to schooling for girls is associated with a range of factors: household (HH) socioeconomic status and characteristics of the head of household (HoH), such as gender, education level and employment levels. It should also be noted that the majority of HoH were male; though the majority of caregivers were female.

The level of education of the HoH was associated with their occupational status: those with the lowest level of education are the least likely to be employed. Male HoH were more likely to go onto to secondary or further education than females, and the proportion of female HoH without education was higher. There is significant association between being unemployed and being a female HoH.

Whilst poverty was an indicator in girls' enrolment status, the level of education of the HoH was not; however the latter was associated with occupational status: those with the lowest level of education are the least likely to be employed, so it follows these HH are likely to be poorer. Male HoH were more likely to go onto to secondary or further education than females, and the proportion of female HoH without education is higher. As noted above, education level is significantly linked to deprivation, with HoH with lower education levels having a greater likelihood of deprivation, and those with higher education levels more likely to be less deprived.<sup>13</sup> Again, this also seems to be mediated by the gender of the HoH - with a significant association between being unemployed and being female.

As noted above, the level of education of the HoH (whether a male or female headed HH) was not directly associated with girls' enrolment status. This is not in line with general findings in the literature, whereby there tends to be an association between level of education of the HoH and enrolment, and so calls for further exploration. Nevertheless the level of education of the HoH was associated with other factors such as employment status of the HoH and poverty levels, which in turn are associated with the girls' enrolment status, as noted above. These findings will need to be further explored using both quantitative and qualitative research to elaborate the associations.

Household poverty levels are significantly associated with girls' enrolment status, with the number of girls who have never enrolled in school being from the most severely deprived households; whereas a significant number of those who dropped out are from HH who are less deprived. The poorest HH also have the highest proportion of girls with difficulties in two or more prevalent domains.

Concerning the poverty level, somewhat unsurprisingly, when the HoH is employed, the HH is less deprived, and the situation is reversed when the head of household is unemployed. The poverty level of a HH is also affected by the educational level of the head of the household – if the head of household has no education is associated positively with the level of deprivation; and conversely, poverty is reduced if they have a higher level of education. Poverty is also significantly associated with the gender of the head of the household, with female-headed HHs being more likely to be deprived or severely deprived. Poverty was also associated with the number of members in the HH; with the levels of poverty overall increasing with number of members of the HH, though HH with nine or more members had a lower proportion of severely deprived households (though the range of HH defined as deprived was similar). One possible explanation for this might be that the higher number of members links to a related higher number of assets.<sup>14</sup>

Interestingly there are a higher number of out of school girls in households where female adults are the majority.

Therefore while it could be speculated that poverty is one of the main reasons why girls from the most deprived households do not enrol in school in the first place, it is not clear why those from less deprived HH drop out. Among the reasons indicated in the baseline include early marriage, but further research is needed to elaborate on this.

# Caregivers

As noted above, girls' enrolment status was associated with the level of education of the caregiver, and this is significantly linked to deprivation. Caregivers with lower education levels have a greater likelihood of deprivation, and those with higher education levels are more likely to be less deprived.

Perhaps unsurprisingly, the overwhelming majority of the caregivers were female. For most, caring was a full time occupation; though over a third of caregivers reported having a job outside the household, which, as noted above, significantly impacted on the poverty level of the household. Poverty was unsurprisingly associated with occupational status - with a greater proportion of less deprived households identified when the caregiver is likely to be employed. Caregivers were

<sup>&</sup>lt;sup>14</sup> As listed on p.18

also more likely to be unemployed if the girl (they are caring for) had difficulties in two or more domains.

Caring for a child with difficulties in one or more domains also impacted on the social life of the caregiver; with more than half saying it limited time with other friends and relatives, though this increased with the severity of the difficulty. This means that there is less opportunity for them to get out and meet people and socialise, which may lead to isolation for the caregiver – a common issues for many carers; it also means that there is less opportunity for them to engage in information sharing, which has implications for community-based work, such as public health activities or sensitisation. It perhaps therefore follows that a greater number of caregivers who cannot visit friends/relatives are from HH defined as severely deprived households.

This association was further explored for each domain of difficulties, and as above, a significant result was found for caregivers of girls with difficulties in the walking, remembering and communicating domains in particular.

# Impact of difficulty

Overall, over a third of caregivers interviewed thought that girls spent less time in school because of their difficulties, and only a slightly lower number thought they actually spent more time in school. This extra time may be spent on remedial classes or other extracurricular activities; this will be further explored in the next stage of the research. However, this finding is slightly negated by the fact that the data reveals that girls with difficulties in two or more prevalent domains also spend less time at school, which could either mean that the teachers do not provide sufficient support to these girls, so they go home earlier, or that the girls leave for other reasons. Either way, this warrants further exploration through field work to better understand the differences.

Caregivers were also asked about the amount of learning girls acquired at school. The majority of caregivers (over two thirds) thought that girls with difficulties learned less than other girls in school. This was also further explored by each of the specific domains. There were also significant associations with the time spent at school for girls with difficulties in the hearing, remembering and communicating domains specifically – though of course, there clearly may be some overlap between these domains.

# Hearing

The data revealed that caregivers of girls who have difficulties with hearing thought they spent more time at school, yet they were less able to do the same amount of school work as other girl and less able to learn the same as other girls. Therefore we can speculate as to whether the extra time spent in school is used to catch up with school work– though this needs to be followed up in discussions with these girls. In addition to this caregivers of girls who have difficulties with hearing reported that they less are less confident than other girls and less happy.

# Remembering

According to information given by caregivers, the number of girls with difficulties remembering is higher amongst those who have never been in school or who have dropped out compared to those without any, or only mild, difficulties with remembering. It follows that there are few girls with difficulties enrolled in school. Given that this domain may be a proxy for a range of issues, including learning difficulties, this is perhaps unsurprising. This is also reflected in the evidence that when they are enrolled, these girls spend less time in school; do less school work, and learn less than girls without any difficulties in remembering. Again, more information is needed as to why they are not spending the same amount of time in class – could it be that they do not bother to attend if they are not learning? This may also be reflected in the levels of confidence reported – girls with difficulties report feeling less confident than girls with no difficulties remembering. All of this calls for further research and associated action from a programmatic perspective.

Caregivers of girls with difficulties in the remembering domain also noted a number of barriers and challenges. These include: having a greater likelihood of negative experiences; hostility or discrimination; problems with local people (possibly linked); having fewer friends and enough support. Similarly, the caregivers also expressed some dissatisfaction with the learning environment, with a greater proportion of caregivers of girls with difficulties expressing dissatisfaction with classrooms; teaching, toilets and text books compared to caregivers of girls without any difficulties remembering.

With regards to the girls with a lot of difficulties with remembering themselves, fewer thought that school was fun sometimes; while more thought that teachers do not respect them, or do not care, or do not help them. It is therefore unsurprising that these girls are less happy and spend less time in school. As noted above, more research is needed to ascertain more details about what causes them to feel unhappy and why they spend less time in school

# Communicating

Caregivers of girls with reported communication difficulties (which may also include hearing or other learning difficulties, as noted above) stated that these girls are more likely to have never gone to school than those without any communication difficulties; and there are fewer girls with communication difficulties enrolled in school compared to those without communication difficulties. Similarly, there are fewer girls with communication difficulties who able to do the same school work, or learn the same as those without difficulties with communication. Girls with some communication difficulties self-reported feeling less confident than other girls, and having fewer friends. However, a relatively high number of girls with communication difficulties thought school was fun.

Of the girls with communication difficulties who are in school, caregivers reported that they spend more time at school; again, the reasons for this are as yet unknown, though may again include catching up with school work, but this needs to be explored in more detail in the qualitative research.

Caregivers of girls with mild and moderate communication difficulties also expressed dissatisfaction with the teaching the girls received. However, this did not necessarily impact on their expectations for the girls, with a significant number expecting them to at least go to primary school.

Caregivers of girls with difficulties in the other domains also experienced a range of challenges, which are discussed briefly below.

# Vision

A higher proportion of caregivers of girls with difficulty seeing reported feeling unsatisfied with the teaching (at the child's school).

# Walking

Perhaps unsurprisingly, if taken as an indicator of mobility or other impairments, there are more girls with difficulties walking who have never been to school compared to girls without any difficulties walking. This means there are fewer girls with walking difficulties enrolled in school. In addition, more (caregivers of) girls with difficulties walking reported them having had a negative experience while travelling (to school or around the area). Again, the exact nature of these experiences is unknown, but further research is planned to explore these issues in more detail.

# Other relevant factors associated with enrolment

There are a range of other factors that caregivers assume come about as a result of girls dropping out of school, including local people being hostile or unfriendly; caregivers also reported that girls who have never enrolled or who have dropped out of school are more likely to have few or no friends compared to those enrolled in school.

It is interesting to note that caregivers of girls never enrolled in school thought that people (in their village) did not send girls with disabilities to school, whereas caregivers of girls enrolled in school thought they did. This belief seems in fact to be borne out by the evidence, whereby girls with disabilities (here defined as a lot of difficulty in one or more domain or at least some difficulties in two or more domains) are disproportionately represented amongst the out of school or dropped out groups. This raises the question as to whether it is the caregivers' perception about possibilities for educating their child that is the barrier, or if it is the actual schools themselves? With regards to other factors influencing the decision to send a girl to school, including age (of the child) and time (to school), these were seen as less relevant factors; most caregivers selected the school in the village, and most felt there was enough support at the school. However, as outlined below, responses to these points were less positive from caregivers of girls with two or more difficulties.

Caregivers of girls with difficulties in two or more domains of difficulty also reported that these girls do less school work, learn less and are less confident and have fewer friends than girls with mild difficulties or no difficulties. They also help in the home less; again, this may indicate that caregivers perceive that girls with difficulties have more limitations across all of these aspects, but this needs to be corroborated against what the girls themselves say. This will be part of the next stage of the research when we will explore the extent to which these perceptions reflect girls' experiences.

# Expectations

Caregivers' expectations were examined from a range of perspectives, including what they thought of the actual school, the teaching, and their child's achievements. It seems from the analysis that their expectations seem to be somewhat raised in comparison to the reality on the ground.

Overall, as discussed above, caregivers of girls who had never enrolled in school were more likely to think that school could not accept children with disabilities. Conversely, caregivers of girls enrolled in school were more likely to think they could.

It is also interesting to explore some of the expectations surrounding the potential of girls – for example, more caregivers of girls never enrolled in schools expected the girls to reach a primary or secondary educational level, rather than college or university level education. This is perhaps unsurprising if they are not (yet) enrolled in school; borne out by the fact that the results were slightly different when the child was younger, when expectations were higher that they would go on to secondary or tertiary education.

Although there is not a significant association with the indicator of difficulty, expectations were significantly associated with the remembering and communication domains of difficulty, with fewer caregivers of girls with difficulties in the remembering domain expecting them to go to primary school.

Expectations about schooling were also associated with the HH poverty level, with caregivers living in less deprived households being more likely to expect the girls to reach college or university. The picture was slightly different for poorer households, with more caregivers expecting the girls to reach (only up to) primary or secondary; however, it should be noted a significant number still stated college or university.

Caregivers (of girls both enrolled and not enrolled) were also asked to think about the girls' future with regard to continuing education or getting married after completion of primary school. The overwhelming majority opted for continuing on to secondary school. This was the case regardless of the girls' current enrolment status, which again raises questions as to the match between expectations and current reality on the ground.

# School experience (enrolled girls)

It is also worth noting that caregivers of girls with difficulties in two or more domains are more likely to think that local schools cannot accommodate pupils with disability than caregivers of girls with difficulties in one prevalent domain, or no difficulties, who think that local schools can accommodate pupils with disabilities.

The results indicate that these girls are indeed more likely to be attending the local (nearest) school. This is linked to responses concerning the journey (to school). Caregivers of girls with difficulties in one prevalent domain are more likely to think the girls' journey is very difficult compared to caregivers of girls with mild difficulties. It may be speculated that if caregivers perceive the child's journey to be difficult, this may affect their decision about sending their child to school.

Caregivers of girls enrolled in school from severely deprived households were also less satisfied with the classroom; the school toilets; the text books or the teaching.

It is interesting to note that similarly lower levels of caregivers' satisfaction were significantly associated with the visual, remembering and communicating domains in particular – again, these were the domains identified as having the most difficulties and most challenges, so it is clear that expectations do not match current satisfaction levels.

# Attitudes/Perceptions toward schooling

What is striking about these results is that there is a clear impact on being in school and other aspects of a girl's life: for example, girls who had never been enrolled in school report feeling less confident than those enrolled in school. Overall, girls with some difficulty (in one prevalent domain), and those with difficulties in two or more domains are less confident than girls without any difficulties. These results were also closely linked to the poverty levels of the HH. For example, caregivers from severely deprived households reported that these girls were less confident, had more bad experiences when travelling around; and experienced more hostility and/or discrimination. They were also less likely to think there was enough support for the girls. They were also more likely to think girls with disabilities were not sent to school. They were also (predicably) less likely to be able to afford school, and think that age was not a factor in deciding when to send a child to school – this may indicate a more flexible approach to school - with caregivers sending the child to school when they can afford to, and not sending them when they can't. It is interesting to note that these variables were significantly associated also with the visual, remembering and communicating domains in particular. Poorer HH are also less likely to conform to 'traditional' pattens of schooling (currently in Kenya 8-4-4), and therefore contemplate sending girls to school at a later age. The reverse of all of these was true for less deprived households.

These results also indicated that for very deprived HH, education is a commodity that once utilised, needs to be seen as value for money, so expectations about the 'product' are high, which is also reflected in the section above (expectations).

# Girls' School experiences (self-reported)

The survey also asked questions about their school experiences to the girls directly. Overall, their responses reflected those of their caregivers; for example, more girls who thought school was fun only sometimes came from severely deprived HH; so did girls who thought they were treated unfairly by teachers; or did not respect their opinion and did not care about them. These variables were significantly associated with the remembering domain in particular.

Girls also reported feeling less happy in school, particularly those with difficulties in the hearing and remembering domains. They were also less able to make decisions about school or their future based on what they think is important. However, girls with difficulty in the remembering domain recognised that their teachers would try and help them when they are sad or upset.

Overall, girls identified as having 'mild difficulties' are more likely to report perceiving that they have enough support and that they can make choices; however, girls with difficulties in two or more domains are less likely to believe that they can choose whether to stay at school or make decisions about school or their future based on what they think is important. Again, this is a question of perception and understanding of capacities and capabilities of the children and requires further exploration and analysis.

# Learning Assessment/Achievements

Based on data from the baseline report, only around half of the girls passed the UWEZO test in literacy (English, Kiswahili) and numeracy. Achievement levels varied greatly, depending on the enrolment status, which of course was to the detriment of out of school girls (both those who have never been in school and those who dropped out). We therefore discuss learning outcomes of enrolled girls only, with a focus on English and Maths.

With regard to English, among enrolled girls with mild difficulties, there are a greater proportion of those scoring "story level". Among enrolled girls with difficulties in one prevalent domain, there are a greater proportion of those scoring "word level". Finally, among enrolled girls with difficulties in two or more domains there is a greater proportion of those scoring "nothing level" and a lower proportion of those scoring "letter level".

English reading achievement was significantly associated with the visual, walking, remembering, communication domains. Achievement in reading in English was also significantly associated with the class attended and highlighted a complex picture – as well as drawing attention to the possibility that the current system cannot cope with educating girls with reading difficulties in English at story level beyond class 5.

With regard to Maths, among girls with mild difficulties there is a greater proportion of those scoring at the "counting" or 'subtraction' levels, and a lower proportion of those scoring at the 'nothing' or 'addition' levels.

Among girls with difficulties in more domains there are a greater proportion of those scoring at 'Nothing level' and a lower proportion of those scoring at 'counting level'

Maths proficiency was significant for the visual, walking, remembering and communicating domains. Maths was also significantly associated with the class attended and again highlighted a complex picture; again indicating that apparently the current system cannot cope with educating girls with difficulties in math at 'subtraction level' beyond class 5.

Finally, analysis of the age distribution by class attended by girls with difficulties highlighted that the majority of 5-10 year olds seem to be enrolled in the first two years of schooling. Given the approximate age to start primary school in Kenya is six, this means that some children are above age for their class, indicating that they may have joined late, repeated class(es) or may have dropped out of school and then restarted. Either way, these results highlight the need for further research to understand the barriers and opportunities for girls with difficulties in accessing primary education, progressing through classes/grades and eventually transitioning from primary to secondary schooling.

# Conclusions

Overall, these results demonstrate that much more work is needed at systemic and project level – particularly to address inequalities and the exclusion of girls with difficulties in two or more domains to ensure successful and comprehensive inclusion in the mainstream education system. This includes rethinking how to target policies and programmes to ensure they reach the poorest households. There is much debate about how to ensure equity across the education system and the results here indicate that the poorest households have the highest expectations but the least access to, confidence in, and satisfaction with, the education system; this may result in their expectations continuing not to be met, therefore reducing their interest in the system. An obvious outcome of this is that they are even less likely to send their children to school. Education officials, policy makers, and other stakeholders working in the education sector need to balance managing expectations with delivering a comprehensive and equitable service.

From a programme level, it is clear that more targeted work needs to be done to ensure the specific needs of the children are addressed, in particular those with remembering, communication and hearing difficulties. These are also the areas that teachers find the most difficult to teach (e.g. GEC KAP survey).

As the baseline data was collected only from girls, it is difficult to draw out the specific gendered implications of these results for the girls themselves; however, it seems there are some implications about the gender of the HoH, with poorer, female-dominated HH being less likely to send their girls with disabilities to school.

Therefore, while on the surface, it seems that caregivers support the inclusion of girls across the education system there are some indicators in these results that warrant further exploration and follow up, for example, the rates reported for older girls dropping out (which will also be monitored across the lifetime of the intervention). These and other issues will be followed up in detail in the qualitative component of the research.

# References

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