

# **Take-Up, Use, and Effectiveness of Remote Learning Technologies: Lessons from the Covid-19 Pandemic**

Midline report

Prepared by Innovations for Poverty Action Bangladesh  
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## Abbreviations

- a2i – Aspire to Innovate
- IVR – Interactive Voice Response
- IPA – Innovations for Poverty Action
- SIEF – Strategic Impact Evaluation Fund
- SMS – Short Message Service
- SS Stipend – Secondary School Stipend
- RDD – Random Digit Dialing
- BDT – Bangladeshi Taka

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## EXECUTIVE SUMMARY

The school and university closures resulting from the Covid-19 pandemic severely disrupted education, with UNICEF estimating an impact on 1.6 billion students worldwide, or 91% of all students (UNICEF, 2020). In general, missing school hours reduces the skill growth of students and increases the time parents spend to provide childcare and support home schooling. Staying at home increases social isolation for children, which may have consequences on their mental health. The closures also coincided with the yearly summative assessment window in many countries, which resulted in them being postponed or canceled, thus preventing an important measurement of academic progress. The effects are more severe for disadvantaged communities and have interrupted learning, compromised food security and childcare, and consequently had a major economic cost. As distance learning becomes the primary alternative to classroom education, unequal access to technology and other resources necessary may exacerbate gaps in learning caused by economic disadvantages. Many households also depended on schools for free or discounted meals for their children, and for them, coupled with the loss of income, the closures have disrupted food security. As the lockdown continues, drop-out rates might increase, and children may also be forced into child labor.

At the end of March 2020, the government-run Sangsad TV channel started broadcasting two 20-minute daily lessons for students in grades 6 through 10, and these lessons are also available on a YouTube channel. a2i has built a parallel platform, Konnect, to host Sangsad TV videos, electronic textbooks, life-skills videos, and other educational materials. This randomized evaluation, conducted in partnership with a2i, aims to measure the impact of four interventions aimed at decreasing the barriers to remote education, two interventions targeting information constraints and two interventions targeting price constraints. First, to increase salience of the options available, we will provide information and reminders about the remote TV and internet lessons. Second, we will provide information about an adaptive learning technology. Third, we will reduce the cost of internet learning activities by providing discounted data packages. Fourth, we will provide students with support by connecting students directly to teachers working with a2i.

With schools expected to reopen in late March 2020, parents may have to substantially change their investment decisions regarding their children's education. In addition, parents' time, and monetary investments (for which we experimentally changed their costs) might have also already been affected by (1) the teacher outreach and data subsidy treatments, and (2) the fact of having no schools. IPA interviewed 4,332 households between 14<sup>th</sup> March 2021 and 31<sup>st</sup> March 2021, where we spoke to either the mother or father of students enrolled in grades 6-10 prior to the closures. At baseline (Dec 2020 – Feb 2021), the sample of households was already restricted to those households that had a smartphone in the house. The phone numbers of households that completed the baseline survey came largely from the Konnect database and the Secondary School Stipend Programme database (about 46% and 38% respectively), and another 15.5% were drawn from the Random Digit Dialing database. The Konnect sample, which contained households that used the internet to access educational resources, was found to be better off than the more representative RDD sample, while the SS Stipend sample of households was found to be the worst off. Further, although the RDD sample is roughly representative of those who own smartphones across Bangladesh, we saw a wide range of occupations, incomes, and parents' education levels across all the databases.

From among the 5,015 households that we spoke to, 84% of the respondents were parents of children in grades 6-10. 87% of these households had only 1 child and 12% had 2 children of which 46% were boys and 54% were girls. We found only 1.6% of the children not currently living in the household, and the reasons varied from marriage (0.5% of all children – 4 boys and 27 girls) to living with another parent (about 0.2% of all children – 5 boys and 9 girls) or having moved for education (about 0.2% all children – 11 boys and 2 girls).

Parents were asked to recount how much time each of their children in grades 6-10 had spent on schoolwork in a typical week. We found that on average, parents reported boys having spent significantly lesser time (5 days or 18 hours in a

typical week) than girls (about 6 days or 19 hours in a typical week) doing schoolwork. About 63.5% of the children were reportedly engaging in private tutoring, with parents spending an average of 1,732 BDT (21 USD) on private tuitions in the past month (median is 1,000 BDT or 12 USD). We also found that parents spent slightly more (232 BDT or 2.8 USD) for boys than for girls in the past month.

We asked parents to recount the use of 10 learning resources by each of their children in the past month and found that the most often cited were: reading textbooks/schoolbooks (94%), meeting with a teacher in person (62%), working in exercise books (32%), watching video lessons on a smartphone or other device (25%), watching Sangsad TV (20%) and e-meetings with teachers by phone/internet (12%). Further, 85% of students read textbooks/schoolbooks, and the median time spent among those who did is 14 hours (average 18.7 hours). Twenty-two percent of students worked in exercise books, and the median time spent among those who did is 7 hours (average 9 hours). Fifty-five percent of students met with a teacher in person, and the median time spent among those who did is 6 hours. Another 18% of students watched video lessons on a smartphone or other device, and the median time spent among those who did is 4.5 hours (average 6 hours). Boys were found to be watching video lessons on a smartphone or other device and attending remote classes in a slightly higher proportion than girls; girls, on the other hand, were found to be reading textbooks/schoolbooks slightly more than boys. Of the top 5 most used resources, parents found all of them “very” or “somewhat” helpful. Additionally, 55% of the parents rated “working in exercise books” as the “most useful” learning resource, followed by “meeting with a teacher in person” (20%). “Watching video lessons on a smartphone/other device” (9%) and “working in exercise books” (7%) were rated as the “least useful” by a small proportion of parents.

When we enquired about how children accessed remote learning activities in the past month, about half (52%) of the parents reported that their children did not use either a television, feature phone, smartphone, computer, or tablet, 33% reported that their children used smartphones, and 16% used television. However, only about 20% of all children reportedly had access to a pre-paid internet plan, 1% had access to post-paid internet and 11% had access to WIFI. Parents estimated using an average of 36 GB of data or spending an average of 326 BDT (4 USD) in March for educational activities in the past month. Boys were reported to be using 26GB more data than girls, although parents also reported spending about 6 BDT (0.08 USD) more in buying data packages for girls.

Overall, parents reported having spent an average of 139 BDT (1.7 USD) on all phone and internet charges, 946 BDT (11.5 USD) on learning activities excluding tutoring and the cost of phone and internet charges in the previous month, and an average of 4,553 BDT (55 USD) annually in school fees per child. We found parents spending more for boys on phone and internet charges as well on annual school fees than for girls, on average; they were also found to be spending more for girls on learning activities excluding private tutoring and phone and internet charges.

Parents and other adults were mostly “always” or “often” at home while their children engaged in educational activities in March 2021, so we asked some further questions to get a sense of their time investment in their children’s education. We found that in a typical week in March, parents and other adults were able to spend an average of 7 hours and 5 hours respectively helping all children with their educational activities. They reported providing support and encouragement, as well as supervision to help keep the children on track. Additionally, other adults/elder siblings also spent an average of 6 hours in a typical week helping about 36% of all children with their studies in a typical week.

We asked 10% of parents (507) about their beliefs and expectations for their children’s educational achievements and learning needs at midline. Parents of 64% of the children said that they had “learned something, but not very much”, while a slightly higher proportion of girls (33%) than boys (26%) were said to have “learned a lot” when asked to compare each of their children’s level of knowledge and (academic) ability that day to the beginning of March. Parents also reported that 67% of the children were asked to submit assignments regularly throughout the school year after the closures (either in person or remotely), and that 92% of them had submitted “most” or “all” of these assignments. We

also found out that about 80% of the children were also asked to submit a final set of assignments at the end of 2020 in school, 79% of them had done so, and 58% of them had submitted “all” or “most” of them on time. But only 30% of the children were thought to have received grades/feedback on their final assignments. Most of the parents (97%) were confident that their children would be attending school in the upcoming year and would be ready to enter the next grade. Only 4% of the children were reportedly going to start the next grade (academic year 2021-22) in a different school majorly because they were moving on to the next level (i.e., moving on from grades five, eight, ten, or twelve which respectively correspond to public examinations conducted by the gov’t Directorate of Primary Education), or that the new school was of better quality, lower cost, or closer to home.

## INTRODUCTION

The COVID-19 pandemic is an unprecedented global challenge that has affected the health and livelihood of billions worldwide. Low-income countries will be increasingly affected by the pandemic itself (Walker, 2020), and these populations are also less likely to be able to access vital health care resources or social safety nets. Bangladesh is especially susceptible due to its strong ties to the global economy, and these negative demand shocks are likely to persist throughout and after the pandemic.

Governments and educational organizations worldwide are trying to quickly adapt to the unprecedented circumstances created by the pandemic by developing or scaling up distance education modalities to continue delivering educational content to students and maintain students' connection to formal education. However, the effectiveness of these tools is largely unknown.

One important challenge of remote learning is that it can exacerbate disparities between students. Access to the minimal technology infrastructure needed to regularly follow lessons delivered remotely (e.g., access to electricity, radio, TV, computers, or smartphones with data plans) differs widely across the population. Depending on children's socio-economic circumstances, they may not be as well informed about the planned televised lessons, or they may not have the resources and educational inputs to follow the lessons consistently during the school closures. In addition, even among children with basic access to remote lessons, different personal and family situations can generate inequalities in the learning environments at home, and in the support received by the children. Finally, a global pandemic, with its associated school closures and stay-at-home recommendations, results in the forced social isolation of children. Since social interactions in school are crucial for learning and psychological and emotional development, facilitating communication among students and between students and teachers might be an important element of a successful distance education initiative.

The first known cases of Covid-19 were reported in Bangladesh on March 7, 2020. The country-wide school closures implemented in Bangladesh began on March 17 with an uncertain end date (as was the case in many countries around the globe), affecting 24 million students. In this context, the government's main priority has been to minimize the disruption of learning. To address this, the Ministry of Education and Aspire to Innovate (a2i) are working together to use a combination of mass media broadcasting and online platforms to remotely deliver educational content from the school curriculum.

Bangladesh announced the closure of all schools on March 17, 2020, which is in effect as of February 2021. The government announced cancellation of the PEC examinations (Grade 5) on August 24<sup>th</sup>, the Junior Secondary Certification (JSC) examinations (Grade 8) on August 27<sup>th</sup>. For these and the remaining Grades 6, 7, 9, they announced on September 24<sup>th</sup> that internal evaluations are to be used for promotion to the next grade. On October 7<sup>th</sup>, 2020, Education Minister Dipu Moni announced that the Higher Secondary School Certificate (HSC) for Grade 12 and equivalent examinations will not be held this year and the results will be evaluated based on the students' JSC (grade 8) and SSC (grade 10) results.

Figure 1- Timeline of official announcements



This project is being conducted in partnership with a2i, a pan-government program of the ICT Division, supported by the Cabinet Division and the United Nations Development Programme (UNDP), that catalyzes citizen-friendly public service innovations simplifying government and bringing it closer to people. It also focuses on supporting the Bangladesh government to develop inclusive means to achieve the UN’s Sustainable Development Goals (SDGs). a2i’s primary goal is to ensure easy, affordable, and reliable access to quality public services for all citizens of Bangladesh.

At the end of March 2020, the government-run Sangsad TV channel started broadcasting two 20-minute daily lessons for students in grades 6 through 10, and these lessons are also available on a YouTube channel. a2i has built a parallel platform, Konnect, to host Sangsad TV videos, electronic textbooks, life-skills videos, and other educational materials. Additionally, a2i manages a popular Facebook group, which serves as a meeting point for increasing engagement of students and teachers, and it regularly features educational videos and live video lessons with Q&A capabilities. Non-governmental organizations are also offering educational resources and initiatives to aid remote learning during school closures.

With schools expected to reopen in late March 2020, parents may have to substantially change their investment decisions regarding their children’s education. In addition, parents’ time, and monetary investments (for which we experimentally changed their costs) might have also already been affected by (1) the teacher outreach and data subsidy treatments, and (2) the fact of having no schools. We conducted a midline survey with 4,332 households to collect information about students’ behavior (using and engaging with learning technology, time spent working for pay), parents’ behavior (time and economic investments in children’s education), and parents’ beliefs and expectations on school completion and children’s learning/achievement. We interviewed one caregiver/parent from each household and describe our methodology and findings below.

# EVALUATION SETTING

## Evaluation Partners

### **a2i**

Aspire to innovate (a2i) of the ICT Division and the Cabinet Division, supported by the UNDP, is a special programme of the government's Digital Bangladesh agenda. a2i leverages and facilitates public service innovation to ensure digital transformation of the public sector and its citizen-centered approach has taken several services to the doorsteps of citizens to improve their livelihoods. The programme aims to provide information to the citizens per the "Right to Information Act of 2009" and bring about a change in the Bangladesh Civil Service to a citizen-centric service delivery system.

### **SIEF**

The World Bank's Strategic Impact Evaluation Fund (SIEF) was established to support scientifically rigorous research that tests the impact of innovative programs and policies that try to improve education, health, access to quality water and sanitation, and early childhood development in low- and middle-income countries. Evidence about programs' impacts and cost-effectiveness allows governments and others to better focus future efforts and investments. SIEF-funded evaluations use experimental methods like randomized control trials and quasi-experimental methods that estimate the impact and cost-effectiveness of government and NGO programs in the poorest countries. Workshops for government officials, researchers, and journalists provide training on the use and value of these methods. Dissemination methods go beyond the standard research paper and policy brief and include social media, documentaries, photo essays, and local media outreach.

### **IPA**

Innovations for Poverty Action (IPA) is a specialized institution whose core competence is the successful design and implementation of impact evaluations of development interventions using randomized controlled trials. IPA's global network of country programs offers supportive infrastructure and established relationships with key stakeholders including expert researchers. To date, IPA has impacted over 50 million people through more than 830 evaluations in over 50 countries. IPA Bangladesh was established in 2010 as an IPA country office and currently has 43 full-time staff and a pool of over 500 field officers. IPAB has completed 27 large-scale evaluations thus far, with 29 more ongoing and more than 25 in the pipeline.

## Research Design

### Research methodology and key questions

This study aims to answer the following overarching question: What are the impacts of households' remote education investment decisions? This question can be subdivided into the following research questions:

1. How does educational technology adoption affect (parental) economic and time investments?
2. How do changes in relative input costs affect households' decisions?
3. What are the short-term (take-up), medium-term (usage), and long-term (learning/dropout) impacts of household remote education decisions?
4. Is there heterogeneity in the effects on remote educational investments (by parents) based on (i) ability relative to grade level, (ii) age, (iii) gender, and (iv) household income?

### Main outcome measures

1. Parents and students' time and economic investments in remote education,
2. Usage of TV lessons and online platform, completion of remote homework,
3. Student learning outcomes,
4. Parental expectations on re-enrollment and grade completion,
5. Child expectations on re-enrollment and grade completion, and
6. Student aspirations and mental health

### Midline Survey outcomes

1. Parental behaviors:
  - a. Time investment in children's education
  - b. Economic investment in children's education
2. Parental beliefs and expectations:
  - a. Expectations on school completion
  - b. Beliefs on children's learning/achievement
3. Student behavior:
  - a. Use of learning technologies
  - b. Effort/engagement in learning activities
  - c. Outside options – time spent working for pay by students

## Sample Selection

The sample for the midline survey was drawn from the pool of respondents who answered the baseline survey between December 2020 - February 2021. At baseline, they were drawn from three sources: the database of Konnect users, the database of recipients of the Secondary School (SS) Stipend Programme, both shared with IPA by a2i, and a list of 30,000 randomly generated phone numbers (Random Digit Dialing) prefixed with "17" and "13" to generate a random list of GrameenPhone users. IPA selected respondents by asking them two questions before the survey to ascertain their eligibility for the study. Having at least one child enrolled in grades 6-10 prior to school closures and having a smartphone in the house would allow the respondent to move ahead and hear the study consent form being explained to them on the phone.

For the midline survey, we sampled all the households who had consented to future surveys during baseline (96%). The resulting total sample for the midline survey was 4,332 respondents who were interviewed between 14<sup>th</sup> March 2021 and 6<sup>th</sup> April 2021.

## Field Plan and Response

Enumerators prioritized speaking to the parent of the “target” students (the ones who had enrolled in grades 6-10 prior to school closures). If neither the mother nor father were available, enumerators tried to survey another older family member.

For all phone numbers, enumerators attempted each number twice a day for an average of 3 consecutive days before closing a case as ‘No one picked up’ or ‘Phone switched off/no network/invalid’ (more protocol details are in ‘Field Work’). The survey response rates for those respondents who were re-contacted at midline are given below in Table 1. The most common reason for non-response was unavailability (16%). This also includes cases in which our calls went unanswered, or the respondents’ phone was switched off/out of network). Rescheduling to a later time constituted 4% of the attrition. About 6% of the respondents refused and/or hung up the phone before consenting. We also found that 3% of the households contacted at baseline had given us wrong information/ information about a friend regarding their eligibility criteria for the survey.

*Table 1 - Summary of responses to midline survey*

<b>Responses</b>	<b>N</b>	<b>%</b>
Parent consented to be surveyed	5,158	75%
Unavailable (no answer/phone switched off/no network)	969	14%
Rescheduled, incomplete	148	2%
Rescheduled, did not respond	3	0%
Household not eligible	264	4%
Refused/Hung up before consent	368	5%
<b>Total contacted at midline</b>	<b>6,910</b>	

# DATA COLLECTION

## Survey Instrument Design

Those respondents that had consented to future surveys during baseline data collection were randomly chosen to answer either a shorter version of the midline survey instrument (90%) or a longer version (10%). In the latter, we added an extra set of questions on parental beliefs and expectations about their children’s educational achievements. The longer survey took an average of 22 minutes to complete, while the shorter survey took an average of 17.4 minutes to complete.

See Appendix A for a copy of the full survey.

The instrument was translated from English to Bangla. All surveys were administered in the local language over the phone. IPA programmed the survey instrument using SurveyCTO, a data collection software. The software’s computer-assisted telephone interviewing (CATI) functionality was required for our purposes. All interviews were conducted by phone through the SurveyCTO application. Completed surveys remained encrypted as soon as surveyors finished an interview. Once transferred from the SurveyCTO server to IPA computers, all files were encrypted using Boxcryptor. Only persons with Institutional Review Board approval to handle data with Personally Identifying Information (PII) were granted the permissions necessary to view PII.

## Field Work

The midline survey team of sixteen enumerators completed 5,015 surveys between 14<sup>th</sup> March 2021 to 6<sup>th</sup> April 2021, roughly 73% of the 6,910 respondents contacted from the pool of baseline survey respondents. Each enumerator had an initial target of 8-10 successful surveys per day.

Certain protocols were followed for the phone surveys. If the respondent did not answer the phone, the enumerator initially was instructed to call again up to a maximum of 3 times a day and each call was to be attempted after a two-hour break from the last attempt. If no one received the call, the phone number was switched off, or someone hung up the phone, the enumerator called again for two consecutive days, twice a day, and sent the data of the second attempt on each day. Initially, enumerators worked from 9 AM till 8 PM, but they added flexibility later based on the respondent’s availability. Figure 2 summarizes the survey completion rates per consecutive attempt.

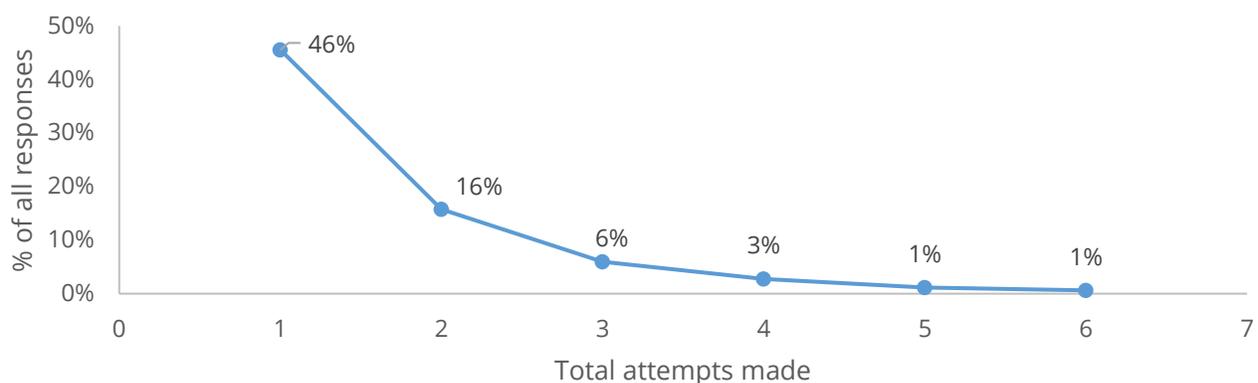


Figure 2 - Survey completion rates per attempt

## Field staff recruitment & training

Baseline data collection was led by the following people:

- » 4 Supervisors (all male)
- » 31 Enumerators (25 female, 6 male)
- » 1 Audio auditor (male)

The training was held on 11<sup>th</sup>-13<sup>th</sup> March 2021. The phone survey protocol, Zoom meeting protocol, communication plan, section-wise discussion of the questionnaire, survey protocol, and data sending protocol were covered during the training. Additionally, question-answer sessions and practice sessions were arranged to identify any issues or concerns and to monitor enumerator performance. Short meetings took place every second day of the phone survey for performance improvement. Households were matched with the same enumerators as during the baseline survey as far as possible, while the rest of the households were randomly assigned to the new pool of enumerators who were not part of baseline data collection.

## Team structure

IPA enumerators worked in four teams to conduct the surveys.

## Quality control

The survey used three main forms of quality controls.

- (1) High-frequency checks: IPA conducted high-frequency checks to identify collection issues in real-time. These included measures of enumerators' performance, time taken per survey, enumerator productivity, survey result, outliers, missing values, and other specified values. If any unusual figure appeared, the enumerator was contacted immediately to find out the reason behind the unusual pattern. If any enumerator took longer than the usual survey duration, her survey data was checked, she was contacted, and remedial steps were taken. If any unusual value was noticed in the collected data, the enumerator was contacted to double-check. The enumerators also kept notes to support later data cleaning.
- (2) Audio audits: Up to five minutes of survey audio was recorded, and the location of these checks varied by survey. For each date of the survey, one audio auditor listened to 10-12 of the random audio recordings to assess the way individual enumerators asked questions and interpreted responses, and to understand the respondent's comprehension, comfort, etc.

Additionally, IPA staff built a dashboard for both surveys which pulled real-time data from the server. It mainly included some selective variables to signify the daily outcome, productivity, and response rate. It also provided an overview of the enumerator's performance and basic regional statistics.

## Response rate

We restrict our follow-up sample to the 96% of baseline respondents (7,273) who agreed to be recontacted during baseline consent. We randomly selected 6,910 respondents to survey (91%) between 14<sup>th</sup> March 2021 and 6<sup>th</sup> April 2021, and we successfully interviewed 75% of those we contacted, or 5,158. As Table 2 shows, response rates were consistently above 71% for individual arms relative to the control group, except for the teacher outreach treatment arm, for which we had a 71% response rate (significant at the 5% level). Taken together, treatment assignment does jointly predict the likelihood of midline response (significant at the 5% level).

Table 2 - Differential attrition across treatment and control groups

	N	Only TV	TV + YT	TV + Robi	Robi + TV + YT	Only Robi	Data subsidy	Teacher outreach
# assigned at baseline	7,576	947	947	947	947	1,894	2,368	828
# consented to future surveys	7,297	904	907	913	916	1,835	2,294	786
# attempted at midline	6,910	859	848	867	868	1,740	2,169	740
Attempt rate	0.91	0.91	0.90	0.92	0.92	0.92	0.92	0.89
<b># responded at midline</b>	5,158	646	607	640	637	1,336	1,627	523
Response rate among attempted	0.75	0.75	0.72	0.74	0.73	0.77	0.75	0.71
p-value		0.165	0.467	0.476	0.295	0.363	0.42	0.022*
<b>F-test of joint significance (Prob &gt; F)</b>		2.24						
		0.028*						
Response rate among baselined	0.68	0.68	0.64	0.68	0.67	0.71	0.69	0.63
p-value		0.97	0.304	0.995	0.939	0.73	0.485	0.335
<b>F-test of joint significance (Prob &gt; F)</b>		0.84						
		0.5542						

Notes: Response rates conditional on attempting to contact for midline. Test for differential response rates by treatment status includes stratification-cell fixed effects. \*\* p<0.05, \*\*\* p<0.01

Because the longer survey questionnaire did require more respondent time, we tested whether the randomly chosen version affects response rates. Table 3 shows that the response rate for the long survey was, instead, slightly higher, at 78%, but this difference is not statistically significant.

Table 3 - Differential attrition across long and short surveys

	Short survey	Long survey
# of respondents attempted to contact at midline	6,239	671
Response rate	0.74	0.78
p-value		0.066
<b>F-test of joint significance (Prob &gt; F)</b>	3.37	

Notes: Response rates conditional on attempting to contact for midline. Test for differential response rates by treatment status includes stratification-cell fixed effects. \*\* p<0.05, \*\*\* p<0.01

We also test which baseline covariates predict the likelihood of interview at midline.

Table 4 - Differential attrition across balance covariates

	Coef.	Robust Std. Err.	t	P>t
<b>Active data pack</b>	-0.04	0.01	-4.15	0.00***
<b>Only girls in the household</b>	0.03	0.01	2.40	0.02**
<b>Only boys in the household</b>	-0.03	0.02	-1.35	0.18
<b>Negative profits-7000 BDT</b>	0.00	0.02	-0.09	0.93
<b>7200-12000 BDT</b>	0.02	0.02	1.35	0.18
<b>12040-20000 BDT</b>	0.02	0.02	1.35	0.18
<b>20048-1500000 BDT</b>	-0.03	0.02	-2.04	0.04**
<b>Konnect Sample</b>	0.11	0.02	6.65	0.00***
<b>Stipend Sample</b>	0.09	0.02	5.11	0.00***
<b>_cons</b>	0.68	0.02	33.13	0.00

79% of non-responses were unavailable, of which about 8% had left their interviews in various stages of completion. For about 55% of these unavailable respondents, their phones were switched off, unanswered, or were not in the coverage area. About 21% of non-responses were due to respondents refusing to consent or hanging up the phone before consenting, and 15% of non-respondents had erroneously reported having children in grades 6-10 at baseline.

Table 5 - Reasons for non-response

Nonresponses	N	Prop. of non-responses	Cumulative share
Unavailable (no answer/phone switched off/no network)	969	0.55	0.55
Rescheduled, incomplete	148	0.08	0.64
Rescheduled, did not respond	3	0.00	0.64
Household not eligible	264	0.15	0.79
Refused/Hung up before consent	368	0.21	1.00
<b>Total non-responses</b>	<b>1752</b>	<b>1.00</b>	

# DESCRIPTIVE TABLES AND FIGURES

## Children's characteristics

Among the 5,015 households that we spoke to, 84% of the respondents were parents of children in grades 6-10 (see Figure 3). 87% of these households had only 1 child and 12% had 2 children (see Figure 4).

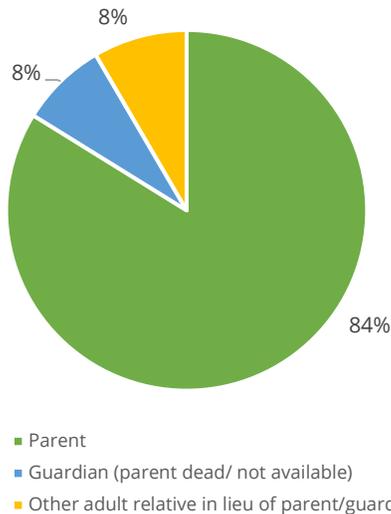


Figure 3 - Types of respondents for midline survey

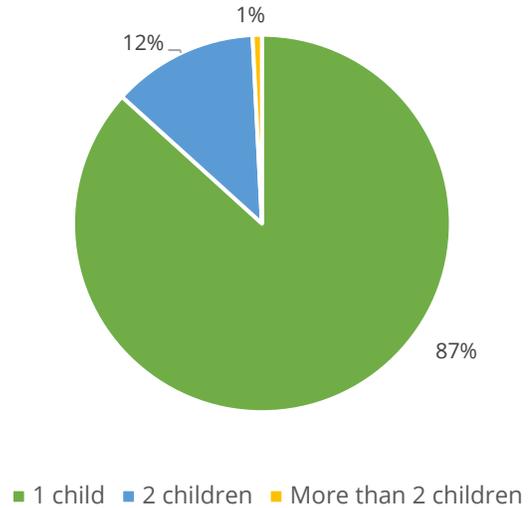


Figure 4 - Number of children in households

As Figure 5 and Figure 6 **Error! Reference source not found.** indicate, of the total 5,724 children in our sample, 46% were boys and 54% were girls. About 1.6% of children (29 boys and 46 girls) were not currently living in the household.

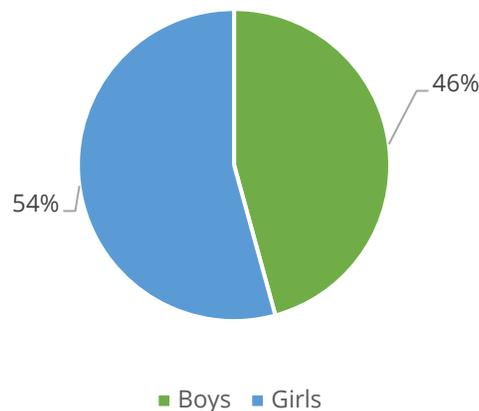


Figure 5 - Gender composition of children in the households

About 0.5% of all children (4 boys and 27 girls) were married, 0.2% of all children (5 boys and 9 girls) were living with another parent, and 0.2% of all children (11 boys and 2 girls) had moved for education.

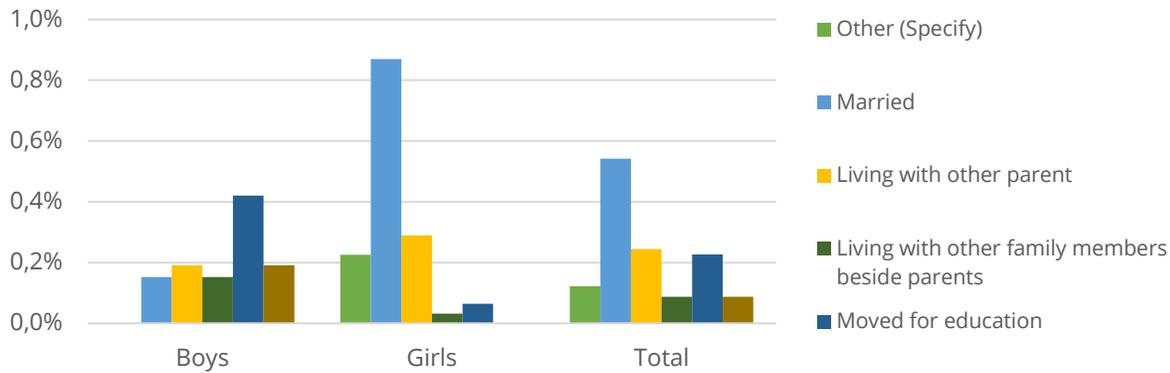


Figure 6 - Reasons for children not currently in households

## Use of learning resources and activities

Parents were asked how much time each of their children in grades 6-10 had spent on schoolwork in a typical week. On average, boys spend significantly less time (5 days, or 18 hours in a typical week) than girls (about 6 days, or 19 hours in a typical week). See Figure 7 and Figure 8 for the distributions.

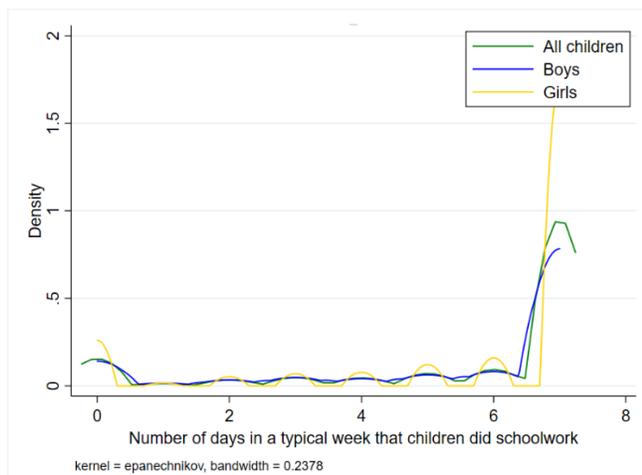


Figure 7 – Number of days in a typical week that children did schoolwork

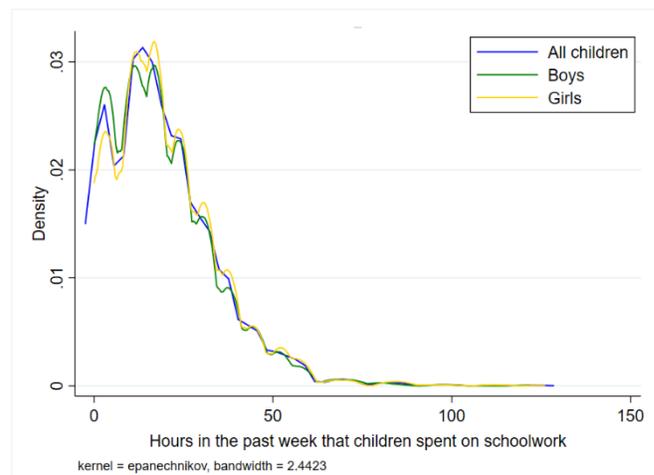


Figure 8 – Hours in the past week that children spent on schoolwork

As Figure 9 indicates, 63.5% of all children received private tutoring in the past month, with the figures roughly similar between girls and boys (63% and 65% respectively). Boys spent slightly longer (an average of 11.2 hours) in a typical week with a private tutor than girls (about 11.1 hours. See Figure 10), but this difference was not statistically significant. Figure 11 shows the distribution of the money spent in March for private tutoring. Parents spent an average of 1,732 BDT (21 USD) on private tuitions in the past month (median is 1,000 BDT or 12 USD). They spent about 232 BDT (2.8 USD) more for boys than girls in the past month.

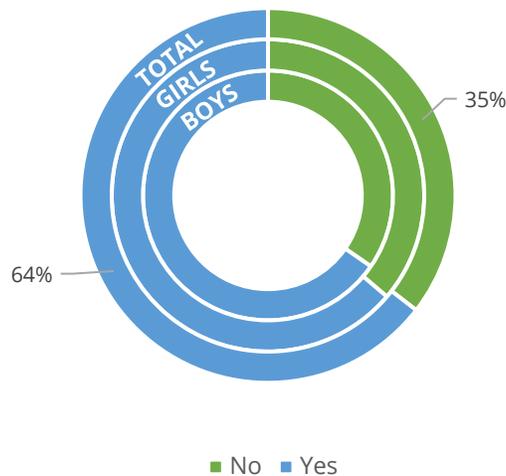


Figure 9 - Children engaged in private tutoring in the past month

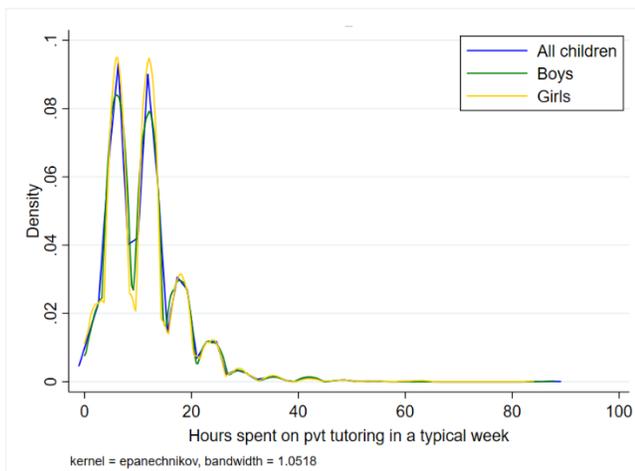


Figure 10 - Time (in hours) spent on private tutoring in a typical week in the past month by all children

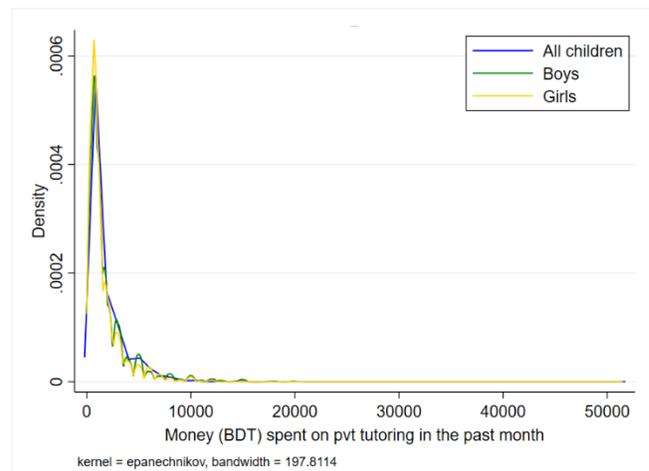


Figure 11 - Money spent on private tutoring in the past month for all children

We asked parents to recount the use of learning resources by each of their children in grades 6-10 in the past month. Out of a list of 10 resources (see Appendix A for questionnaire), the most popular were reading textbooks/schoolbooks (94%), meeting with a teacher in person (62%), working in exercise books (32%), watching video lessons on a smartphone or other device (25%), watching Sangsad TV (20%) and e-meetings with teachers by phone/internet (12%). Boys watch video lessons on a smartphone or other device and attend remote classes at a slightly higher rate than girls; girls, on the other hand, read textbooks/schoolbooks slightly more than boys. The difference in the share of girls and boys using all the other listed learning resources was not statistically significant at the 5% level (see Table in Appendix B).

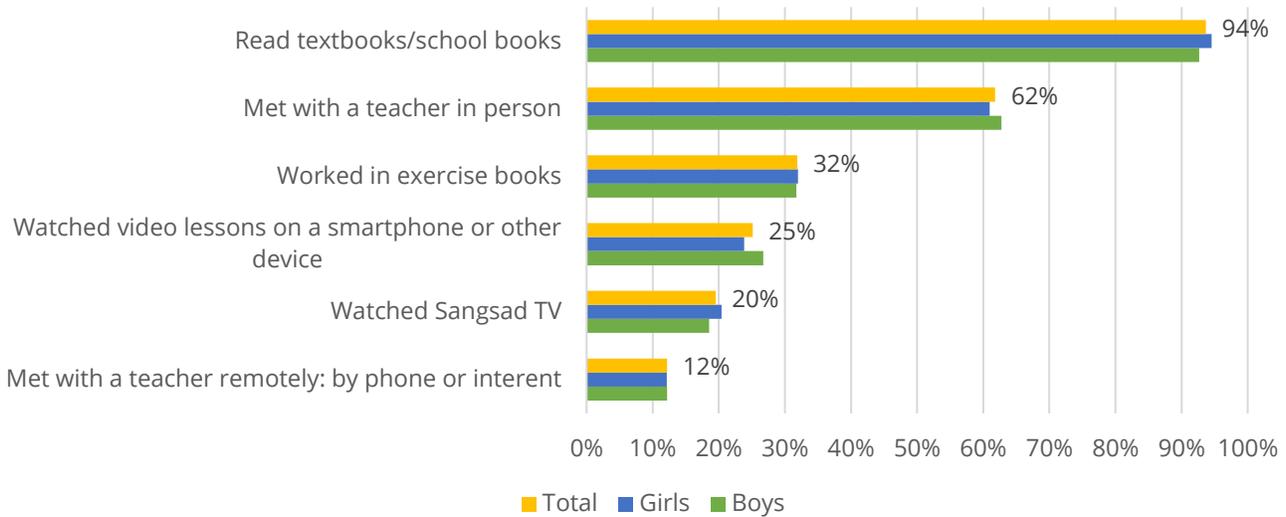


Figure 12 - Resources used by children in the past month

Figure 13 is organized in increasing order of average time spent by children in a typical week in March 2020 in engaging with a list of learning resources in the past month (see Questionnaire in Appendix A).

Eighty-five percent of students read textbooks/schoolbooks, and the median time spent among those who did is 14 hours (average 18.7 hours). Twenty-two percent of students worked in exercise books, and the median time spent among those who did is 7 hours (average 9 hours). Fifty-five percent of students met with a teacher in person, and the median time spent among those who did is 6 hours (average 9 hours). Differences in average time spent using these resources between girls and boys are statistically significant. Boys spent more average time on working in exercise books, meeting with a teacher remotely and attending in-person school classes than girls. Girls spent more average time on using all other resources in the past month (See Table in Appendix B).

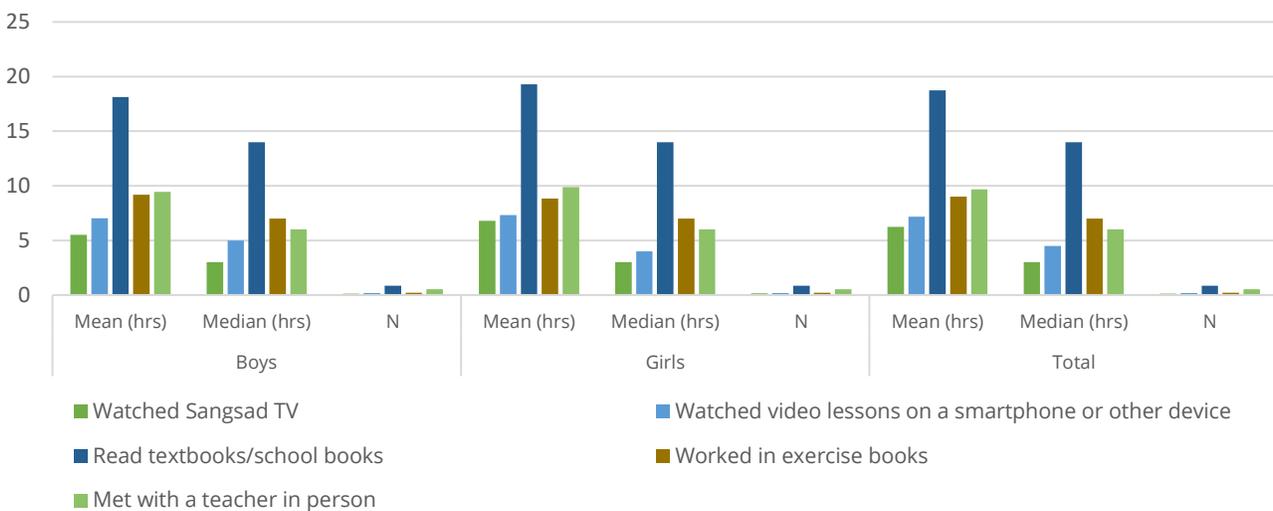


Figure 13 - Time spent by children in a typical week engaging with learning resources in the past month

We also asked parents to what extent each learning resource was helpful for their children. Of the top 5 most used resources, parents found all of them “very” or “somewhat” helpful (see Figure 14).

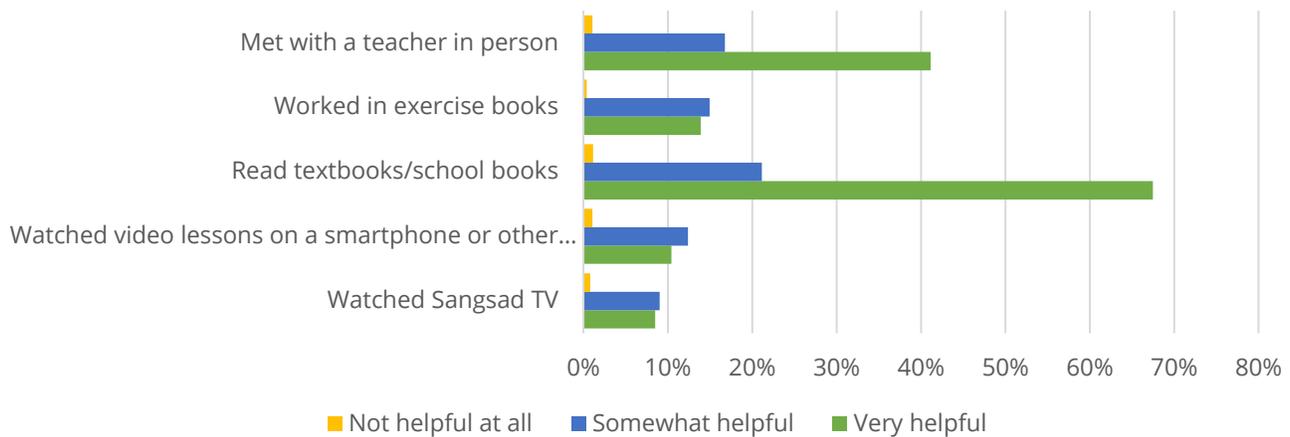


Figure 14 - Usefulness of learning resources over the past month

Working in exercise books was rated as the “most useful” learning resource by parents (55%), followed by meeting with a teacher in person (21%). Watching video lessons on a smartphone/other device (9%) and working in exercise books (7%) were rated as the “least useful” by a small proportion of parents (see Figure 15 and Figure 16).

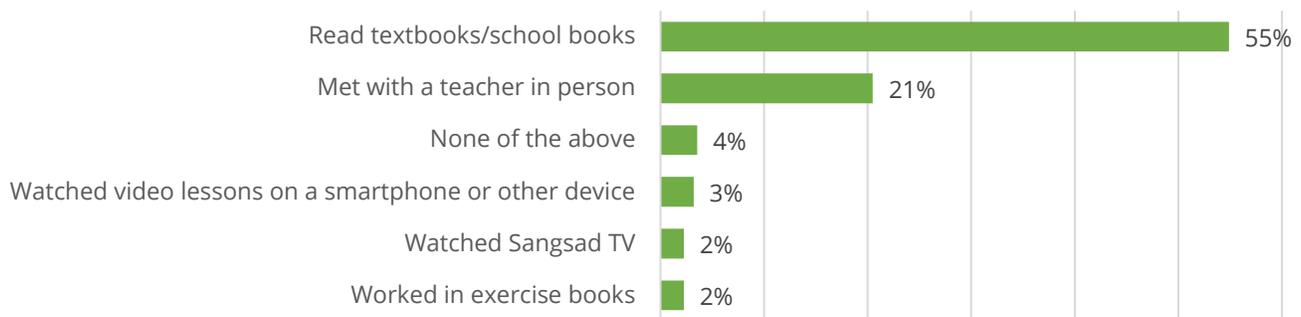


Figure 15 - Learning resources identified as “most useful” by parents

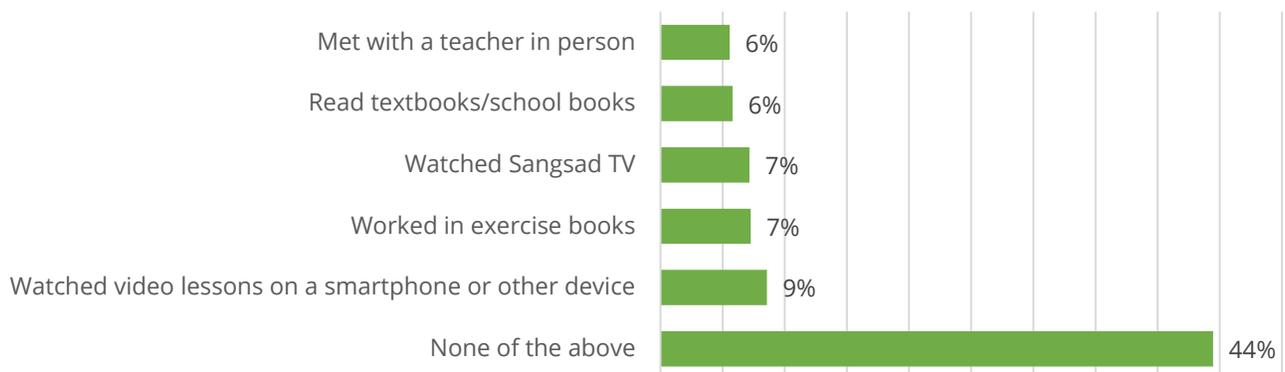


Figure 16 - Learning resources identified as “least useful” by parents

About half (52%) of the parents reported that their children did not use either a television, feature phone, smartphone, computer, or tablet to engage in remote learning activities in the past month (see Figure 17). However, nearly 33% of parents reported that their children used smartphones, and 16% used television, in the past month.

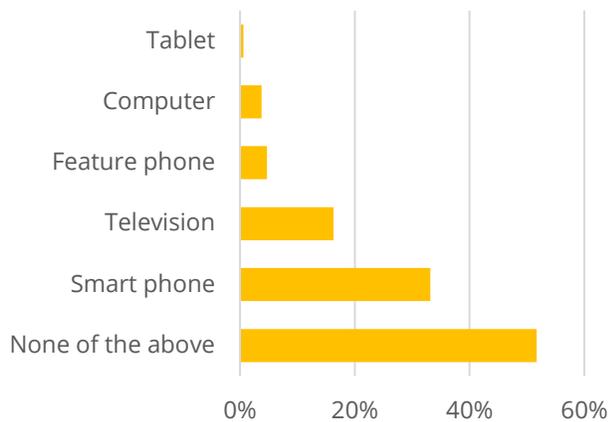


Figure 17 - Devices available with households for accessing remote learning resources

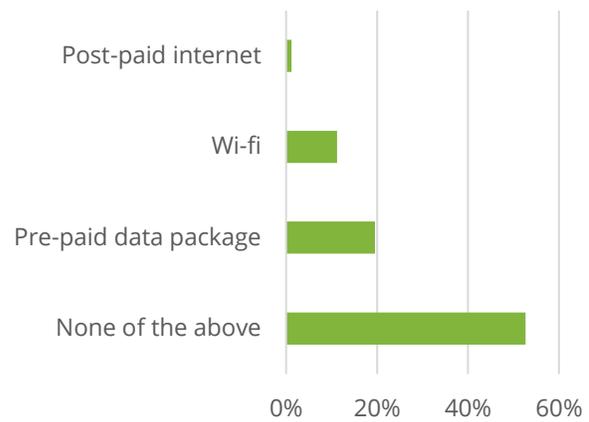


Figure 18 - Plans used to access remote learning activities in March

About 20% of all children had access to a pre-paid internet plan (see Figure 18), and 1% had access to post-paid internet. Only 11% had access to WIFI. Figure 19 and Figure 20 show the distribution of prepaid data packages (in terms of estimated gigabytes used and estimated BDT spent, respectively) used for educational activities in March 2021. Parents estimated using an average of 36 GB of data or spending an average of 326 BDT (4 USD) in March. Boys using 26GB more than girls, although parents also reported spending about 6 BDT (0.08 USD) more for girls.

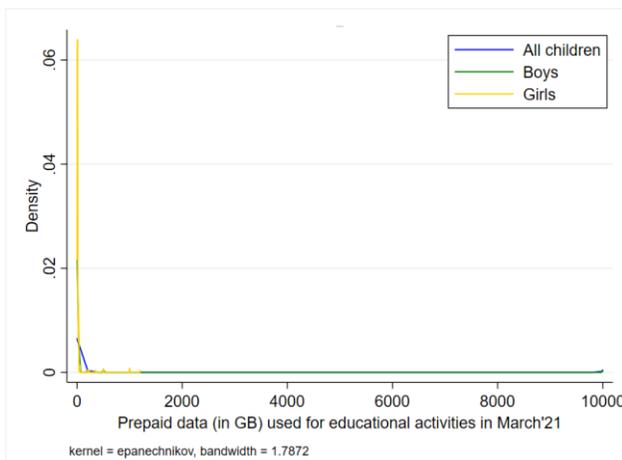


Figure 19 - Amount of prepaid data (in GB) used for educational activities in March'21

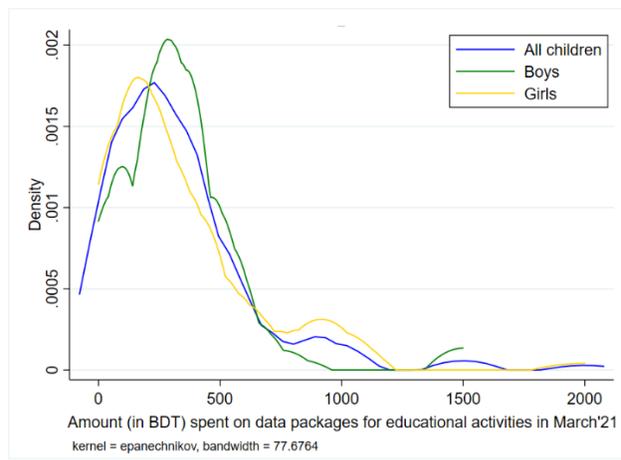


Figure 20 - Amount spent (in BDT) on data packages for children's educational activities in March'21

Parents reported having spent an average of 139 BDT (1.7 USD) on all phone and internet charges in March— this figure was about 17 BDT (0.20 USD) higher for boys than for girls (see Figure 21). The average spent on learning activities, excluding tutoring and the cost of any phone and internet charges, was 946 BDT (11.5 USD). The median was 500 BDT (6 USD) and virtually the same regardless of the child's gender (see Figure 22). Parents reported paying 4,553 BDT (55 USD) annually, on average, in schools fees per child—this figure was higher for boys than for girls by about 1,100 BDT (13 USD. See Figure 23).

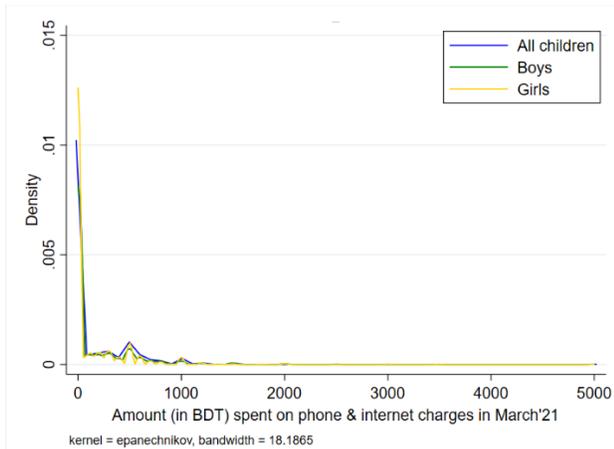


Figure 21 - Amount (in BDT) spent on all phone & internet charges for educational activities in March'21

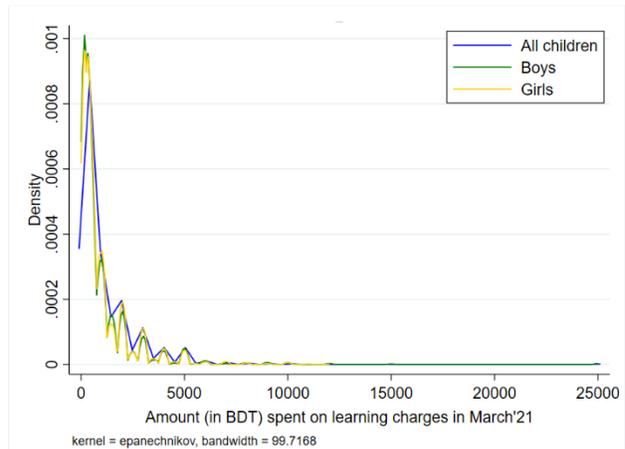


Figure 22 - Amount (in BDT) spent on learning activities excluding phone, internet & private tutoring in March'21

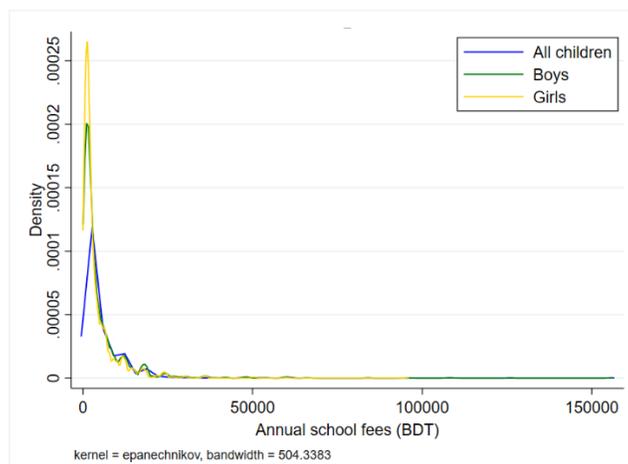


Figure 23 - Annual school fees (in BDT)

## Children's time use

About 11% of children worked for pay in the past month. Those who worked spent an average of 20 days working and an average of 4 hours in a day (see Table 6). A higher share of boys than girls worked for pay in the previous month, and conditional on working, boys worked for fewer days but more hours in a day compared to the girls. Girls spent an average of 1.3 hours more per week performing "care work," that is, taking care of siblings or doing household chores.

Table 6 - Work done by children in the past month

	Boys	Girls	Total	Difference
1. Proportion of children who worked in the past month (%)	16%	7%	11%	9.0%*
N1.	2580	3046	5626	
2. Average days spent working in the past month, conditional	18.6	24.2	20.5	-5.6*
2.1 Median days spent working in the past month, conditional	20	30	25	
N2.	398	206	604	
3. Average hours spent working in the past month, conditional	4.8	2.5	4.02	2.3*
3.1 Median hours spent working in the past month, conditional	3	2	2	
N3.	395	202	597	
4. Average hours spent on care work in the past month, conditional	10.3	11.6	11.1	-1.3*
4.1 Median hours spent on care work in the past month, conditional	7	7	7	
N4.	1315	2126	3441	

## Parental time investment in education

Figure 24 shows that both parents and other adults were mostly “always” or “often” at home while their children engaged in educational activities in March 2021.

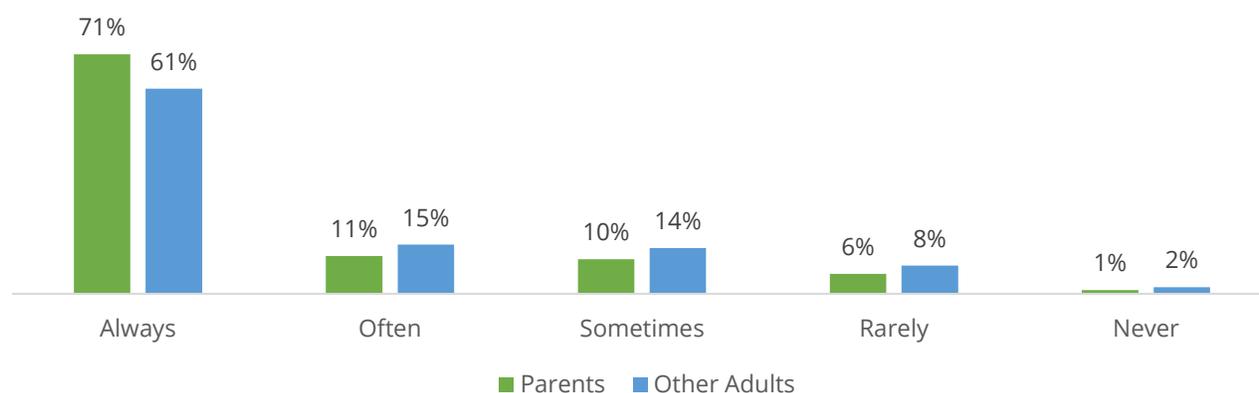


Figure 24 - Parents and other adults who stayed at home in the past month

Parents remind boys and girls about 5 and 4 times respectively in a typical week to complete their learning activities (see Table 7). About 36% of children also had other adults/older siblings in the household help them, and among those who did, they spent an average of 6 hours in a typical week doing so. Parents, on the other hand, were able to spend an average of 7 hours in a typical week helping children with their educational activities, while other adults spent an average of 5 hours in a typical week. They would often provide support, encouragement, and supervision to help keep the children on track.

Table 7 – Parental time investment in children’s education in a typical week in March 2021

	Boys	Girls	Total	Difference
1. Average no. of times parents reminded all children to complete learning activity	5.2	4.4	4.8	0.8
1.1 Median no. of times parents reminded all children to complete learning activity	7.0	6.0	7.0	
2. Average no. of times other adults reminded all children to complete learning activity	4.3	3.7	4.0	0.6
2.1 Median no. of times other adults reminded all children complete learning activity	6.0	4.0	5.0	
3. Proportion of adults able to help child with schoolwork in a typical week in the past month	35%	36%	36%	-1.1%
4. Average hours spent by other adults in helping all children with schoolwork in a typical week in the past month	6.2	6.3	6.2	-0.1
4.1 Median hours spent by other adults in helping all children with schoolwork	5.0	5.0	5.0	
5. Average hours spent by parents in helping all children with educational activities in a typical week in the past month	6.6	6.9	6.7	-0.3
5.1 Median hours spent by parents in helping all children with schoolwork in a typical week in the past month	4.0	5.0	4.0	
6. Average hours spent by other adults in helping all children with educational activities in a typical week in the past month	4.5	5.1	4.8	-0.6
6.1 Median hours spent by other adults in helping all children with educational activities in a typical week in the past month	2.0	3.0	2.0	

## Parental expectations and beliefs

Ten percent of parents (486) were randomly chosen to answer additional questions about their beliefs and expectations for their children’s educational achievements and learning needs. When we asked them to compare each child’s current level of knowledge and ability that day to the level at the beginning of March (see Figure 25), parents of 66% of the children said that they had “learned something, but not very much”, while a slightly higher proportion of girls (37%) than boys (34%) were said to have “learned a lot.” As Figure 26 shows, around two third of students (67%) had to submit assignments regularly throughout the school year after the closures (either in person or remotely). Parents of nearly all children (92%) who were asked to submit regular assignments believed that they had submitted “most” or “all” of their assignments throughout the school year after closures (see Figure 27).

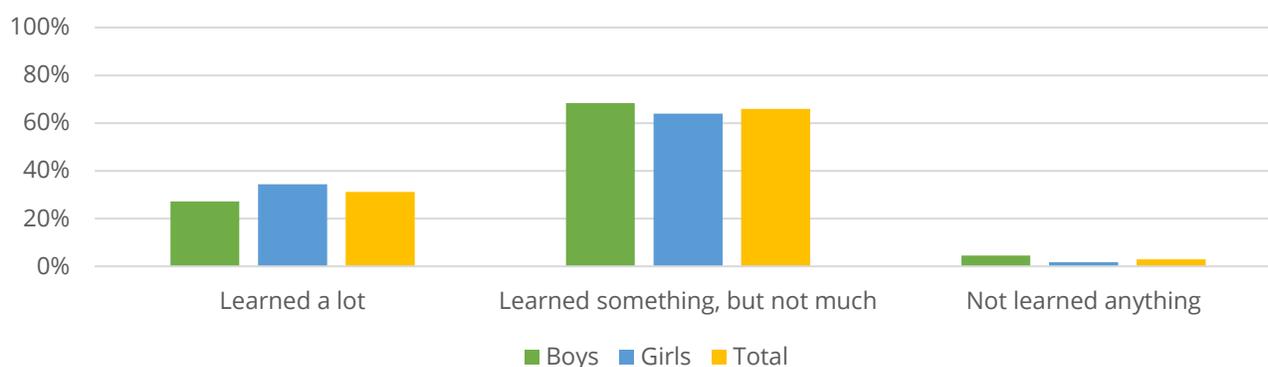


Figure 25 - Parent's assessment of child's learning during March 2021

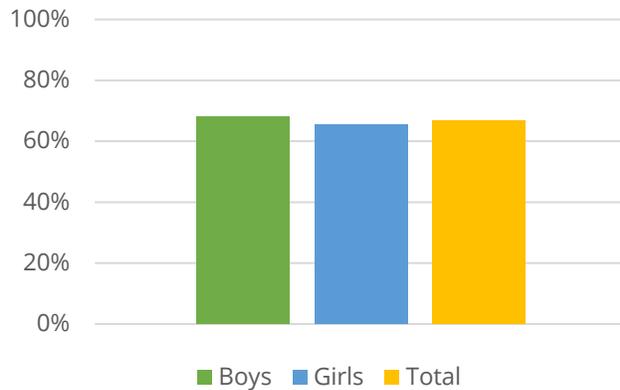


Figure 26 - Whether child had to submit assignments throughout the school year after closures

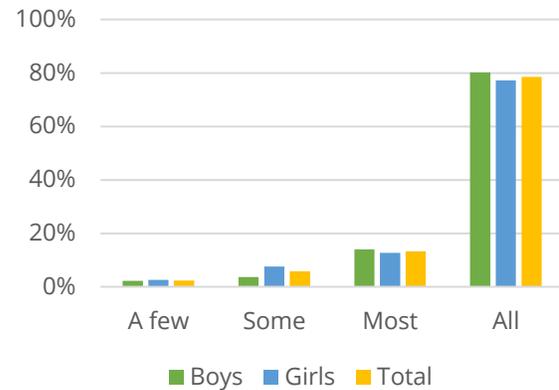


Figure 27 - How often child submitted assignments throughout school year after closures (if asked)

Schools of 82% of children asked for a final set of assignments to be submitted at the end of 2020, and among those that had asked, virtually all parents reported that their children had done so (see Figure 28). 46% of the children who submitted assignments had received grades/feedback on their final assignments. From Figure 29, we find that about 58% of children had reportedly submitted "All" or "Most" of their final assignments on time.

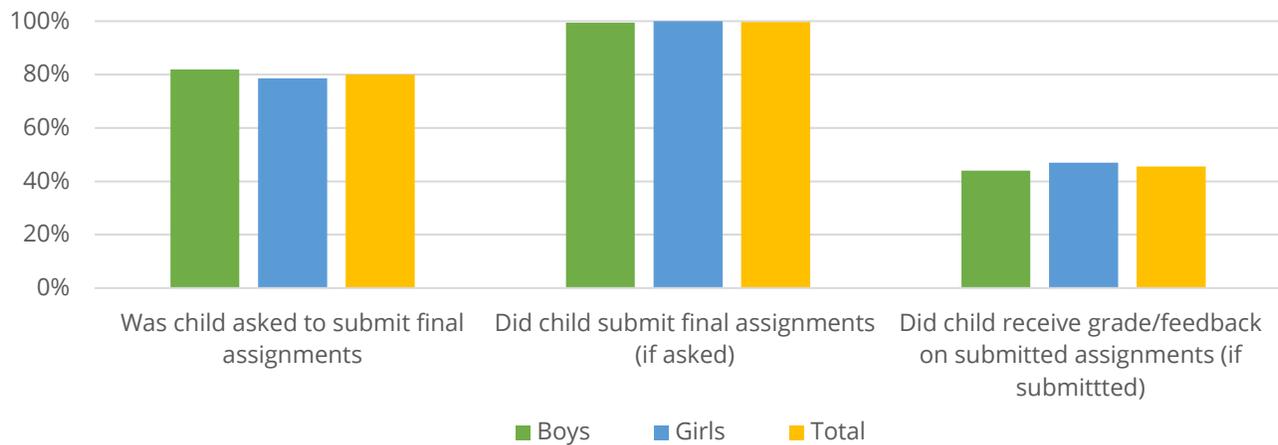


Figure 28 - Children's submission of final assignments at the end of 2020

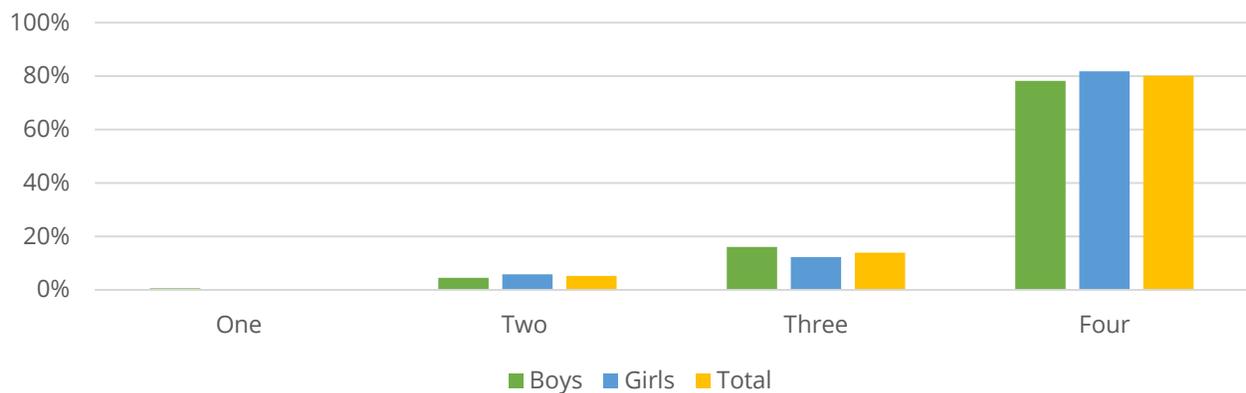


Figure 29 - Number of assignments child submitted at the end of 2020 (if asked)

Virtually all parents were confident that their children (96% of boys and 97% of girls) would attend school if it re-opens, and 97% thought that their children (96% of boys and 98% of girls) would be ready to enter the next grade.

Parents of only 4% of the children reported that their children will attend a different school in the 2021 academic year, and Figure 30 lists the main reasons they provided.

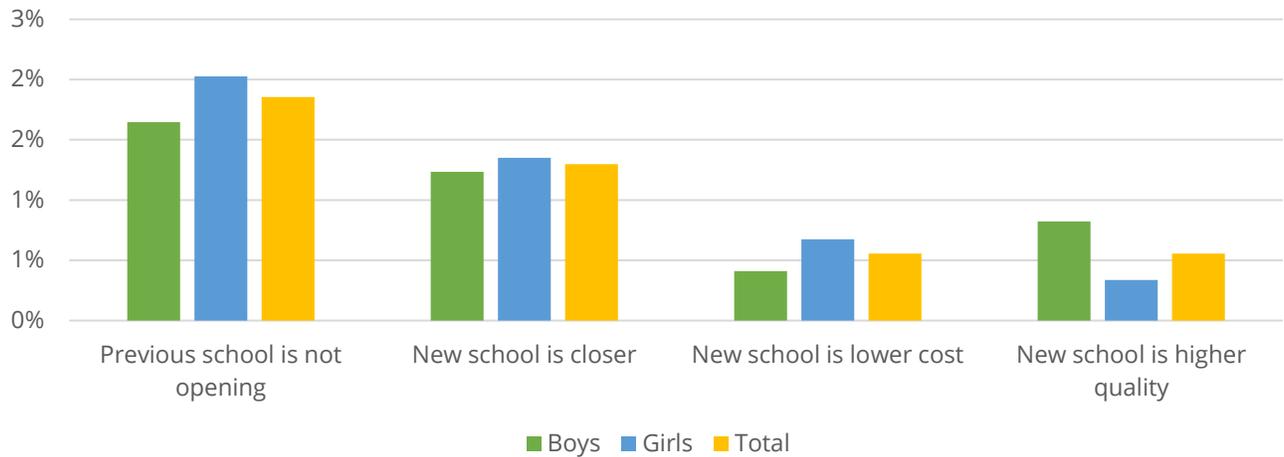


Figure 30 - Reasons for changing schools for the new academic year

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# APPENDIX

## A. Midline Questionnaire

SECTION TR: TRACKING SHEET (SECTION TR)		
<i>Respondent information for this survey</i>		
<i>Call</i>		
<b>Script</b>	Good day! I'm \${enum_name} calling from Innovations for Poverty Action, a U.S.-based research non-profit. We are partnering with a2i in Bangladesh to conduct a study on how the new Coronavirus is affecting children's learning. We spoke to \${resp_name} a few months ago to collect some information about the household and children in grades 6-10. We would like to talk to you again for some follow-up questions to understand the learning needs of your children over the last month. The information you provide is important to help policymakers understand the needs of students across Bangladesh. Your participation today will take 20 minutes. As researchers, we cannot provide direct benefits to you, but we will provide a 40 BDT mobile recharge for your participation. Can we continue talking?	1 Yes 2 No >> TR4 3 Call not answered >> TR4
<b>SCREEN1</b>	Is \${resp_name} the father or mother of the \${child_name_1}, \${child_name_2}, and \${child_name_3}?	1 Father 2 Mother 3 Sibling (older/younger) >> <b>Screen2</b> 4 Other adult >> <b>Screen 2</b>
<b>SCREEN2</b>	We would like to speak to either one of the parents of the children. Could you put him/her on the phone?	1 Parent now on phone >> <b>TR3 - Consent</b> 2 Call back later >> <b>TR4</b> 3 Share different number >> <b>TR4</b>

<p><b>TR3 - CONSENT</b></p>	<p>Now let me share some information in detail. This study involves research, which is different from routine care or programming, because we are trying to learn about certain things rather than only providing services.</p> <p>I would like to invite you to participate in this research and will ask you some questions about your family's access to technology and the school activities of children in your household. Your answers are important to inform policymakers about how households are coping with the challenges they are experiencing right now.</p> <p>Participation is completely voluntary, and you can refuse to participate in this discussion, stop the discussion at any time or skip any questions that make you feel uncomfortable without any fear of repercussion. We do not anticipate any risks from participation in this research.</p> <p>As part of the study, you may be randomly selected to receive some additional messages from us by SMS. You may also be randomly selected to receive free data packages. If you are selected, you will be notified by SMS and will only need to confirm whether you accept.</p> <p>We will keep your information confidential to the extent possible, and information that identifies you or your family will be protected to prevent third parties from accessing it. a2i will not have access to your personal information or the answers that you give us, and we will only share our overall findings with them. We hope to record part of your interview for quality assurance. If you do not want to be recorded, you can participate without this component.</p>	<p>1 Consent &gt;&gt; TR4  2 Do not consent &gt;&gt;End  3 Call back later &gt;&gt; TR4</p>
<p><b>TR3.1 - AUDIO CONSENT</b></p>	<p>Do you agree have brief segments of our discussion audio recorded?</p>	<p>1 Audio recording consent  2 Do not consent for audio recording  3 Call back later &gt;&gt; TR4</p>
<p><b>TR3.2 - QUERIES</b></p>	<p>Do you have any further questions?</p>	<p>1 Yes  2 No</p>
<p><b>TR4</b></p>	<p>What was the response?</p>	<p>A: Caregiver/parent consented to be surveyed  No interview: NA: No one picked up the phone  No interview: NA: Phone switched off/ out of network/ invalid  No interview: A: Household not eligible  No interview: A: Reschedule: respondent available later  No interview: A: offered caregivers number</p>

		No interview:A: Hung up the phone before consent
		No interview:A: Refused: Did not consent(refusal)
<b>SCREEN3</b>	Please give us the number of the parent/guardian.	Name - Number - <b>&gt;&gt; TR4 after recording name and number of parent</b>
<b>Screen4</b>	Enumerator: Whom did you get on the call for survey?	1. Parent 2. Guardian (in case parent in not alive) 3. Other older relative
	[SCREEN1=5/6]Why the guardian was not available?	Open ended

#### HOUSEHOLD

I'd like to now ask you some questions about your household

Which division do you live in?	[Region Options]
Which district do you live in?	[District Options, narrowed by region]
Which upazila do you live in?	[Upazila options narrowed by district]
Which union do you live in?	[Union options narrowed by upazila]

#### INFORMATION ON CHILDREN

**[Grades 6-10] {Repeat for each child} "I'd now like to ask you about each of the children in grades 6-10, for whom you are a guardian**

CR01	Does [NAME] still live in this household?	0 No >>CR02 1 Yes
CR02	[if not] Why not? >> NEXT CHILD	1 Married 2 Living with other parent 3 Living with other family members beside parents 4 Moved for education 5 Moved for work 6 Deceased 7 Other _____
<b>CHILD BEHAVIORS: Use of learning resources and activities</b>		
CR03	How many days would you say [Name] typically did schoolwork (studied) in a typical week in the month of March?	.... Days
CR04	How many hours a week would you say [Name] typically did schoolwork/studied in the past week?	
CR05	Has [Name] received any private tutoring during the past month?	1 Yes 2 No >> CR09

CR06	How many hours of tutoring did [Name] receive during a typical week in the month of March?	
CR07	[If Yes to CR05] How much would you say you spent in total during the month of March for [Name]'s tutoring?	_____
CR09	I'm now going to list a set of possible learning resources. For each one, would you tell me if [NAME] used this at all during the past month?	<p>[LEARNING RESOURCE]:</p> <ol style="list-style-type: none"> <li>1 Watched Sangsad TV</li> <li>2 Watched video lessons on a smartphone or other device</li> <li>3 Used Robi platform</li> <li>4 Used other internet resources</li> <li>5 Read textbooks/schoolbooks</li> <li>6. Worked in exercise books</li> <li>7. Met with a teacher in person</li> <li>8. Met with a teacher remotely: by phone or internet</li> <li>9 Attended in-person school classes</li> <li>10 Attended remote school classes</li> <li>11. Other: _____</li> <li>12 None of the above</li> </ol>
<b>CR09a asked only for respondents of the long version of the questionnaire</b>		
CR09a	[If CR09 = 7] Can you describe what your meetings w/ teachers are like?	<text>
CR10	How many total hours would you say [Name] used [LEARNING RESOURCE] during a typical week in the month of March?	... hours
CR11	How helpful was [LEARNING RESOURCE] for [NAME] ?	<ol style="list-style-type: none"> <li>1 Very helpful</li> <li>2 Somewhat helpful</li> <li>3 Not at all helpful</li> </ol>
CR12	Among the resources that [NAME] used in March, which resource do you think was the most useful for? And the least useful?	<p>..... Most useful [<b>MAYBE ADD OPTIONS IN A DRODOWN MENU</b>]</p> <p>..... <b>LEAST USEFUL [options]</b></p> <p><b>Don't know</b></p>
CR13	During the month of March, did your child use any of the following devices to engage in learning activities?	<ol style="list-style-type: none"> <li>1. Television</li> <li>2 .Feature phone</li> <li>3. Smart phone</li> <li>4. Tablet</li> <li>5. Computer</li> <li>6. None of the above</li> </ol>
CR14	During the month of March, did [NAME] use any of the following to access learning activities?	<ol style="list-style-type: none"> <li>1. Pre-paid data package &gt;&gt;CR15</li> <li>2. Post-paid internet</li> <li>3. Wi-fi</li> <li>4. None of the above</li> </ol>
CR15	[If pre-paid data package] During the month of March, about how many GB of data would	<p>___ GB</p> <p>-999 Don't Know</p>

	you estimate [NAME] for educational activities?	
CR15a	[If CR15 = -999] During the month of March, how much did you spend in BDT on data packages for [NAME]'s educational activities?	___ BDT
CR16	During the month of March, how much would you say you spend on all phone and internet charges for [child] for educational activities?	
CR18	How much would you say you spent in the during the month of March for [Name]'s learning activities, excluding tutoring and the cost of any phone and internet charges? (books, for-pay website resources,...)	_____
<b>CHILD BEHAVIORS: Outside options to learning</b>		
CR20	Did [Name] work for pay or help with a family business or on a family farm during the past 30 days?	1 Yes 2 No >> CR24
CR21	[If Yes to CR20] How many total days did he/she work over the past 30 days??	.... Days / ..... Months
CR22	[If Yes to CR20] How many hours in a day did he/she typically work?	.... Hours
CR23	How many hours did [Name] spend taking care of siblings or household chores <b>during a typical week in the month of March?</b>	
<b>PARENTAL BEHAVIORS: Time investment in education</b>		
CR24	<i>If R is a parent:</i> During the month of March, how often were you or another parent at home while [NAME] was engaging in learning activities?  <i>If R is another family member:-</i> During the month of March, how often was at least one of [NAME]'s parents at home while [NAME] was engaging in learning activities?	1 Always 2 Often 3 Sometimes 4 Rarely 5 Never -99 Don't know -97 Refused
CR25	In a typical week during the month of March, how many days did you or another parent remind [NAME] to complete learning activities?  <i>If R is another family member:-</i> In a typical week during the month of March, how many days did a parent remind [NAME] to complete learning activities?	

CR26	Over the past month did any other adults/old siblings in the household or nearby, besides [NAME]'s parents help [NAME] with his/her learning? [if yes] Who?	<p>[pick multiple]</p> <ul style="list-style-type: none"> <li>1 Uncle</li> <li>2 Aunt</li> <li>3 Neighbor</li> <li>4 Cousin</li> <li>5 Older sister</li> <li>6 Older brother</li> <li>7 Mother</li> <li>8 Father</li> <li>9 Grandfather</li> <li>10 Grandmother</li> <li>11 Friend</li> <li>12 Schoolteacher</li> <li>13 Religious leader</li> <li>14 Other(specify)</li> <li>15 None of the above</li> </ul>
CR27	How many hours did they spend helping [NAME] in a typical week in the month of March?	
CR28	<p>In a typical week during the month of March, how many hours did you or another parent spend helping your child with their educational activities?</p> <p><i>If R is another family member:-</i> In a typical week during the month of March, how many hours did a parent spend helping [NAME] with their educational activities?</p>	
CR29	<p>[If CR28&gt;0], which of the following activities did you or another parent do with [NAME]?</p> <p><i>If R is another family member:</i> If CR28&gt;0], which of the following activities a parent do with [NAME]?</p>	<ul style="list-style-type: none"> <li>1 Explain or clarify materials and concepts</li> <li>2 Help with assignments or specific problems</li> <li>3 Watch videos or TV with [NAME]</li> <li>4 Help find additional resources</li> <li>5 Provide encouragement and support</li> <li>6 Provide supervision to help [NAME] stay on task</li> <li>7 Other _____</li> </ul>

**Only for respondents of the long version of the questionnaire**

<b>PARENTAL EXPECTATIONS AND BELIEFS</b>
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CR30	Now, I'd like you to think about the learning activities that [NAME] has done during the month of March. How would you compare his/her current level of knowledge and ability today to the beginning of March?	1 Has learned a lot 2 Has learned something, but not very much 3 Has not learned anything -99 Don't know
CR31	Did [NAME]'s school ask students to submit assignments regularly throughout the school year after the closures? (either in person or remotely)	0 No 1 Yes -999 Don't know
CR31a	[If CR31 = yes] Overall, about how many of these assignments did [NAME] submit?	0 None 1 A few 2 Some 3 Most 4 All -999 Don' know
CR32	Did [NAME]'s school ask students to submit a set of final assignments at the end of 2020?	0 No 1 Yes -999 Don't know
CR32a	[If CR32 = yes] Did [NAME] submit final assignments to his/her school at the end of 2020?	
CR32b	[if CR32=yes] About how many assignments did [NAME] submit?	1. None, 2. Few, 3. Some, 4. Almost all, 5. All -999 Don't Know
CR33	[If YES] Did [NAME] receive a grade or feedback on these assignments?	
CR34	Do you expect to send [NAME] to school once it re-opens?	1 Yes 2 No
CR35	Do you think that [NAME] is ready to start school at his/her current level?	1 Yes 2 No
<b>CR36 asked in both long and short versions of the questionnaire</b>		
CR36	How much in tuition fees do you pay to the school?	____ BDT  <i>Frequency: Monthly, Quarterly, Annual</i>
CR37	[If CR34=1] In what grade will [NAME] enroll?	1 Grade 6 2 Grade 7 3 Grade 8 4 Grade 9 5 Grade 10 6 Grade 11 7 Grade 12

CR38	Is this the same school that she attended at the beginning of 2020?	1 Yes 2 No
CR39	{If CR38=2} Why is it a different school? (do not read choices)	1 Moving to next level 2 Previous school is not opening 3 New school is higher quality 4 New school is closer 5 New school is lower cost 6 Family moved to new location 7 Other _____
CR40	What level of education do you expect [Name] to complete?	1. Primary School Certificate 2. Junior School Certificate 3. Secondary School Certificate 4. Higher School Certificate 5. University Graduate 6. Post Graduate 7. Vocational education 8. Madrasa Hafiz 9. Ebtadayee (grade I-V) Equivalent to primary. 10. Dakhil (grade VI-X) Equivalent to SSC. 11. Alim (grade XI-XII) Equivalent to HSC. 12. Fazil (grade XIII-XIV) Equivalent to degrees. 13. Kamil (grade XV-XVI)

## B.Tables: Tests of means and proportions

	<b>Boys</b>	<b>Girls</b>	<b>Difference</b>	<b>p</b>
<b>Proportion of children found currently living in the household</b>	0.99	0.98	0.00	0.22
<b>N</b>	2133	2539		
<b>Average number of days of schoolwork done by children</b>	5.53	5.76	-0.23*	0.00
<b>N</b>	2543	3019		
<b>Average time (in hours) spent on schoolwork by children</b>	18.10	19.34	-1.24*	0.00
<b>N</b>	2347	2775		
<b>Proportion of children engaging in private tutoring</b>	0.65	0.64	0.02	0.21
<b>N</b>	2583	3050		
<b>Average time (in hours) spent on private tutoring by children</b>	11.17	11.12	0.05	0.18
<b>N</b>	1571	1793		
<b>Average money (in BDT) spent on private tutoring for children</b>	1856.11	1624.39	231.73*	0.00
<b>N</b>	1544	1770		
<b>Proportion of children using various learning resources</b>				
<b>Watched Sangsad TV</b>	0.19	0.20	-0.02	0.08
<b>Watched video lessons on a smartphone or other device</b>	0.27	0.24	0.03*	0.01
<b>Used Robi platform</b>	0.05	0.04	0.01	0.06
<b>Used other internet resources</b>	0.06	0.06	0.00	0.73
<b>Read textbooks/schoolbooks</b>	0.93	0.95	-0.02*	0.00
<b>Worked in exercise books</b>	0.32	0.32	0.00	0.86
<b>Met with a teacher in person</b>	0.63	0.61	0.02	0.17
<b>Met with a teacher remotely: by phone or internet</b>	0.12	0.12	0.00	0.98
<b>Attended in-person school classes</b>	0.01	0.01	0.00	0.80
<b>Attended remote school classes</b>	0.10	0.07	0.03*	0.00
<b>None of the above</b>	0.02	0.01	0.01	0.08
<b>N</b>	2589	3056		
<b>Average hours spent by children on using various learning resources</b>				
<b>Watched Sangsad TV</b>	5.53	6.81	-1.28*	0.00
<b>N</b>	351	452		
<b>Watched video lessons on a smartphone or other device</b>	7.03	7.32	-0.29*	0.00
<b>N</b>	479	555		
<b>Used Robi platform</b>	5.83	6.06	-0.24	0.14
<b>N</b>	81	80		
<b>Used other internet resources</b>	6.87	6.98	-0.11	0.39
<b>N</b>	116	138		
<b>Read textbooks/schoolbooks</b>	18.12	19.28	-1.17*	0.00
<b>N</b>	2188	2627		
<b>Worked in exercise books</b>	9.18	8.84	0.34*	0.00
<b>N</b>	575	662		
<b>Met with a teacher in person</b>	9.44	9.90	-0.46*	0.00
<b>N</b>	1425	1674		

<b>Met with a teacher remotely: by phone or internet</b>	7.56	6.18	1.37*	0.00
<b>N</b>	220	265		
<b>Attended in-person school classes</b>	13.18	11.43	1.76*	0.00
<b>N</b>	33	40		
<b>Attended remote school classes</b>	8.15	8.88	-0.73*	0.00
<b>N</b>	204	175		
<b>Average data (in GB) used by children for education in March</b>	49.72	23.49	26.23*	0.00
<b>N</b>	334	391		
<b>Average prepaid amount (in BDT) used for education in March</b>	322.46	328.74	-6.29*	0.00
<b>N</b>	70	82		
<b>Average data (in GB) used by children for education in March</b>	148.51	131.75	16.76*	0.00
<b>N</b>	2271	2772		
<b>Average prepaid amount (in BDT) used for education in March</b>	943.53	948.40	-4.87*	0.00
<b>N</b>	2018	2373		
<b>Average charges (in BDT) for educational activities for children in March</b>	5125.58	4025.99	1099.59*	0.00
<b>N</b>	1354	1453		
<b>Average charges (in BDT) for learning activities for children in March</b>	0.16	0.07	0.09*	0.00
<b>N</b>	2580	3046		
<b>Average annual school fee for children (in BDT)</b>	18.51	24.19	-5.68*	0.00
<b>N</b>	398	206		
<b>Proportion of children working for pay in the past month</b>	0.16	0.07	0.09*	0.00
<b>N</b>	2580	3046		
<b>Average number of days spent working for pay by children in the past month, conditional</b>	18.51	24.19	-5.68*	0.00
<b>N</b>	398	206		
<b>Average hours spent working for pay by children in the past month, conditional</b>	4.77	2.43	2.34*	0.00
<b>N</b>	398	204		
<b>Average hours spent on care-work by children in the past month, conditional</b>	10.28	11.57	-1.29*	0.00
<b>N</b>	1315	2126		
<b>Average times parents reminded children to do schoolwork in a typical week</b>	6.20	6.26	-0.06	0.17
<b>N</b>	817	981		
<b>Average times other adults reminded children to do schoolwork in a typical week</b>	0.35	0.36	0.36*	0.00
<b>N</b>	2561	3035		
<b>Average hours that adults spent helping children with studies</b>	6.55	6.86	-0.31*	0.00
<b>N</b>	2259	2632		
<b>Proportion of children who had adults to help them with schoolwork</b>	4.48	5.10	-0.62*	0.00
<b>N</b>	190	257		