FORMING FOUNDATIONS

UNDERSTANDING LEARNING LEVELS AND BARRIERS TO EDUCATION FOR ADOLESCENT ROHINGYA REFUGEES

MAY 2019

SUMMARY REPORT

CONTENTS

1. EXECUTIVE SUMMARY

This research report outlines findings of research carried out by Street Child in collaboration with Mukti Cox's Bazar, investigating the present learning levels and barriers to education for out-of-learning Rohingya adolescent refugees in camps. The findings are drawn from the results of 168 literacy and numeracy assessments in Burmese, English and Mathematics and 6 focus group discussions with out-of-learning Rohingya adolescents.

The following report finds:

- A severe lack of foundational learning skills for out-of-learning Rohingya adolescents in camps, with significant variations in learning outcomes across variables of gender and age
- Differences in learning outcomes between adolescent boys and girls reveal much lower learning levels for adolescent girls. This is largely found to be symptomatic of lower levels of prior education
- Adolescents cite supply side issues as a main barrier to education, through a lack of available opportunities for learning (in April 2019 only 12% of *targeted*[1] adolescents had access to education)
- Barriers to education are often interwoven with protection issues. This is especially prevalent for girls, who cite fear of sexual harassment as a reason for dropping out of education.
- Adolescents express other protection concerns such as child labour amongst adolescent boys and early pregnancy and involvement in trafficking amongst adolescent girls. Such actions are often attributed as harmful coping mechanisms for refugees in camps who lack positive engagement such as learning opportunities and appropriate support services.

This report recommends an increased focus upon adolescent education, with programming that prioritises building basic skills in reading and arithmetic. Programmes must also prioritise education for adolescent girls, whilst offering alternative mechanisms for learning to ensure inclusive delivery. Furthermore, as barriers to education are interwoven with barriers to protection, physical and psychosocial protection should be integrated into education programmes for adolescents.

[1] 'Targeted' population refers to those people in need who are specifically targets of support interventions and assistance activities contained within the annual Joint Response Plan for the Rohingya humanitarian response. For the 2019 Joint Response Plan the Education Sector targets 77,922 adolescent Rohingya aged 12-17 years for equitable learning opportunities.

FINDINGS AT A GLANCE:

- 39% of Rohingya adolescents cannot read a letter in Burmese and 60% cannot read a word
- 16% of Rohingya adolescents cannot read a letter in English and 51% cannot read a word
- 32% of Rohingya adolescents cannot recognise 2-digit numbers and 11% cannot recognise single-digit numbers
- 60% of Rohingya adolescents cannot perform addition and 71% cannot perform subtraction
- 51% of adolescent girls assessed have had no prior schooling compared to 19% of boys
- Adolescent girls with prior schooling reached an average grade level of 2 compared to 3.8 for adolescent boys
- The average learning level of adolescent girls is consistently one-level below males in Burmese literacy and Mathematics, and two levels in English literacy

2. ORGANISATION

121 million school-aged children are currently out of education world-wide. Millions more children are in school but failing to learn. Street Child believes that achieving universal basic education is the single greatest step that can be taken towards the elimination of global poverty. Our Vision is a world where the rights of every child are realised, in particular the right to education

Street Child is an education specialist with a specific expertise in education in emergencies. Since 2008, Street Child have helped over 200,000 children to go to school and learn across the 2014-16 Ebola epidemic in Liberia and Sierra Leone; the 2015 earthquake response and recovery in Nepal; protracted political crises in Afghanistan, Burundi, DR Congo and Nigeria; and the current refugee crisis in Uganda. Street Child has partnered with local organisations since October 2018 to develop the capacity of local organisations to ensure the quality of the response keeps up with the scale of the response.

This research was supported by staff from Mukti Cox's Bazar. An established partner of Street Child, Mukti Cox's Bazar has worked to build 386 learning centres across 19 camps and worked with 638 teachers to enable access to education for 14677 girls and 16054 boys. Mukti has been a critical contributor to the Rohingya response as an implementing partner of UNICEF, UNHCR, and UNFPA amongst others, across a range of sectors.

3. RATIONALE FOR RESEARCH

Since August 2017, nearly one million Rohingya refugees have fled Myanmar for Bangladesh. The Rohingya community have faced decades of discrimination and persecution, leading to several waves of displacement from Myanmar into Bangladesh, notably in 1978, 1991, and 2016. However, the largest ever influx of Rohingya refugees started on 25th August 2017 after clashes in Rakhine State, Myanmar. The 2019 Joint Response Plan details the cause of the flight from Myanmar:

> "widespread and systematic attack on [civilians]" including "murder, imprisonment, enforced disappearance, torture, rape, sexual slavery and other forms of sexual violence, persecution, and enslavement" with "elements of extermination and deportation" as well as "systematic oppression and discrimination [that] may also amount to the crime of apartheid."

Life-saving and life-sustaining assistance has been provided by a range of actors, including local and national civil society organisations and NGOs, international NGOs, and UN agencies. In terms of the focus areas of this report, significant progress has been made in the areas of Education and Child Protection. Regarding education: 263,146 children have been enrolled in education (aged 3-14), covering 77% of refugee children, over 4,300 learning facilities have been established, and over 7000 teachers from the refugee and host community have been trained and recruited[2]. Regarding child protection, nearly 300,000 children and adolescents have received psychosocial support, case management, and service information and awareness. Over 200 adolescents' clubs have been established, and over 40000 adolescents have received life skills and resilience trainings.[3]

However, despite significant progress across these domains, there remain critical gaps. Rohingya adolescents are largely overlooked for education opportunities. As of April 2019, only 12% of targeted adolescents had access to education (6,365 adolescents aged 15-24)[4]. This unmet need is due to a number of factors, namely: a lack of donors and implementing partners focused on adolescent education, a lack of physical space in the camps to locate adolescent education, social norms regarding adolescent education, and perceived trade-offs between learning and earning.

The effect of this unmet need for adolescents is both immediate and long-term. In the immediate term: adolescents are not accessing safe environments in the camps, and adolescents are not creating peer networks that increase collective resilience. Plan UK's 'Adolescent Girls in Crisis: Voices of the Rohingya' report found that 87% of violence against adolescent girls occur at home, and that peer networks had been severely disrupted by

[2] As of April 2019, Education Sector (Education Sector 2019a)
[3] ISCG (2018a)
[4] Whilst in relative terms this is an increase from 4% in February 2019, the increase is largely due to a recalculation of the number of adolescents to target in the Joint Response Plan 2019, compared to those targeted in the Joint Response Plan 2018. In the 2018 JRP, 117,000 adolescents were targeted; in the 2019 JRP only 51,940 adolescents are targeted. Thus, the 6365 adolescents enrolled account for 12% of the 2019 JRP target, or 5% of the 2018 JRP target.

displacement. Education also provides a path to reduce the risks present in the camp, whether that be the risks that predominantly adolescent girls face (early marriage, early pregnancy, and sexual and gender-based violence), or the risks that predominantly adolescent boys face (trafficking, drug abuse, or being receptive to extremism). In the medium- and long-term, adolescents will not have the requisite foundational skills and knowledge to reintegrate and transition into education opportunities or the requisite skills and knowledge to attain a decent livelihood, wherever that may be.

Whilst there is increasing knowledge generation regarding the education levels of *children-in-learning*, there is a dearth of data of *out-of-learning children*. Nearly 180,000 children participated in the ASER-Plus assessment to identify literacy and numeracy levels, and thus group children appropriately to the levels of the Learning Competency Framework Approach (LCFA). However, this assessment was of children *in-learning*. Regarding out-of-learning children, there is no existing data that analyses current literacy and numeracy levels of *out-of-learning children*. Given the gap of provision for adolescents and gap in knowledge, generating knowledge on out-of-learning adolescents will allow for the better planning of future projects targeting adolescents, and specifically enable more tailored education interventions that are age and gender responsive. This research also identifies barriers that Rohingya adolescents face regarding access to education and seeks to understand the interplay between educational access, quality of learning, and immediate protection risks, as noted above.

4. RESEARCH QUESTIONS

Our research focuses on two main areas. Firstly, our research focuses on understanding the literacy and numeracy levels of out-of-learning Rohingya adolescent refugees. Secondly, our research focuses on understanding the interplay between protection risks faced by Rohingya adolescent refugees and access to education. Thus, Street Child sought to answer the following four questions:

A1. What are the present learning levels of out-of-learning Rohingya adolescents in camps in English, Burmese and Maths?

A2. How do present learning levels of out-of-learning Rohingya adolescents vary by a) gender, b) age, c) previous schooling, d) living with a parent

B1. What are the main barriers for Rohingya adolescents to access education opportunities?

B2. How are protection issues interrelated with education access or educational attainment? (and how does this vary by gender)

5. PARTNERSHIPS

Street Child's primary education partner, Mukti Cox's Bazar, has coverage in 12 camps and has constructed 325 learning centres which serve 61,462 children aged 3-24. Since 1996, Mukti Cox's Bazar has worked in Cox's Bazar as an NGO and has implemented programme across a diverse range of sectors, including: education, health, women's empowerment, skills development, anti-corruption and disaster management. Mukti has more than 17 years working experience in implementing education and life-skills based programmes.

During the Rohingya crisis Mukti has partnered with UNICEF, VSO, and Handicap International to build a proven track-record in education delivery. The organization has built strong linkages with the government sector, local representatives, influential people in the community, religious leaders and the targeted beneficiaries who are the key stakeholders of our projects.

In line with Street Child's Partnership Framework and selection criteria, Mukti were selected as Street Child's primary education partner in Cox's Bazar due to their deep well of local experience, knowledge and ability to deliver meaningful outcomes in education. Street Child is working with Mukti to provide short-term surge support during the Rohingya crisis whilst providing long term capacity building support.

6. RESEARCH METHODOLOGY

With the support of Mukti Cox's Bazar, Street Child conducted research during the period of 27th March 2019 to 3rd April 2019. 168 out-of-learning adolescents in 5 camps in Kutupalong, Ukhia (1E, 1W, 2W, 3 and 4) took part in literacy and numeracy assessments to provide quantitative insight into the learning levels of out-of-learning adolescents. A further 48 out-of-learning adolescents (24 female, 24 male) from these 5 camps in took part in focus group discussions to provide a qualitative insight into barriers to education and protection for out-of-learning adolescents. Street Child acknowledges that the scale of the research would have ideally been larger, however research in these select camps was only possible during this period due to capacity constraints, and therefore results should be regarded as indicative rather than representative of Rohingya adolescents in all camps.

For literacy and numeracy assessments, as well as focus groups discussions Street Child leveraged Mukti's experience and reach within the camps to access out-of-learning adolescents participating in the study. Research participants were exclusively Rohingya adolescent refugees between 12 and 18 years of age. All participants were out-of-learning; presently without access to learning opportunities in camps. In order to identify out-of-learning adolescent participants, literacy and numeracy assessments were conducted through a random household survey method of door-to-door visits. For literacy and numeracy assessments sampling methods sought to achieve balanced age and gender-ratios, however this was not achieved with levels of prior education and those living with parents. Participating adolescents were informed of the opportunity for further participation in focus group discussions, with the first 24 male and 24 female adolescents who expressed interest selected. 6 focus group discussions were conducted on the premises of Mukti community spaces.

For participation in literacy and numeracy assessments and focus group participation, researchers gained informed, voluntary and renegotiable consent from parents/caregivers of adolescents and assent from adolescents. Where adolescents declined to take part, their view was respected regardless of whether parents/caregivers consented. Consent provided by parents/caregivers was provided verbally as written consent was deemed inappropriate in the context due to low adult literacy. Adolescents and parents/caregivers were provided with explanation of the research aims, information about Street Child and Mukti, contact information of researchers, and how the information would be used in future. Furthermore it was ensured that adolescents and parents/caregivers felt that they could say refuse participation or further participation at any point in the process – mindful of the power dynamics inherent between NGOs and Rohingya displacees. Subsequent use of data following collection ensured the application of strict data protection protocols that ensure full confidentiality of participant's data at all times, including the anonymous storage of literacy and numeracy assessment and focus group discussion data.

LITERACY AND NUMERACY ASSESSMENTS

In order to conduct literacy and numeracy assessments Street Child employed the ASER-PLUS assessments to measure learning levels for English, Burmese and Mathematics. As an assessment tool employed by the Education Sector in December 2018 to determine the learning levels of children in learning centres, the ASER-PLUS assessment therefore provides a body of evidence familiar to the Education Sector and partners. Furthermore Street Child has experience with the ASER method, having conducted a province-wide assessment of learning levels amongst children in-school children aged 5-16 in Nepal in March 2019. Using this method, adolescents' learning levels are assessed through one-to-one oral assessments.

For literacy assessments, students are assigned learning levels based on their reading abilities – ranging from beginner (unable to recognise letters) to letter- and word-recognition abilities to the ability to read simple paragraphs, short stories and complete basic comprehension exercises.

For arithmetic assessments, students are assigned learning levels based on: I) number recognition – ability to identify numbers of various place values – ranging from beginner (no digit recognition) to 1-digit and 2-digit recognition; and II) number operations – ability to carry out the four basic mathematical operations (additional, subtraction, multiplication and division). For operations, adolescents are given a pen and paper to conduct their workings-out of questions. All of the above assessments are untimed, allowing ample time for adolescents to progress through the assessment at their own pace.

Figure 6.1 – Literacy and numeracy assessment participants by gender – disaggregated by prior schooling, age and living status

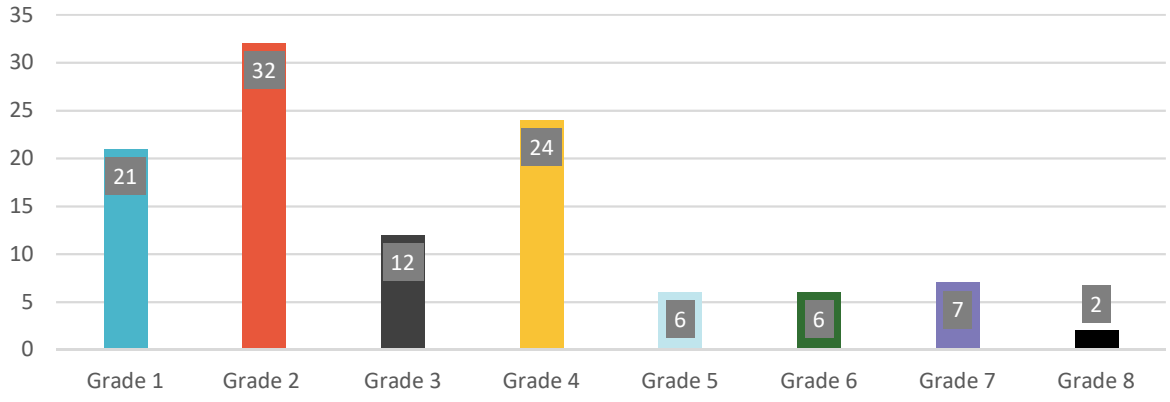
	Previous Schooling		Age			Lives with Parents	
	Yes	No	11-12	13-14	15-18	Yes	No
Male (85)	69	16	31	28	26	77	8
Female (83)	41	42	31	26	26	81	2
All (168)	**110**	**58**	**62**	**54**	**52**	**158**	**10**

A profile of research participants is shown above in Figure 6.1. Of all 168 adolescents surveyed, 83 were female (49%) and 85 male (51%). Amongst all participants, 57 were aged 11-12 (34%), 54 were aged 13-14 (32%), and 57 were aged 15-18 (34%). Of all participants surveyed, a vast majority – 158, presently lived with their parents (94%), and 10 participants did not (6%). Furthermore, 58 participants – roughly one-third of all surveyed, had no prior schooling. Interestingly this group was predominantly female, with 42 female respondents (72%) and 16 male (28%) respondents with no prior education.

As shown in Figure 6.2 - of the 110 respondents with prior education, 21 had reached Grade 1 equivalency (13% of overall sample), 31 had reached Grade 2 equivalency (18% of overall sample), 12 had reached Grade 3 equivalency (7% of overall sample), 24 had reached Grade 4 equivalency (14%), and 21 had reached Grades 5-8 equivalency (13% of overall sample).

Using recorded data from literacy and numeracy assessments a systematic analysis identified trends in learning levels across lines of gender, age, levels of prior education, with the key trends presented in later sections.

Figure 6.2 – Literacy and numeracy assessment participants with prior education by Grade level



FOCUS GROUP DISCUSSIONS

For focus group discussions Street Child leveraged the support of teachers from the Rohingya community who teach Burmese in the camps to provide translation support between Bengali and Rohingya. A total of 6 focus groups were carried out with 48 adolescents overall – gender segregated between groups of adolescent boys and adolescent girls (3 focus groups

with 8 boys each and 3 focus groups with 8 girls each). Focus groups were gender segregated in order to facilitate conversation on more sensitive topics, especially relating to protection risks; focus groups were conducted by field staff and Rohingya teachers from the appropriate gender.

Focus groups were carried out in a semi-structured format – Street Child field staff asked a series of preordained questions around barriers to education and protection for Rohingya adolescents and unstructured follow-up questions based upon responses, which were translated by Burmese teachers from Bengali for participants' understanding; respondents answers were subsequently translated back into Bengali. The quality of focus groups were thus limited due to language barriers, with no recorded transcript of responses. Instead Street Child field staff recorded detailed notes the experiences of Rohingya adolescents as described by the translators. Following data collection these detailed notes were coded according to thematic area, allowing an analysis that draws out thematic trends prevalent across multiple focus group discussions. These thematic trends are presented in the following section.

7. RESULTS

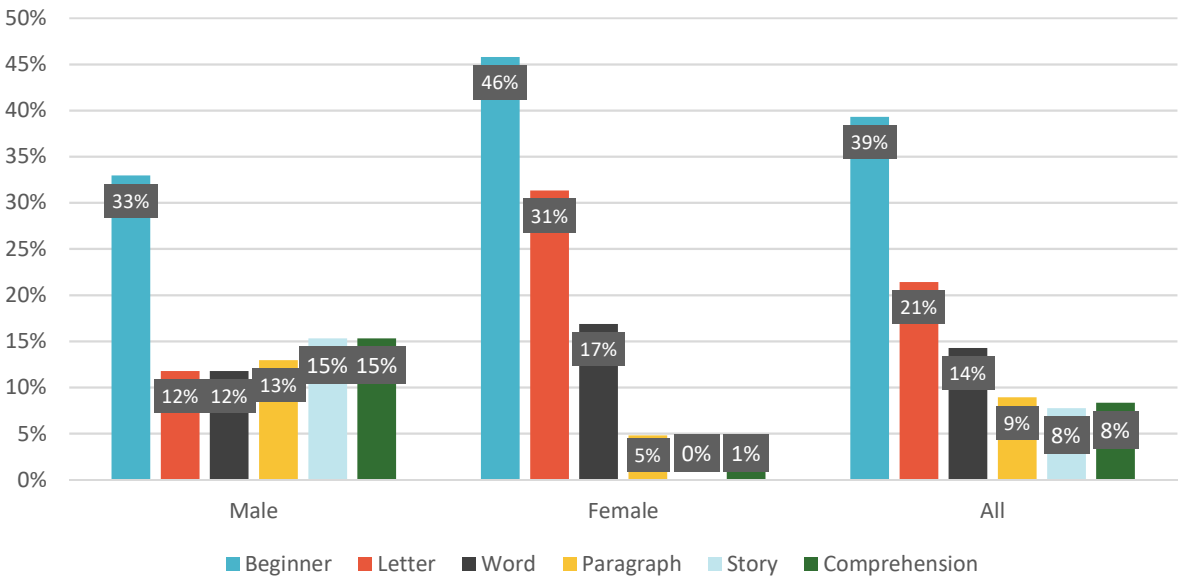
The following results are divided into four sections: I) Burmese learning outcomes; II) English learning outcomes; III) Mathematics learning outcomes; and IV) education and protection challenges:

7.1 BURMESE LEARNING OUTCOMES

The results of the Burmese reading assessment are outlined in Figure 7.1. Of all participating adolescents, 39% are at Beginner level in Burmese, 21% are at Letter level in Burmese, 14% are at Word level in Burmese, 9% are at Paragraph level in Burmese, 8% are at Story level in Burmese, and 8% are at Comprehension level.

Males outperformed females in the Burmese reading assessment; with 43% of males achieving Paragraph level or above, compared to just 6% of females. Almost half of females surveyed (46%) were at beginner level in Burmese; although a significant proportion of males (33%) were at beginner level for Burmese literacy also. The other half of females were predominantly at letter (31%) and word (17%) levels; whilst the two-thirds of non-beginner males were almost evenly distributed between letter and comprehension levels.

Figure 7.1 – Burmese Literacy Levels

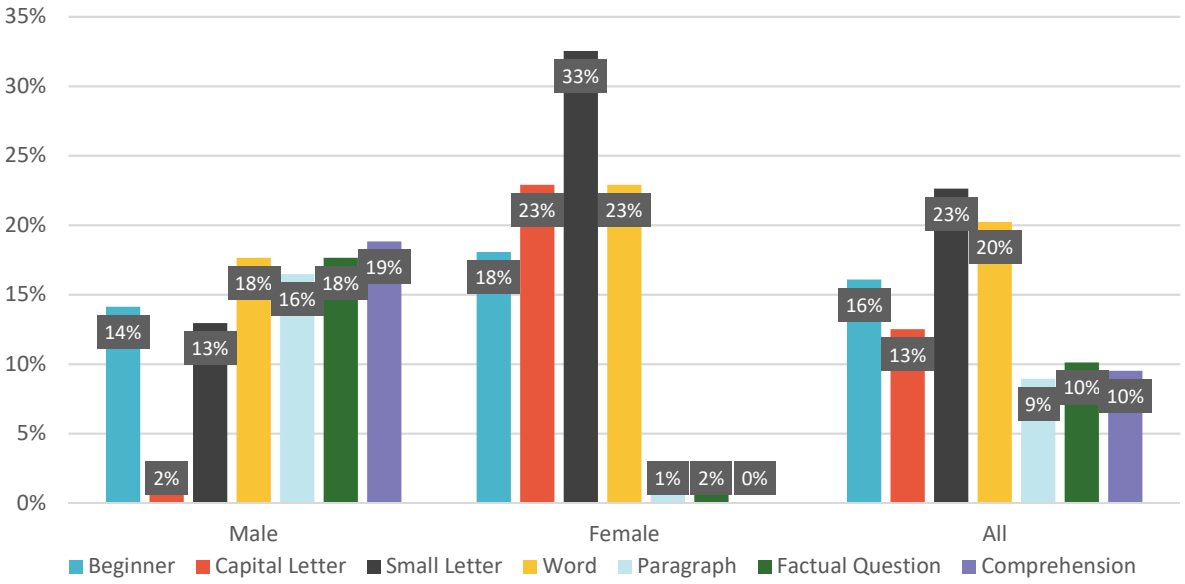


7.2 ENGLISH LEARNING OUTCOMES

The results of the English reading assessment are outlined in Figure 7.2. Of all participating adolescents, 16% are at Beginner level in English, 36% are at Letter level in English (13% with capital letter recognition and 23% with small letter recognition), 20% are at Word level in English, 9% are at Paragraph level in English, 10% are at Factual Question level in English and 10% are at Comprehension level.

As with Burmese results, males outperformed females in English reading; with 53% of males achieving Paragraph level of above, compared to just 3% of females. On the other end of the scale, there is a similar gender split between females at Beginner level (16%) and males at Beginner level (14%). Half of females surveyed (53%) were on Letter level, with 23% achieving Word level. As with Burmese reading, there is a more even split for males across all reading levels in English, with 15% on Letter level, 18% on Word level, 16% on Paragraph level, 18% on Factual Question level and 19% on Comprehension level.

Figure 7.2 – English Literacy Levels



7.3 MATHEMATICS LEARNING OUTCOMES

The results of the Mathematics assessments are outlined in Figures 7.3 and 7.4. Of all participating adolescents, 11% are beginners in number recognition, 21% could recognise 1-digit numbers and 68% could recognise 2-digit numbers. Furthermore, 40% of participants could perform addition operations, 29% could perform subtraction operations, 5% could perform multiplication operations and 1% could perform division operations.

For number recognition and mathematical operations, males once again outperformed females. 16% of female adolescents were at a beginner level of number recognition compared 6% of males. The majority of females (60%) nonetheless had the ability to recognise 2-digit numbers, with 24% of females recognising 1-digit numbers. The vast majority of males (76%) could recognise 2-digit numbers.

With mathematical operations, 30% of female adolescents could perform addition and 19% could perform subtraction, compared to 51% and 38% respectively for their male counterparts. Males performed marginally better than females in the two most complex operations with 7% of males able to do multiplication and 1% able to do division, compared to 2% and 0% of females for each operation respectively.

Figure 7.3 – Numeracy: Number Recognition

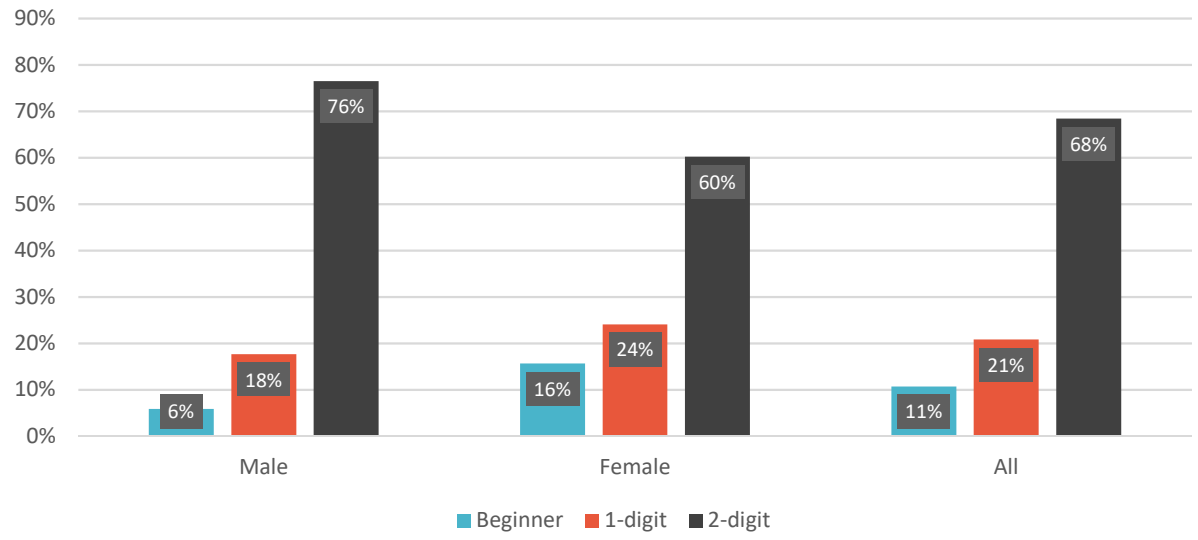
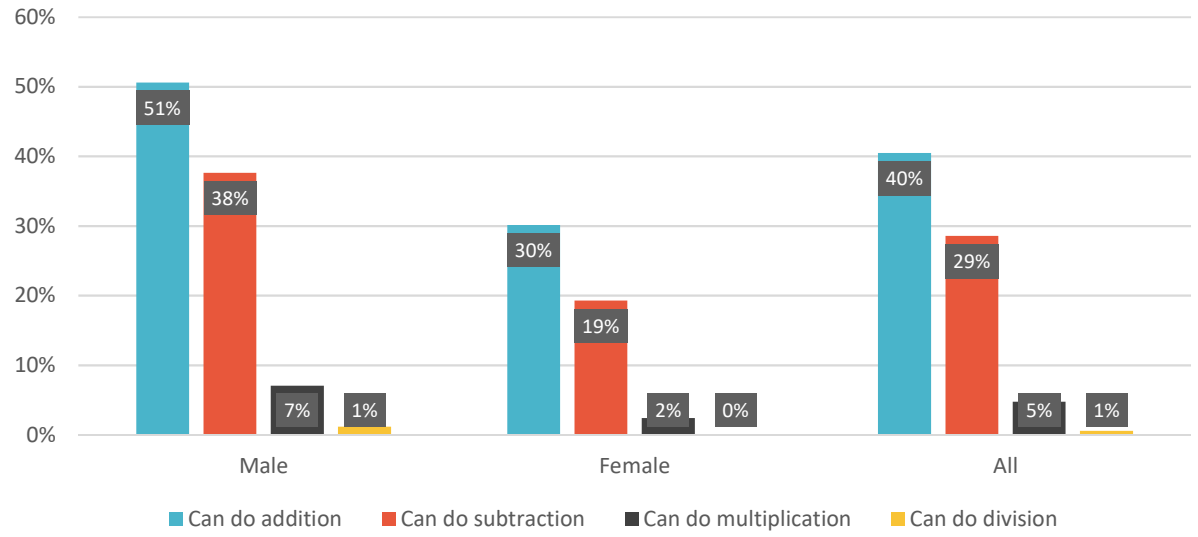


Figure 7.4 – Numeracy: Mathematical Operations



7.4 EDUCATION AND PROTECTION CHALLENGES

Results from focus group discussions with Rohingya adolescents are displayed in the tables of Figure 7.5 and 7.6, with general observations and gendered observations of issues particular to adolescent boys and girls.

Figure 7.5 – Education challenges for adolescents

Education Challenges
There is poor availability of appropriate learning opportunities for Rohingya adolescents in the camps. Rohingya adolescents have limited access to qualified teachers and learning centres
Adolescents are interested in engaging in activities that will make them more interested in education
Adolescents expressed a desire to learn skills applicable to their daily lives and activities; learning knowledge that would 'remain in the school premises' was not deemed sustainable for learning
Adolescents' parents generally had low levels of education
Many adolescents did not want to attend learning facilities due to the age range, with far younger children in the classroom
One focus group participant with a physical disability stated that learning centres were inaccessible due to location of learning centres, and a lack of in-classroom assistance

Figure 7.6 – Protection challenges for adolescents

Protection Challenges: General
Adolescents express the need for protection in camps, both at day and night; they especially fear to be outside of the home during non-daylight hours. Adolescents fear to leave the home due to instances of human trafficking, drug abuse and sexual violence and abuse prevalent in camps
Adolescents expressed a desire for support in psychological care for addressing mental and physical trauma.

Protection Challenges: Gendered	
Adolescent Boys	Adolescent Girls
Adolescent boys are often involved in child labour in camps. Those with no parents are especially vulnerable to child labour.	Adolescent girls expressed concerns over sexual and gender-based violence inside and outside of households. This often comes in the form of sexual harassment and abuse within schools. Girls also expressed concern over the lack of gender-segregated classrooms for learning in camps, which are viewed as requisite due to religious norms and protection risks encountered. Risks of harassment and a lack of gender-sensitive learning facilities is why many

	adolescent girls drop out of learning opportunities. Adolescent girls expressed a desire for a greater understanding in camps of sexual and reproductive rights. Adolescent girls often experience early and unwanted pregnancies at a young age.

8. ANALYSIS

The results from this study depict a range of learning levels achieved by out-of-learning adolescents, but largely that there is a severe deficiency of foundational learning skills amongst a significant proportion of out-of-learning Rohingya adolescents in Burmese, English and Mathematics. These results are discussed in the first sub-section, which outline the present learning levels of out-of-learning Rohingya adolescents. The second sub-section will discuss how these results vary by: gender, age, and the background of adolescents – whether they're living with parents and whether they've had prior schooling. The third sub-section will examine the main barriers to education for Rohingya adolescents, and the fourth will determine how such barrier interrelate with protection issues in camps.

8.1 PRESENT LEARNING LEVELS

In Burmese reading, our results show that 39% of all adolescents surveyed cannot read a letter in Burmese, 60% of all adolescents cannot read a word in Burmese, and 74% of all adolescents cannot read a simple paragraph in Burmese. A small proportion (8%) of adolescents are able to read a short story in Burmese, and a further 8% can do this and successfully complete a short comprehension exercise based upon the said story.

In English reading, our results show a marked improvement compared to Burmese, yet still a discernible proportion of adolescents lack basic reading skills in English with 16% of adolescents surveyed unable to read a letter in English, 52% unable to read a word in English, and 72% unable to read a simple paragraph in English. A proportion of 10% of adolescents were able to answer factual questions based upon the simple paragraph, and a further 10% were able to complete comprehension questions based upon the same paragraph.

In Mathematics a majority of adolescents (68%) were able to recognise 2-digit numbers, yet this nonetheless left 32% of adolescents who could not recognise 2-digit numbers and 11% unable to recognise even 1-digit numbers. Furthermore, with the four basic mathematical operations a majority of 60% were unable to perform addition, 71% were unable to perform subtraction, 95% were unable to perform multiplication and 99% were unable to perform division.

Low levels of foundational literacy and numeracy could be attributed to the historical disenfranchisement of the Rohingya in Myanmar. The Rohingya were stripped of their

citizenship over 35 years ago in Myanmar with the 1982 Myanmar Nationality Law that does not recognise the Rohingyas as one of the 135 legally recognised ethnic groups of Myanmar. The law defines citizens as those who belong to an 'indigenous race', yet the official government stance is that the Rohingya are citizens of Bangladesh. As a result the Rohingya have faced restriction of basic freedoms including freedom of movement, as well as access to state education.[5] An under resourced education system and overcrowding schools means that access is not universally assured, yet the Rohingya are systematically discriminated against – with predominantly Buddhist teachers disinclined to work in Muslim majority areas.[6] Furthermore travel restrictions prevent children from attending middle and high schools which tend to be located further than village primary schools.[7] Due to a lack of access to formal education, the Education Sector estimate that just 58% of boys and 50% of girls are reported to have completed Grade 1, and 31% of boys and 25% of girls progress beyond Grade 3.[8]

8.2 LEARNING LEVELS BY GENDER, AGE AND BACKGROUND

In order to determine how learning levels vary by gender, age and background – whether adolescents live at home and their level of prior schooling, the results are shown differentiated according to these factors.

GENDER AND LEARNING LEVEL

Figures 8.1 and 8.2 show the results for reading assessments in Burmese and English. The results show a stark difference in learning level by gender, a relationship that is strongly significant for both languages.[9]

Figure 8.1. depicts the variation in learning levels for Burmese by gender. The results show far lower levels of attainment for females than males – with 6% of females able to read a simple paragraph in Burmese, compared to a significantly higher total of 43% of males. On the other end of the scale a majority of 77% of females were unable to read words in Burmese, compare to a lesser yet still significant total of 45% of males. A significant proportion of both genders – 46% of females and 33% of males, were unable to recognise letters in Burmese.

Figure 8.2 shows learning levels for English by gender. Like Burmese results a larger proportion of males are shown to achieve higher learning levels in English, with 71% of male adolescents able to read words in English compared to 26% of females. On the other end of the scale a similar proportion of both males and females were unable to recognise letters (capital or small) in English, 18% of females and 14% of males.

[5] Human Rights Watch (2000)
[6] Al Jazeera (2014)
[7] ibid.
[8] Education Sector (2018)
[9] For Burmese P=.001 and for English P=.000 as shown in Annex B

Figure 8.1. Learning levels for Burmese by gender

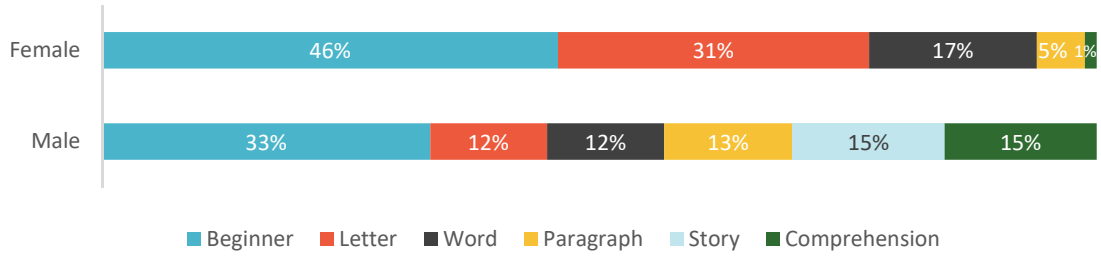
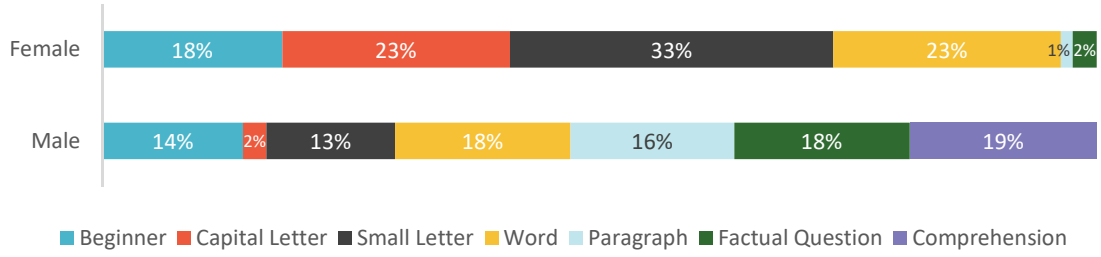


Figure 8.2 Learning levels for English by gender

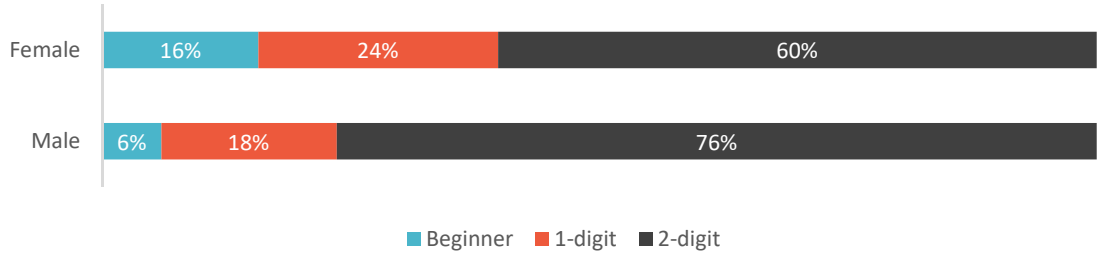


Figures 8.3 and 8.4 depict results for numeracy assessments differentiated by gender. As with the literacy assessments, results show higher levels of attainment for male adolescents, although these findings show a narrower gap in attainment, and had less statistical significance than literacy results.[10]

Figure 8.3 shows the results for number recognition by gender. The majority of both males and females can recognise two-digit numbers, although the figure is lower for females at 60% of adolescent girls compared to 76% of adolescent boys. On the other end of the scale a significant 16% of adolescent girls were unable to recognise one-digit numbers; this figure falls to 6% of adolescent males.

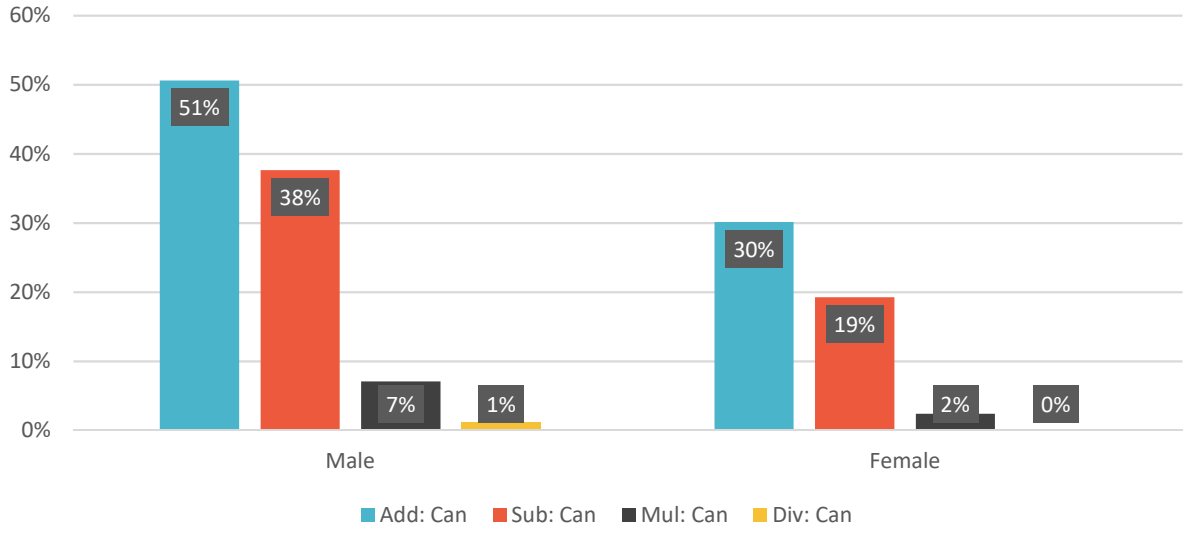
Figure 8.4 depicts the results of mathematical operations assessments according to gender. As with number recognition these results show a lesser yet still discernible gap between adolescent boys and girls. 49% of males were found to be unable to perform addition, compared to 70% of females. 62% of males were unable to perform subtraction, which rises to 81% of females. Few adolescent boys or girls were able to do multiplication or division – just 7% and 2% of males respectively, and 2% and zero adolescent girls respectively

Figure 8.3 Number recognition by gender



[10] For number recognition P=.234 for addition P=.082 for subtraction P=.066 for multiplication P=.687 for division P=.386 as shown in Annex B

Figure 8.4 Mathematical operations by gender



The above results and evidence from Section 7 indicate a clear divergence in learning levels between males and female adolescents. Results show that males consistently score better across all Burmese, English and Mathematics assessments. Weighted scoring for assessments show the average learning levels vary between male and female adolescents in Burmese, English and mathematical operations by at least one learning level for each. In Burmese, on average a male was on Word level, whereas females were on average one level below on Beginner level and unable to recognise letters. In English, on average a male was on Word level whilst females were on average on Capital Letter level – able to understand capital letters, but not small letters. With mathematical operations, males were on average able to perform one of the four basic mathematical operations – addition, females were however on average unable to perform any of the four basic operations. Possible interpretation of the reasons as to why females show lower learning levels will be discussed in the follow section on barriers to education and protection.

AGE AND LEARNING LEVEL

This section examines how results in learning levels in Burmese, English and Mathematics assessments of number recognition and operations. As a whole, variations in learning level by age for all literacy and numeracy assessments were shown to have a low statistical significance.[11]

Figures 8.5 and 8.6 the results for literacy assessments, both Burmese and English according to the age of participating adolescents (categorised into 3 groupings of 11-12 years, 13-14 years and 15-18 years).

Figure 8.5 shows learning levels for Burmese by age grouping. In terms of higher learning levels, these appear to improve with age as might be expected, albeit only slightly; 23% of adolescents aged 11-12 were able to read a simple paragraph in Burmese, which rises to 24% of adolescents aged 13-14, and then up 28% of adolescents aged 15-18. Surprisingly

[11] For aggregated results for all literacy and numeracy assessments by age P=.381 as shown in Annex B

there appears to be an inverse correlation for lower learning levels in Burmese literacy – with a higher proportion the elder age categories that are unable to read words in Burmese; 57% of adolescents aged 11-12 were found to be unable to read a word in Burmese, which rises to 59% of adolescents aged 13-14 and a 67% majority of adolescents aged 15-18. Whilst there appears to be a more even distribution in learning levels for younger age categories, results for the 15-18 age group are visibly more polarised. Amongst all age groups a high proportion of participants were unable to recognise letters in Burmese – 32% of adolescents aged 11-12, 13-14 of adolescents aged 13-14, but rising to a majority of 15-18-year olds with 51% unable to recognise a letter in Burmese.

Figure 8.6 shows learning levels for English assessments categorised by age. With the higher learning levels in English there appears to be little difference by age – with 28%, 27% and 30% of adolescents aged 11-12, 13-14 and 15-18 able to read a simple paragraph in English respectively. At other levels however the results indicate improved results by younger age categories, with a negative correlation between reading ability and age. A higher proportion of 11-12-year olds can recognise words in English than their 13-14-year-old and 15-18-year-old counterparts – 53%, 51% and 33% respectively. At the lowest reading level results appear more sporadic, with the highest proportion of the eldest category of 15-18-year-olds unable to recognise letters in English (capital and small), followed by the youngest group of 11-12-year-olds and then the middle group of 13-14-year-olds – 21%, 16% and 11% respectively.

Figure 8.5 Learning levels for Burmese by age

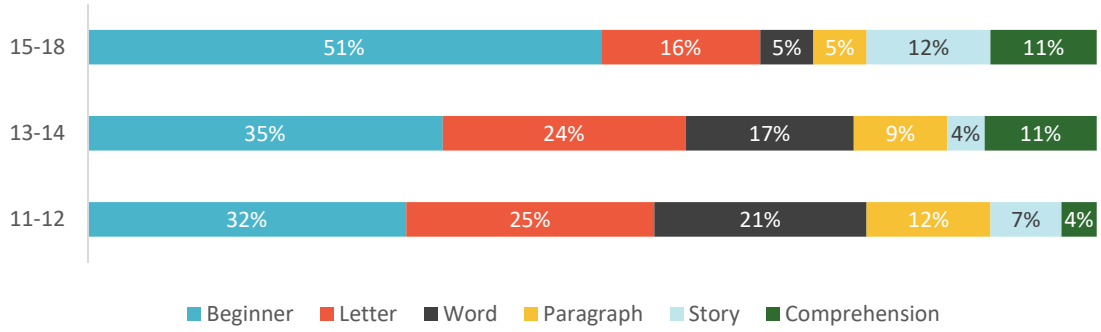
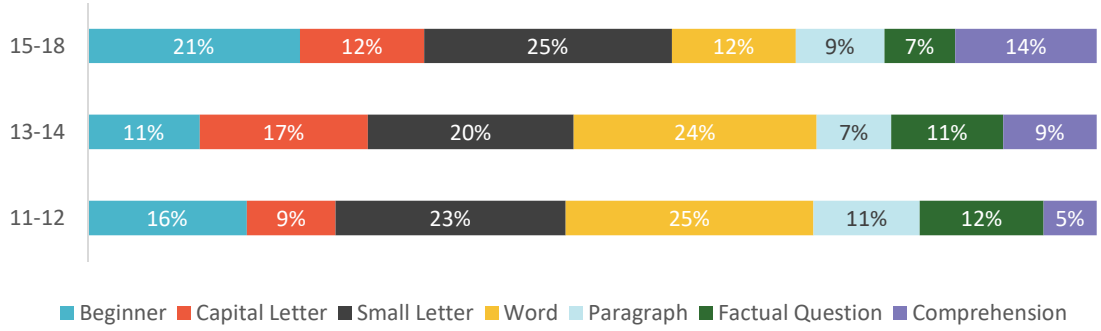


Figure 8.6 Learning levels for English by age



Figures 8.7 and 8.8 show the results of mathematics assessments by age category. Figure 8.7 depicts number recognition by age. As with literacy assessments, there appears to be an unexpectedly inverted relationship by attainment in number recognition assessments and age. 60% of adolescents

aged 15-18 were able to recognise two-digit numbers, which rises to 70% of adolescents aged 13-14 and then to 75% of the youngest group of 11-12-year-olds. At the lowest level results are more sporadic, with 11%, 6% and 16% of participants aged 11-12, 13-14 and 15-18 unable to recognise single-digit numbers respectively.

Figure 8.8 shows the results of mathematical operations according to age category. As with literacy assessments there appears to be an unexpected negative correlation between age and mathematical ability in addition – with the age group with the lowest proportion of participants able to addition being the eldest; 66% of adolescents aged 15-18 were unable to perform addition, which drops to 54% of adolescents aged 13-14 and up again to 58% of adolescents aged 11-12. Yet for other operations this relationship reverses, the group with the highest proportion of respondents able to do subtraction, multiplication and division being the eldest group of 15-18-year-olds – of which 33%, 7% and 2% can do the respective operations. This could perhaps be explained by the polarised nature of this age cohort as shown in the literacy assessments with the largest proportion high and low-learning levels achieved by this group.

Figure 8.7 Number recognition by age

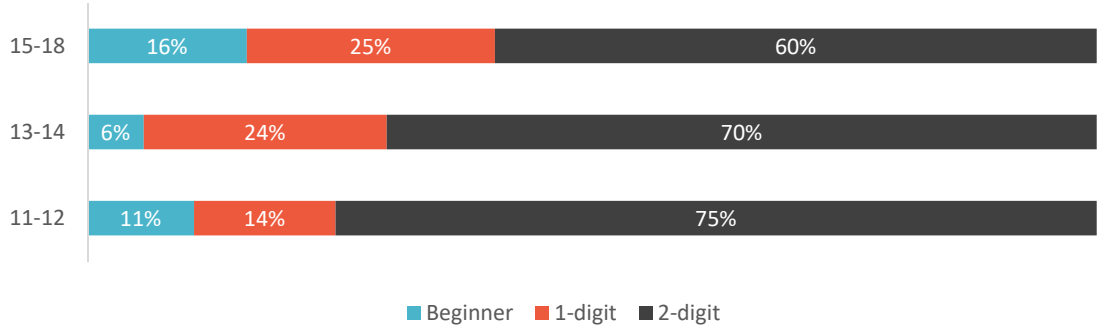
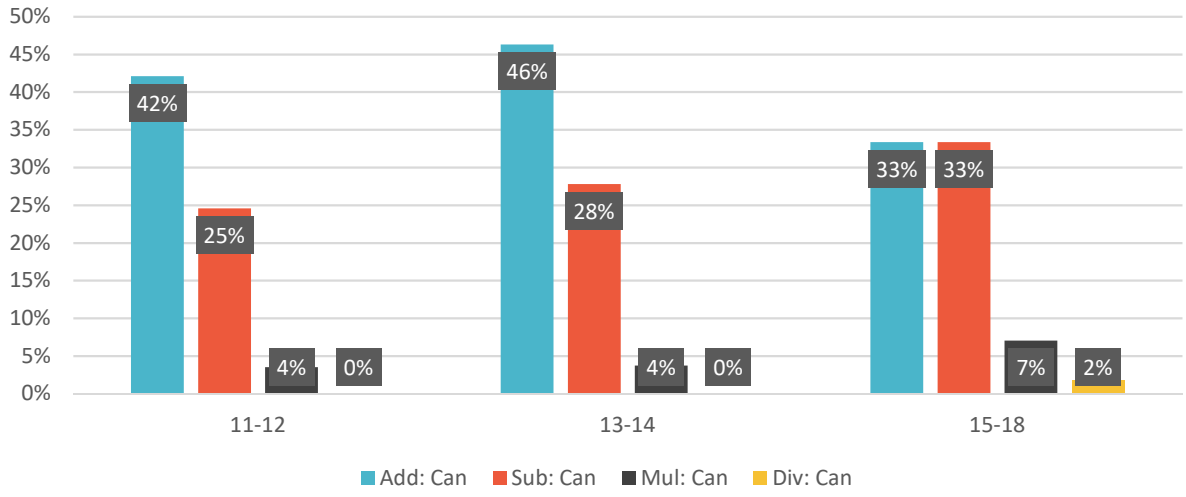


Figure 8.8 Mathematical operations by age



Explanations for such a divergence: I) between the 15-18 age category and younger age categories; and, II) within the 15-18 age category, may be partially explained by other indicators such as years of prior schooling or gender. A higher proportion of aged 11-12 adolescents had more schooling than their age 15-18 counterparts, 61% to 54% respectively – indicating selection bias in years of schooling to the detriment of the elder group. Yet at the

same time, the age 15-18 group was comprised a larger proportion of males - 54% were compared 46% male for the 11-12 group; with males performing better across all assessments, this selection bias would be expected to favour the results for the 15-18 age group. Reasons for the divergence between age groups could be explained by other external factors such as more significant disruption of education through displacement for the elder group. Yet, another non-external factor may explain the divergence within the 15-18 age group; whilst a higher proportion of adolescents aged 15-18 are reported to have received no schooling, those who have achieved a much higher-grade level than their younger counterparts – an average Grade of 4.8 compared to 2.07 for the younger group. This larger gap may explain how results tend toward the extreme of learning levels of near-mastery of basic skills and severely inadequate skills.

LIVING STATUS AND LEARNING LEVEL

The following section analyses literacy and numeracy assessment results according to living status – whether adolescents live with their parents or not. A necessary caveat for this section is margin of error resulting from the sample size of the latter group – of all participants 10 (6%) were not living with their parents, as opposed to the majority of 158 participants who were. The results across Burmese, English and Mathematics assessments indicate that adolescents not living with their parents are more likely to achieve lower learning levels – however due to the low sample size these results are inconclusive.

Figures 8.9 and 8.10 shows results for literacy assessments in Burmese and English by living status of adolescents. Both figures show a stark contrast in learning levels by living status, especially for Burmese reading. None of the 10 adolescents not living with parents sampled were able to recognise words in Burmese, compared to 41% of participants living with parents. On the other end of the scale whilst 37% of adolescents living with parents were found to be unable to recognise letters in Burmese, 7 out the 10 adolescents not living with parents (70%) were unable to recognise letters. English results show a similar trend, with just 2 out of the 10 adolescents not living with parents able to recognise words in English – compared to half (51%) of adolescents living with parents. 4 out of the 10 adolescents not living with parents were unable to recognise letters in English (40%) compared with a lesser yet still significant 37% of adolescents living with parents. Literacy results indicate lower learning levels for those not living with parents, yet this assertion should be seen as indicative rather than conclusive due to the disproportionately under representative sampling of this group.

Figure 8.9 Learning levels for Burmese by living status (with or not with parents)

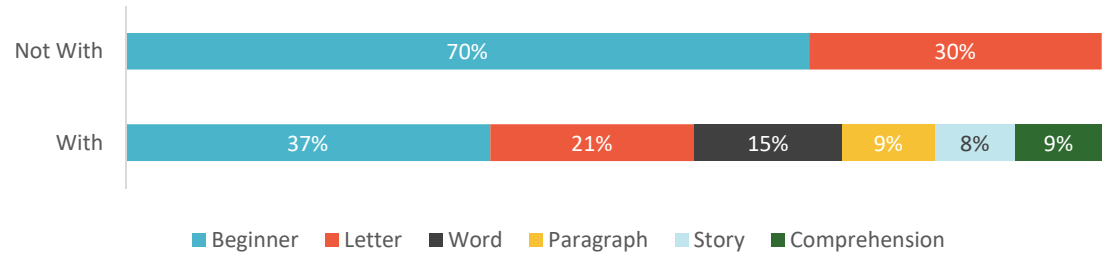
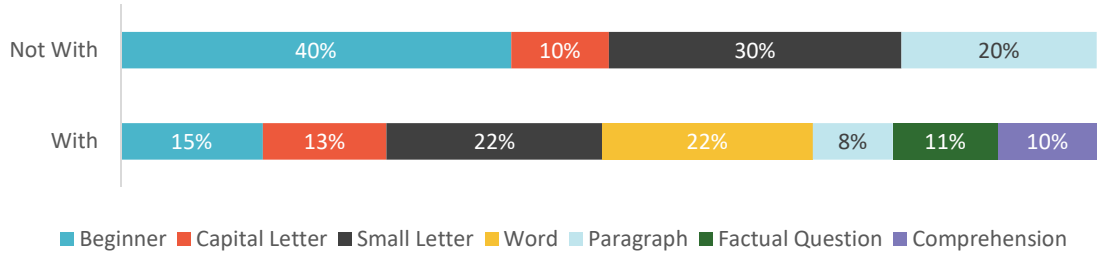


Figure 8.10 Learning levels for English by living status (with or not with parents)



Figures 8.11 and 8.12 depict results for mathematics assessments according to living status. As with literacy assessments there is a clear and discernible gap in attainment between adolescents who live with their parents and those who do not. This is clear in Figure 8.11 which shows results for number recognition, with 4 out of the 10 (40%) adolescent not living with parents able to recognise two-digit numbers, compared to 70% of adolescents who live with parents. On the other end of the scale 9% of adolescents living with parents were unable to recognise one-digit numbers, which rises 30% of those not living with parents (3 out of 10 sampled). Figure 8.12 perhaps shows the clearest gap in attainment of all assessments with none of the 10 adolescents not living with parents sampled able to perform any of the four basic mathematical operations of addition, subtraction, multiplication and division. In contrast a still greatly significant 57%, 70%, 95% and 99% of adolescents living with parents were unable to do addition, subtraction, multiplication and division respectively. As with literacy assessments, numeracy assessments show a clear division in attainment between those sampled living with parents and not living with parents, however due to a high margin of error this relationship is indicative and warrants further investigation in future research of greater scope and scale.

Figure 8.11 Number recognition by living status (with or not with parents)

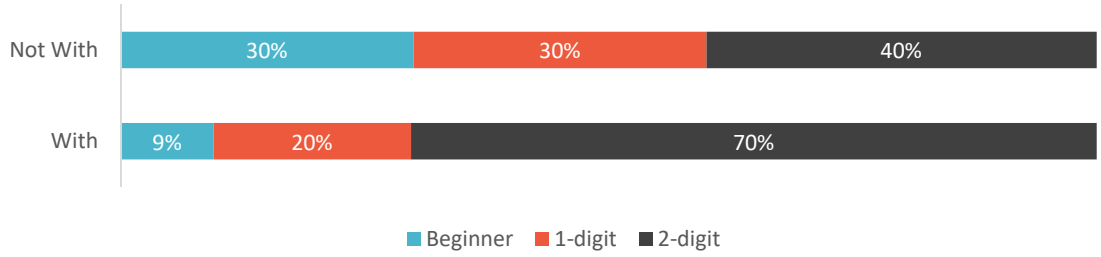
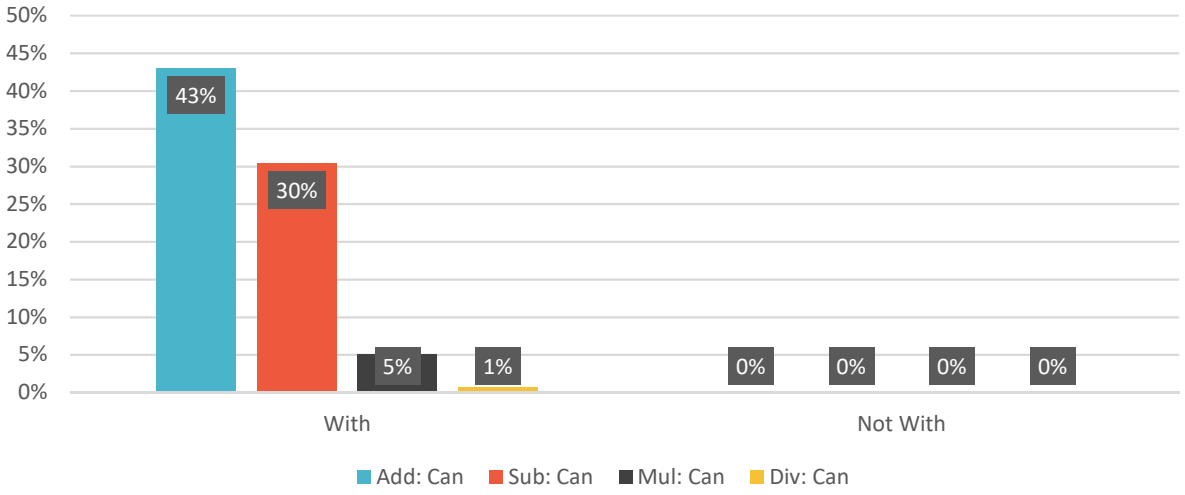


Figure 8.12 Mathematical operations by living status (with or not with parents)



Based on the sampled adolescent results indicatively show higher learning levels in both literacy and numeracy for adolescents living with parents. This could be deemed as the expected result, with the benefits of parental support in education for those living at home – which may come in the forms of a combination of: I) encouraging learning – creating conductive conditions for study; and II) learning assistance. As results indicate in Section 7 that parental learning levels are low, and so positive benefits of learning assistance may be lesser than expected, however the benefits of an encouraging learning environment must not be understated.

PREVIOUS EDUCATION AND LEARNING LEVEL

Figures 8.13 and 8.14 depict learning levels results from literacy assessments by prior schooling – grade level reached.[12] As might be expected results for all literacy assessments show a clear positive correlation between grade level reached and reading attainment in both Burmese and English, of this relationship is found to be strongly significant for both languages.[13]

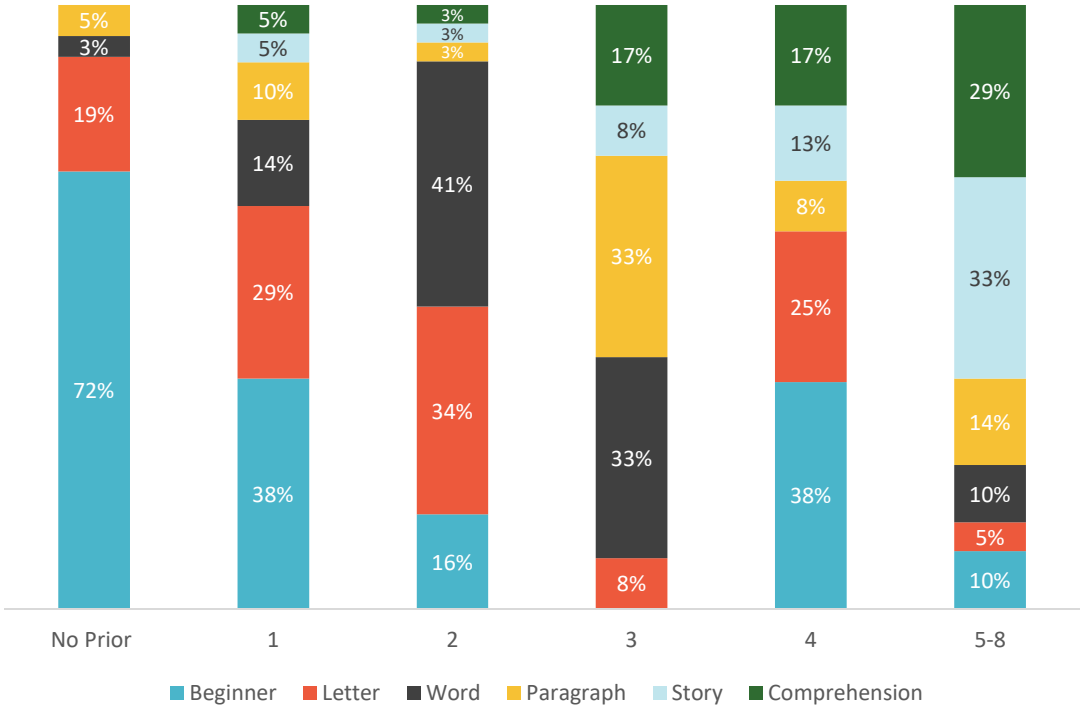
Figure 8.13 depicts learning levels in Bengali by prior schooling. As may be expected, there is a general positive correlation shown between grade level reached and prior schooling; only 5% of adolescents with no prior schooling can read a simple paragraph which rises to 20% of participants with Grade 1 schooling, 58% of participants with Grade 3 schooling and 76% of participants with schooling from Grades 5-8. Grades 2 and 4 are outliers to this trend with 9% and 38% able to read simple paragraphs in Burmese respectively. On the other end of the scale the proportion of participants unable to read words in Burmese shows a similar trend – with the highest proportion of respondents unable to recognise words in Burmese having the least schooling; an enormous 91% of participants with no prior schooling were unable to read words in Burmese, dropping to 67% of adolescents with Grade 1 schooling, 50% with Grade 3

[12] Grades 5, 6, 7 and 8 are grouped together due to the low individual sample size of each Grade
[13] For Burmese P=.000 and for English P=.000

schooling, dropping to 8% of those with Grade 3 schooling and rising slightly 15% of adolescents schooled to Grades 5-8. Once again Grade 4 was an outlier to this trend with 63% of this group unable to recognise words in Burmese.

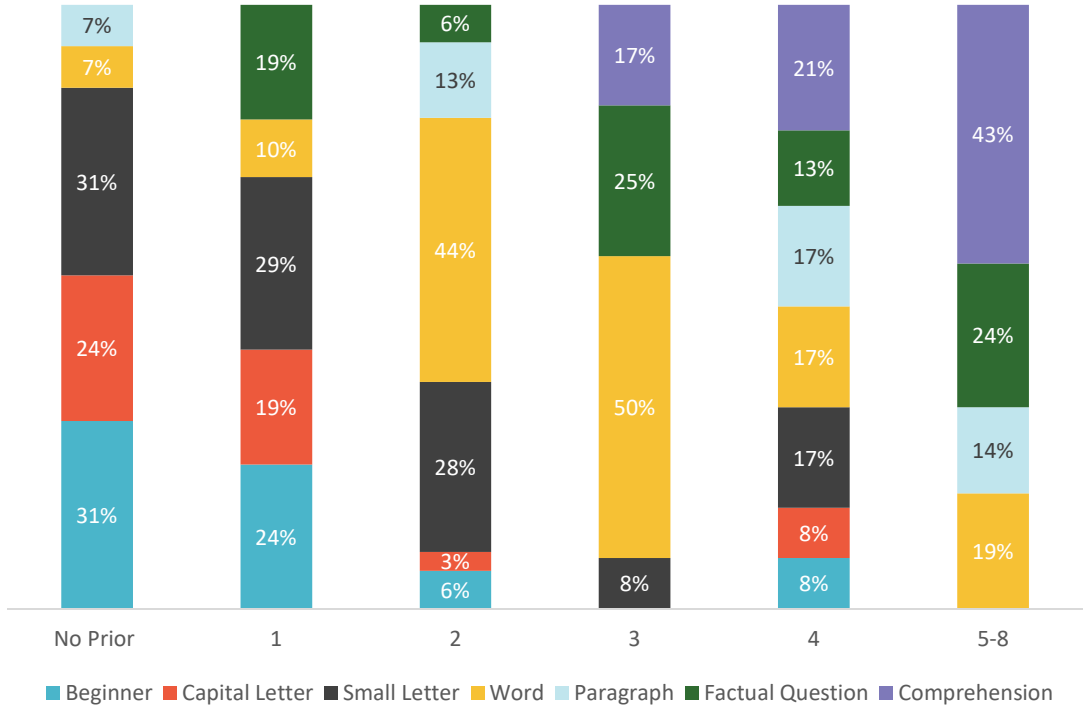
Figure 8.14 shows learning levels in English by prior schooling. As with Burmese reading assessment results there is a general trend towards higher attainment for those with more years of schooling.[14] The proportion of adolescents able to read words in English stands at 14% of those with no prior schooling, rising to 29% with Grade 1 schooling, then rising sharply to 63% of those with Grade 2 schooling, and then again to 92% of those with Grade 3 schooling, and finally all participants with schooling to the level of Grades 5-8. On the other end of the scale the proportion of participants unable to recognise letters in English is 31% of participants with no prior schooling, 24% of those with Grade 1 schooling, 6% of those with Grade 2 schooling and then zero participants with Grade 3 and 5-8 schooling.

Figure 8.13 Learning Levels for Burmese by prior schooling



[14] Apart from Grade 4 – which appears to be an outlier in this category

Figure 8.14 Learning levels for English by prior schooling



Figures 8.15 and 8.16 show the results of numeracy assessments – number recognition and mathematical operations by prior schooling. Figure 8.15 shows a clear positive correlation between level of prior schooling and attainment in number recognition assessment results,[15] of which the results show a strong statistical significance.[16] The proportion of participants with no prior schooling unable to recognise two-digit numbers is 52%, which drops to 29% and 28% of those with Grade 1 and 2 schooling respectively before dropping to 0% of those with Grade 3 schooling and rising again to 5% of those with Grade 5-8 schooling. The relationship shows clear improvement with schooling, albeit sporadically around the Grade 3, 4 and 5-8 mark.

Figure 8.16 shows results for mathematical operations, which are shown to have less statistical significance (This statistical significance varies for each operation with addition and subtraction being the most significant, and multiplication and division being the least significant.[17] Results for addition and subtraction show a general positive correlation between ability to perform these operation and level of prior schooling. 83% of those with no prior schooling are unable to do addition, which drops to 71% of those with Grade 1 schooling, 53% of those with Grade 2 schooling, 25% of those with Grade 3 schooling and 19% of those with schooling to Grades 5-8. The proportion of participants with no prior schooling unable to do subtraction is 88%, which drops to 81% of those with Grade 1 schooling, 69% of those with Grade 2 schooling, 64% of those with Grade 3 schooling and finally 24% of those with Grade 5-8 schooling. Results for multiplication appear more sporadic, with no clear relationship

[15] As with literacy assessments Grade 4 appears to be an outlier to the trend

[16] P=.000 as shown in Annex B

[17] This statistical significance varies for each operation with addition and subtraction being the most significant (for addition P=.004 and for subtraction P=.025) and multiplication and division being the least significant (for multiplication P=.147 and for division P=.621) as shown in Annex B

between years of schooling and ability to do multiplication. Of all 168 participants, just one respondent in the Grade 5-8 category was able to do division.

Figure 8.15 Number recognition by prior schooling

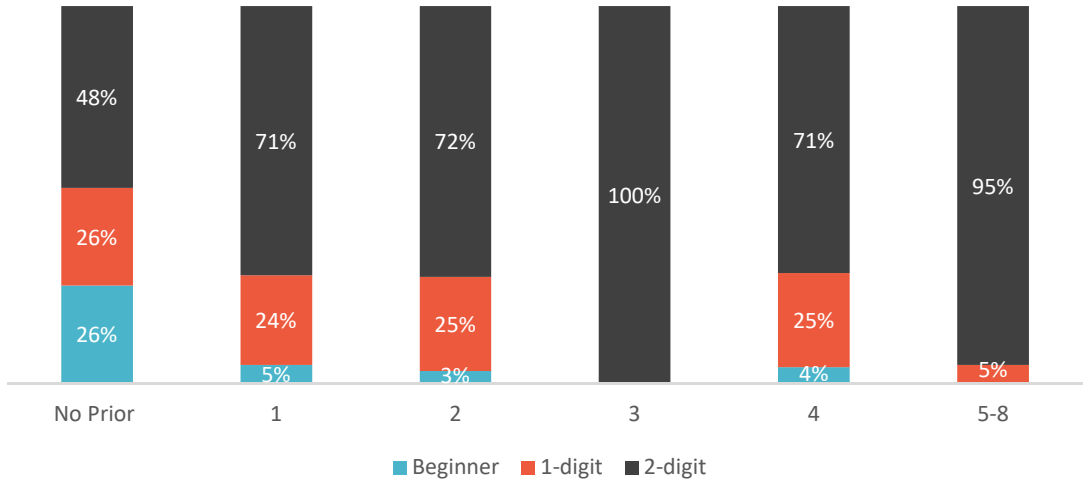
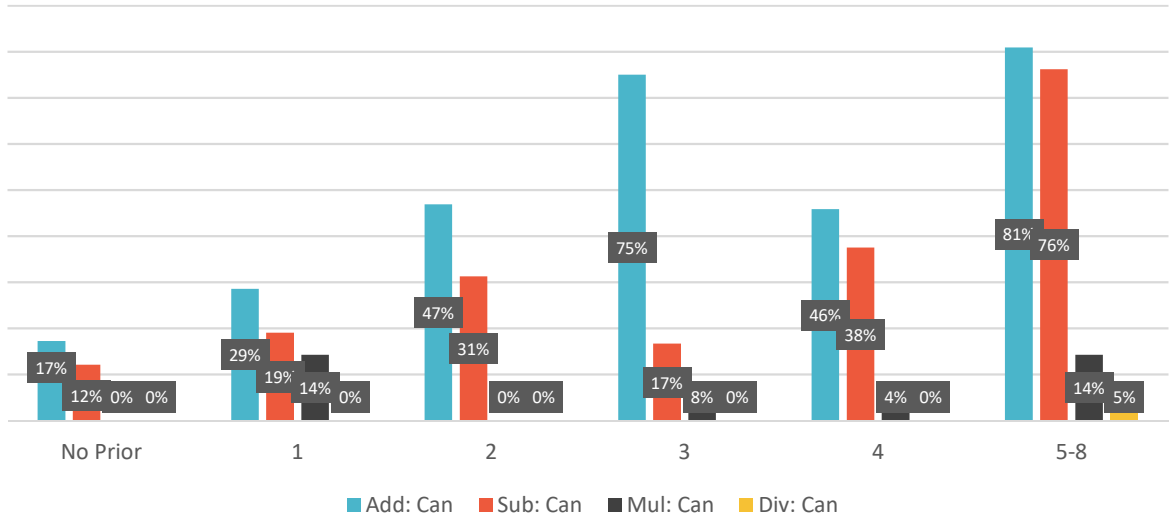


Figure 8.16 Mathematical operations by prior schooling



One of the clearest indicators of learning levels for adolescents is prior schooling, to which the above results indicate that prior schooling significantly improves learning levels for the discernible reason that more years of schooling bring higher levels of foundational literacy and numeracy skills. Prior schooling appears to be inextricably linked with gender, with 42 of the 83 girls assessed (51%) having had no prior schooling – compared to just 16 of the 85 boys assessed (19%). Likewise, the average grade level reached by adolescent girls was 2 compared to an average grade level of 3.8 for adolescent boys. Reasons as to why prior schooling is such a gendered issue will be discussed further in the following section.

8.3 BARRIERS TO EDUCATION

Focus groups with adolescents intended to shed light on some of the main barriers to education for Rohingya adolescents.

Some of the general barriers include first and foremost the lack of learning opportunities. As mentioned in Section 3, as of April 2019 only 12% of targeted adolescents have access to education, making them a highly underserved group due to a lack of donor focus upon this age group, as well as a lack of physical space in camps to create learning spaces tailored for adolescents. As adolescents cited in focus groups, there are also a lack of qualified teachers and learning materials available in camps that would create opportunities for learning outside of learning centres. A lack of education opportunities tailored specifically for adolescent age groups appears to be a disincentive to engage in learning opportunities as adolescents prefer to learn with those of their age, rather than with a younger cohort of learners.

Adolescents cited the need for engaging learning activities that would make them more interested in education, as well as to ascertain skills that are applicable to their daily lives. Anecdotal evidence suggests that many adolescents may lack interest in education due to perceived trade-offs between earning and learning. Based upon the results of assessments, learning programmes for adolescents therefore need to address the need for rapid improvements in basic literacy and numeracy skills, whilst placing a large emphasis upon the 'real world' practicalities of such skills conducive for enhanced life opportunities.

Adolescents also cited that parents generally have low levels of parental education as a barrier to education. Evidence on family literacy shows that the degree to which parents are educated has corresponding effect upon children's level of success in their education; literate parents are better able to support the learning of their children. A vast majority of adults in camps are without literacy and numeracy skills, with 76% of Rohingya over the age of 15 having received no education.[18] Uneducated parents are therefore unable to provide parental support critical to their children's learning at home.

Furthermore, a lack of parental engagement in education often leads parents to deprioritise education, a commonly reported barrier to learning in camps,[19] especially for girls of whom it is often believed education is of limited use as they are expected to grow into traditional roles in households by undertaking domestic responsibilities. 40% of parents of adolescent girls and 33% of parents of adolescent boys report that education is not appropriate for their children[20], this reveals gaps in community sensitisation on education and youth rights, and is linked to gendered social norms that restrict mobility for girls after puberty. The deprioritisation of girls education is highlighted in our assessments, with 51% of girls assessed having had no prior schooling, compared to just 19% of boys – as well as the average grade level reached of 2 for girls compared to 3.8 on average for boys. The deprioritisation of education for adolescent girls amongst parents and wider communities further explains the

[18] Bhatia et al. (2018)
[19] Education Sector and Child Protection Sector (2017)
[20] ISCG (2018b)

major discrepancies in literacy and numeracy assessments, and why as outlined in the previous section, female adolescents were on average one, and in one instance two, learning levels below their male counterparts.

Accessibility to learning centres was cited as another barrier to education for young persons with disabilities, due to poor accessibility of learning centres and teachers being ill-equipped to facilitate for their needs. A REACH study using the Washington Group Short Set Questions estimated the amongst adolescents aged 15-18 years old was 5.7% for boys and 3.1% for girls.[21] The same study noted that children with disabilities 10% less likely to attend learning centres than children without disabilities, and that only 26% of learning facilitators reported having received training in supporting the needs of children with disabilities.[22]

8.4 BARRIERS TO PROTECTION

Gender differentiated focus groups with adolescents discussed some of the general protection challenges faced by adolescents in the camps, the gendered barriers to protection faced by adolescent girls and boys in camps, and their subsequent effect upon access to education.

Generally, adolescents expressed the need for protection in camps at all hours – although protection risks of all kinds are especially heightened during non-daylight hours. Adolescents fear to leave home due to instances of human trafficking, drug abuse, sexual violence and abuse prevalent in camps. Such concerns reflect UNHCR research on the widespread protection risks faced by children and adolescents in camps; sexual and gender-based violence is the top risk that girls aged under-18 in the camps identify, with 41% reporting it as a safety concern, and kidnapping is the main protection concern for boys under-18, with 49% reporting it as a safety concern and the second main concern for girls under-18 with 38% reporting kidnapping to be a safety concern.[23]

Adolescents expressed a desire for increased access to psychological care in order to address the mental trauma encountered through conflict and displacement and the daily 'stressors' of life in camps – such as the aforementioned protection risks faced by boys and girls. Traumas of conflict and displacement may be especially prevalent for girls, with a Rapid Gender Analysis detailing that in one refugee camps every women and girl was a survivor of sexual assault or witness to from their times in Myanmar; the same study estimated that at least 448,000 refugees had witnessed or experienced gender-based violence. The Education Sector found that such traumas are interlinked with the ability of children and adolescent to access and effectively engage with education in camps;[24] a Joint Rapid Needs Assessment in the wake of the Rohingya influx found that 50% of respondents reported evidence of psychosocial distress among children in their communities, of which 36% of girls and 46% of boys reported an unwillingness to go to a learning facility.[25]

[21] REACH (2019)
[22] ibid.
[23] UNHCR (2018)
[24] Education Sector (2018)
[25] Education Sector and Child Protection Sector (2017)

Adolescent boys report that many are involved in child labour in the camps, and that those without parents are particularly vulnerable to child labour. Such assertions reflect Sector research, whereby key informants have described the most abusive and exploitative forms of work faced by adolescent boys – including boys as young as 7 years old being recruited into jobs as herders, shop workers, fishermen, rickshaw pullers and other forms of daily casual work – many of which are hazardous.[26]

Adolescent girls expressed concern over sexual and gender-based violence inside and outside of households. The majority of cases of sexual and gender-based violence are likely to occur within the household; a study of adolescent girls in Rohingya camps found that one in ten adolescent girls aged 15-19 reported being hit or beaten in the past month, with 87% of cases occurring at home.[27] Girls also reported how such protection risks of violence and abuse interact with their ability to engage in education, citing instances of sexual harassment and abuse within schools, which lead to girls dropping out of learning opportunities. Girls highlighted the need for gender-sensitive learning facilities in camps. Perceived safety threats in learning facilities is a widespread concern, particularly for 6-18-year-old girls of whom 32% report safety in learning centres as a concern.[28] Perceived threats in learning environments further explains why 51% of adolescent girls have no prior schooling, and for the 49% of those who have participated in education have done so no further than Grade 2 on average.

Adolescent girls also voiced a desire for a greater understanding of sexual and reproductive rights – as girls often experience early and unwanted pregnancies. This is often closely interlinked with child early and forced marriage; with a Plan study finding that 13% of adolescent girls in camps aged 15-19 were married and that 70% of those either currently or previously married have at least one child.[29] The same report highlights the linkages between early and forced marriage with education; of those adolescent girls who stated they were currently or had been married, the rate of attendance at school was 0%.[30]

Some of the protection risks faced by adolescent boys and girls in camps are inextricably interlinked with the adoption of negative coping mechanisms. Practices such as early marriage of adolescent girls, human trafficking, child labour for adolescent boys or other negative coping strategies are deemed by the ISCG as often resulting of a lack of "positive engagement activities"[31], such as access to learning opportunities and appropriate support services and networks.

[26] Joint Response Plan (2018)
[27] Plan International (2018)
[28] ISCG (2018b)
[29] Plan (2018)
[30] ibid.
[31] ISCG (2018b)

9. CONCLUSION AND RECOMMENDATIONS

Street Child's research has revealed a series of insights into present learning levels and barriers to education for out-of-learning adolescents, as well as ways in which these appear to cut across demographic factors of age and gender and background. Whilst the scale and scope of this study by no means fills the knowledge gap on adolescent education in camps, it does provide a snapshot into the present status of education amongst this underserved group – including learning levels and the main barriers to education and protection.

The results of literacy and numeracy assessments broadly reveal a severe lack of foundational learning skills amongst out-of-learning Rohingya adolescents. In Burmese literacy, results show that 39% of all adolescents surveyed were unable read a letter and 60% of all adolescents were unable to read a word. In English literacy, results show that 16% of adolescents surveyed were unable to read a letter in English and 52% were unable to read a word in English. In Mathematics 32% of adolescents surveyed were unable to recognise 2-digit numbers and 11% were unable to recognise numbers at all. Furthermore, 60% of respondents were unable to perform any of the four basic operations in mathematics.

The above results differed vastly, cutting across lines of age, gender and prior schooling. Results show that the 15-18 age group of adolescents consistently performed the poorest in literacy and numeracy assessments, with the highest proportion on beginner level for English, Burmese and Mathematics drawn from this age category. Such discrepancies of age on learning level warrants further investigation in future study of Rohingya adolescent education.

Literacy and numeracy assessments show consistently lower learning levels for Rohingya adolescent girls compared to boys in literacy and numeracy. Weighted scoring for assessments indicates that the average learning levels of females is consistently one-level below males in all areas of literacy, and two in the case of English literacy. The clearest explanation for lower learning levels for female participants is the higher proportion of females with no prior schooling and less schooling compared to male counterparts.

As might be expected prior education is a the most closely correlated with learning level. For example, 26% of those without schooling were unable to recognise any numbers compared to 3% of those with at least some previous schooling. Years of previous schooling is also an important factor to achieving higher learning levels.

Previous schooling was found to be inextricably interlinked with gender, with 51% of girls assessed having no prior schooling compared with 19% of boys assessed; girls with prior schooling reached an average grade level of 2 compared with an average grade level of 3.8 for boys.

Focus group discussions highlighted the main barriers to education and protection issues, as well as some of the contributing factors to the gender discrepancies in the assessment results.

As highlighted by adolescents in focus groups, supply side constraints are the greatest barrier to education for adolescents in camps with a lack of available learning spaces, trained teachers or educational resources to create opportunities for learning inside and outside of

learning centres. In any measures that address these underserved groups, adolescents emphasised the need for learning activities that are engaging and imbue practical 'real world' skills. Accessibility was highlighted as an important barrier to learning for young persons with disabilities – due to location of learning centres and teachers unable to accommodate for the needs of persons with disabilities.

Adolescents in focus groups evoked concerns of the various risks faced by adolescents in camps and the need for increased protection, and the need for psychological support services in helping address traumas of displacement. Protection concerns were often gendered in nature, with adolescent boys susceptible to involvement in child labour and girls at risk of early pregnancy and involvement in trafficking. Cases of the above often come in the form of negative coping strategies, which comes as a result from a lack of 'positive engagement activities' such as access to learning opportunities and appropriate support services and networks.

With a lack of prior schooling as the most closely correlated with learning levels, and a lower level of schooling amongst girls, consideration must be made about the particular barriers to education for girls which are interwoven with protection issues. Efforts must be made to engage with parents who often undervalue education – and especially so for parents of adolescent girls who further deprioritise education. Another major barrier to advancing education for adolescent girls stems from the concerns of sexual harassment and abuse faced by girls within schools – which often leads to girls dropping out of learning entirely.

9.1 RECOMMENDATIONS FOR FUTURE INTERVENTIONS

- **Further research on barriers to education in host communities in Cox's Bazar**
  This report is in scale and scope – having been carried out with just 168 adolescents in 5 camps, and therefore provides a snapshot into the status of education, rather than a comprehensive study representative of all adolescents in camps.

- **Increased focus upon adolescent education as a priority**
  As a result of the major gaps in access to learning and a lack of donor focus

- **Accelerated learning interventions for adolescents**
  As a result of, the severe lack of foundational skills amongst adolescents as found in this report. Accelerated adolescent education programmes should prioritise building basic skills in reading and arithmetic

- **Prioritise Education for Adolescent Girls**
  Due to the major discrepancies in learning outcomes between adolescent boys and girls, which has been found to stem from a far lower rate of prior schooling, education opportunities should prioritise education for adolescent girls, whilst providing gender-sensitive learning opportunities due to protection risks highlighted in learning spaces

- **Alternative delivery methods for education**
  Due to issues of accessibility – education programmes should offer alternative methods of delivering learning opportunities such as home-based learning. Alternative delivery should priorities young persons with disabilities who face issues of accessibility to learning centres, and adolescent girls who face restrictions on movement due to entrenched social norms and caregiving obligations

- **Integrate physical and psychosocial protection into education programming**
  Adolescents are amongst the most vulnerable groups, due to a lack of available services and protection risks particular to adolescent boys such as child labour, and adolescent girls such as early marriage and pregnancy and sexual and gender-based violence. Barriers to protection are interwoven with barriers to education, and therefore education programming should integrate physical and psychosocial protection for participating adolescents, offering referral systems and building supportive networks for Rohingya adolescents. Those most prone to protection risks such as girls vulnerable early marriage and pregnancy and sexual and gender-based violence, and boys vulnerable to child labour should be prioritised

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ANNEX A CONTINGENCY TABLE FOR LITERACY AND NUMERACY ACCESSMENT RESULTS

			Gender		Previous Schooling		Age			Lives with Parents		Camp Number					All
			Male	Female	Yes	No	11-12	13-14	15+	Yes	No	1E	1W	2W	3	4	All
Subject	Assessment	Population Size	85	83	110	58	57	54	57	158	10	10	20	80	28	30	168
Burmese	Beginner	66	33%	46%	22%	72%	32%	35%	51%	37%	70%	80%	60%	45%	0%	33%	**39%**
	Letter	36	12%	31%	23%	19%	25%	24%	16%	21%	30%	10%	10%	25%	18%	27%	**21%**
	Word	24	12%	17%	20%	3%	21%	17%	5%	15%	0%	0%	10%	13%	32%	10%	**14%**
	Paragraph	15	13%	5%	11%	5%	12%	9%	5%	9%	0%	10%	10%	3%	21%	13%	**9%**
	Story	13	15%	0%	12%	0%	7%	4%	12%	8%	0%	0%	5%	8%	18%	3%	**8%**
	Comprehension	14	15%	1%	13%	0%	4%	11%	11%	9%	0%	0%	5%	8%	11%	13%	**8%**
English	Beginner	27	14%	18%	8%	31%	16%	11%	21%	15%	40%	10%	60%	11%	0%	17%	**16%**
	Capital Letter	21	2%	23%	6%	24%	9%	17%	12%	13%	10%	0%	0%	19%	11%	10%	**13%**
	Small Letter	38	13%	33%	18%	31%	23%	20%	25%	22%	30%	50%	5%	24%	14%	30%	**23%**
	Word	34	18%	23%	27%	7%	25%	24%	12%	22%	0%	20%	15%	20%	36%	10%	**20%**
	Paragraph	15	16%	1%	10%	7%	11%	7%	9%	8%	20%	20%	0%	6%	21%	7%	**9%**
	Factual Question	17	18%	2%	15%	0%	12%	11%	7%	11%	0%	0%	15%	8%	18%	10%	**10%**
	Comprehension	16	19%	0%	15%	0%	5%	9%	14%	10%	0%	0%	5%	13%	0%	17%	**10%**
Maths No. Recognition	Beginner	18	6%	16%	3%	26%	11%	6%	16%	9%	30%	10%	15%	11%	0%	17%	**11%**
	1-digit	35	18%	24%	18%	26%	14%	24%	25%	20%	30%	40%	15%	26%	11%	13%	**21%**
	2-digit	115	76%	60%	79%	48%	75%	70%	60%	70%	40%	50%	70%	63%	89%	70%	**68%**
Maths: Addition	Add: Can	68	51%	30%	53%	17%	42%	46%	33%	43%	0%	30%	20%	39%	64%	40%	**40%**
	Add: Can't	100	49%	70%	47%	83%	58%	54%	67%	57%	100%	70%	80%	61%	36%	60%	**60%**
Maths: Subtraction	Sub: Can	48	38%	19%	37%	12%	25%	28%	33%	30%	0%	0%	20%	33%	39%	23%	**29%**
	Sub: Can't	120	62%	81%	63%	88%	75%	72%	67%	70%	100%	100%	80%	68%	61%	77%	**71%**
Maths: Multiply	Mul: Can	8	7%	2%	7%	0%	4%	4%	7%	5%	0%	0%	10%	3%	11%	3%	**5%**
	Mul: Can't	160	93%	98%	93%	100%	96%	96%	93%	95%	100%	100%	90%	98%	89%	97%	**95%**
Maths: Division	Div: Can	1	1%	0%	1%	0%	0%	0%	2%	1%	0%	0%	0%	1%	0%	0%	**1%**
	Div: Can't	167	99%	100%	99%	100%	100%	100%	98%	99%	100%	100%	100%	99%	100%	100%	**99%**

ANNEX B REGRESSION TABLE

Dependent Variable	Independent Variable	P-Value
Aggregated Results	Age	0.381
Aggregated Results	Camp #	0.122
Aggregated Results	Gender	0.000**
Aggregated Results	Living With Parents	0.011*
Aggregated Results	Previous Schooling	0.000**
Addition	Age	0.706
Addition	Camp #	0.405
Addition	Gender	0.082
Addition	Living With Parents	0.024*
Addition	Previous Schooling	0.004**
Subtraction	Age	0.194
Subtraction	Camp #	0.957
Subtraction	Gender	0.066
Subtraction	Living With Parents	0.074
Subtraction	Previous Schooling	0.025*
Multiplication	Age	0.123
Multiplication	Camp #	0.079
Multiplication	Gender	0.687
Multiplication	Living With Parents	0.501
Multiplication	Previous Schooling	0.147

Dependent Variable	Independent Variable	P-Value
Division	Age	0.519
Division	Camp #	0.422
Division	Gender	0.386
Division	Living With Parents	0.853
Division	Previous Schooling	0.621
Digit Recognition	Age	0.563
Digit Recognition	Camp #	0.298
Digit Recognition	Gender	0.234
Digit Recognition	Living With Parents	0.101
Digit Recognition	Previous Schooling	0.000***
English	Age	0.869
English	Camp #	0.448
English	Gender	0.000***
English	Living With Parents	0.076
English	Previous Schooling	0.000***
Burmese	Age	0.065
Burmese	Camp #	0.001**
Burmese	Gender	0.001**
Burmese	Living With Parents	0.011*
Burmese	Previous Schooling	0.000***

** p < 0.05
*** p <0.01
*** p <0.001