

SMS GIRL DATA INSIGHTS:

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As schools reopened after 18 months, are adolescent girls and boys back in school and engaged with learning? Evidence from four surveys in Punjab, Pakistan.

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KEY TAKE-AWAYS

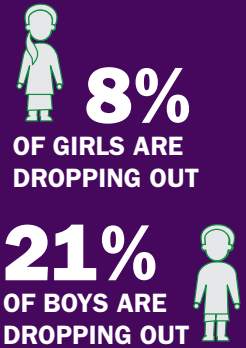
This brief summarizes the main findings from four consecutive telephone surveys of families in Punjab, Pakistan. The surveys were conducted as part of a study assessing the effectiveness of sending phone-based text messages to parents to ensure that adolescent girls (typically aged 10–14 years) continue to learn during school closures and re-enroll in school once schools reopen after the COVID-19 pandemic.

This is the second brief in a series of research briefs, which aims to draw a picture of how the pandemic effects are evolving in the school system over time. The data used in this brief describes the experiences of 5,898 families in Punjab using four rounds of data collected in (1) August–October 2020, (2) November 2020–January 2021, (3) February–March 2021, and (4) September–October 2021. The data reveal the following take-aways.

1 The respondents were given a list of potential reasons for not re-enrolling children to school which were both pandemic related as well as general, including the option to state any other reasons.

2 Hasan, A., Geven, K., & Tahir, A. (2021). SMS Girl Data Insights.

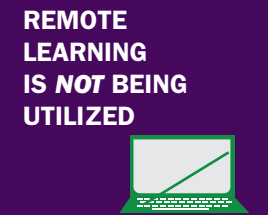
1. **Punjab is losing adolescent children from the school system at faster rates than initially expected, and adolescent boys are dropping out at higher rates than adolescent girls.** Post school reopenings in September 2020–October 2021, boys in our sample re-enroll at low rates for all groups. There is more variation for girls by social background: girls from poor households, rural areas, and those enrolled in public schools and schools supported by the Punjab Education Foundation (PEF) seem to be re-enrolling at lower rates than girls from richer households, urban areas, or those attending private schools.



2. **The most common cited reasons for not re-enrolling include financial difficulties, pursuing religious education, and parents' views that their child would be unable to catch up with learning.**¹ Health issues of the child or a family member also seem to be impacting girls' re-enrollment in school. While some of these reasons may not necessarily be directly related to the pandemic, dropouts are much higher than in a regular year.



3. **Engagement with remote learning (offered online, on television, or on radio) was low,² and has decreased substantially as schools reopened.** Fewer girls and boys are taking advantage of remote learning than at the start of the pandemic; boys' engagement is lower than that of girls. That said, remote learning still has an audience and may fill demand for additional learning support.



4. **Families are hiring tutors as an alternative to in-person learning, but tutors are hired much more regularly by richer families.** This creates inequalities in access to additional learning support.



5. **Girls still spend considerably more time on household chores than boys.** Over time, boys and girls both reduced time spent on family care as schools reopened. Since school reopenings in September 2021, girls spent about twice as much time as boys on family care (46 minutes for girls, 22 minutes for boys, daily).



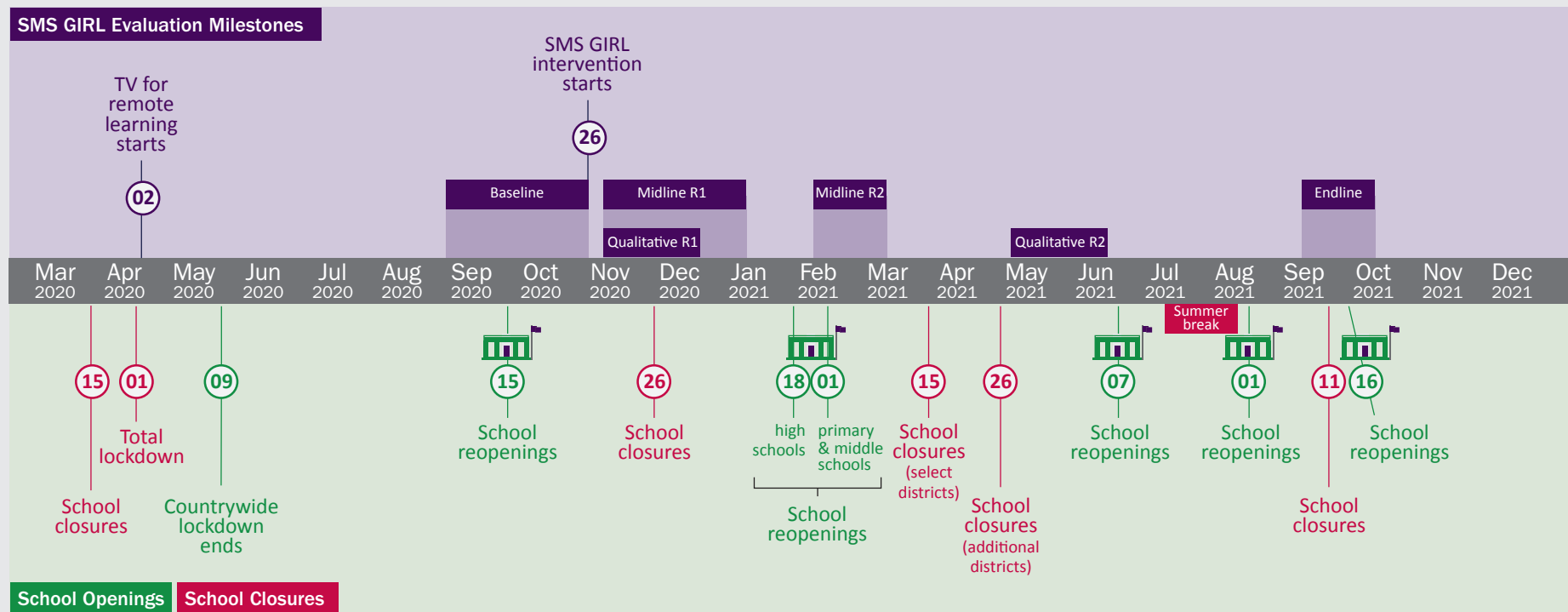
THE STUDY SETTING

Schools in Punjab were closed initially on March 15, 2020, to prevent further spread of the COVID-19 virus. Since then, schools have alternated between opening and closing, with the total period of school closures lasting approximately 10.5 months. We have now tracked the impact of school closures on a sample of families and children since August 2020. The first round of data (Baseline) was collected during August 2020–October 2020, the second round of data (Midline 1)

was collected during second period of school closures (November 2020–January 2021), third round of data (Midline 2) was collected in (February–March 2021), approximately a month after schools reopened again in late January 2021, and fourth round of data (Endline) was collected in September–October 2021, right after schools reopened again in mid-September 2021 (figure 1). Data on learning levels will be collected in the next round of data collection (planned for November 2021).

The survey sample includes 5,898 families, from which we track either a girl or a boy aged 10–14 and those who reported being enrolled in grades 5–7 before the pandemic. Out of the total sample, 5,352 families have an indexed girl, and 536 families had an indexed boy.³ The survey respondents are from 6 districts in Punjab.⁴ The students about whom we present information below are predominantly enrolled in public, private, and Punjab Education Foundation schools.

Figure 1: A Timeline of School Closures and the SMS GIRL Evaluation



³ The sample of girls is much larger to create enough statistical power to estimate the effects of the impact evaluation (not included in this brief).

⁴ Attock, Faisalabad, Lahore, Muzaffargarh, Rahim Yar Khan, and Sargodha.

THE STUDY SETTING

The sample comprises girls and boys who were previously sampled for the SABER Service Delivery Survey conducted in 2018 and was a representative sample of Grade 4 students in the Punjab province. The sample was complemented with an additional sample from a census frame of public schools in two districts in the south of Punjab.⁵ In each survey round, the questionnaire was completed by parents of the children in our sample. The analysis uses baseline weights to account for survey design and attrition over various survey rounds. Round 2 (November 2020–January 2021) was answered by 3,317 households, Round 3 (February–March 2021) was answered by 4,482 households, and Round 4 was answered by 3,857 households.

Our research questions stemmed out of a concern for a potential decline in girls' enrollment due to the COVID-19 pandemic. Earlier studies had pointed out that girls faced many risks during pandemics, for instance during the Ebola outbreak in Sierra Leone in 2016.⁶ We hypothesized that girls were more likely to take up household tasks (such as caring for younger siblings),

and that families could be tempted to make these new roles permanent by keeping their girls at home. We were also concerned about unequal intra-household expenditures, and that in a situation where families were forced to decide between their sons and daughters, they would invest more in their sons' educations.

In our first brief,⁷ we documented how families were coping with the closures. It became clear that most families experienced

the pandemic primarily as an income and a schooling shock. The first brief also showed that a substantial share of students was at risk of dropping out, particularly children in their adolescence. For instance, parents reported that about 1 in 10 children aged 14–17 years were at risk of dropping out, versus about 1 in 40 children aged 10–12 years. Now, we present the experience of these families with subsequent school reopenings and closures.

Figure 2: Study Sample Population

Round 1
(August–September 2020)

5,898 households

Round 2
(November 2020–January 2021)

3,317 households

Round 3
(February–March 2021)

4,482 households

Round 4
(September–October 2021)

3,857 households



Grades 5–7

⁵ Muzzafarghar and Rahim Yar Khan.

⁶ Bandiera et al, 2020. Do School Closures During an Epidemic have Persistent Effects? Evidence from Sierra Leone in the Time of Ebola. Working Paper. https://www.homepages.ucl.ac.uk/~uctpimr/research/ELA_SL.pdf

⁷ Available at: <https://openknowledge.worldbank.org/handle/10986/35477>

5 KEY FINDINGS

1

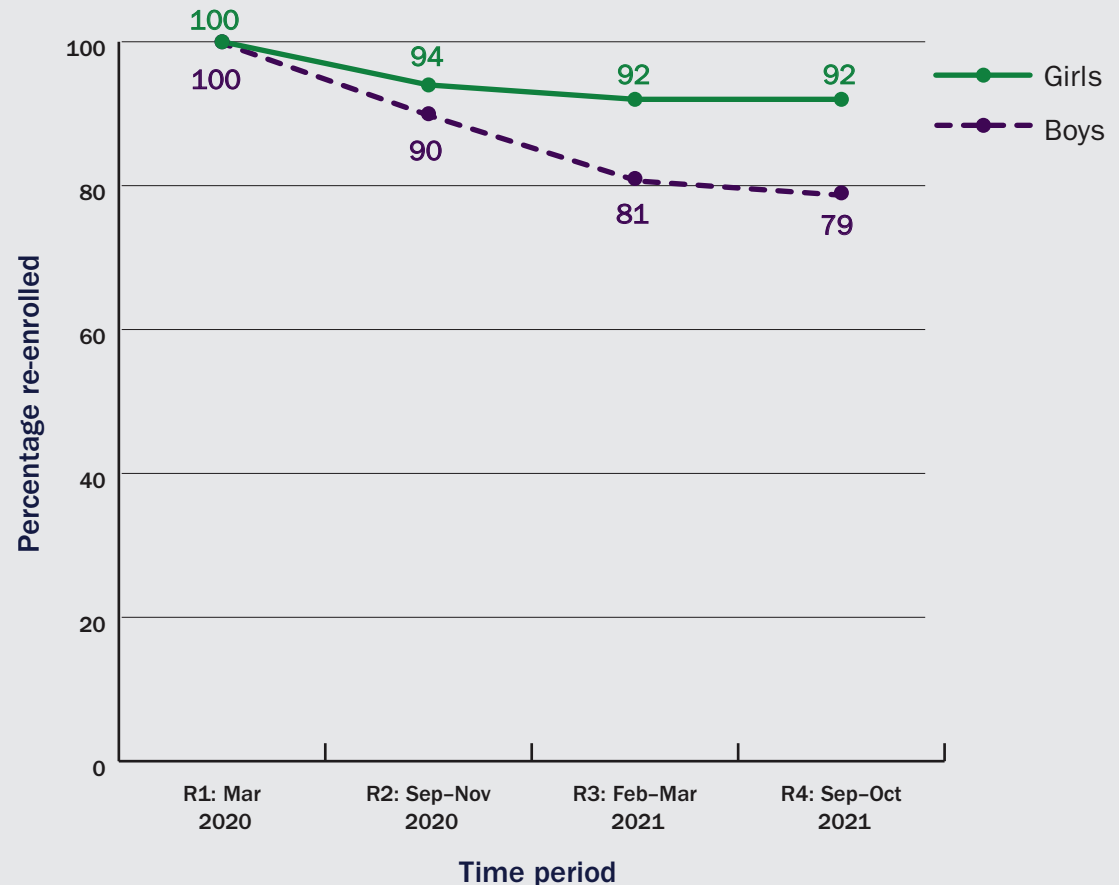
How many adolescent children are we losing from the school system?

As schools progressively reopened from September 2020 onwards, parents are pulling a large number of adolescent students out of school. By the first school reopenings (15 September–November 2020), 6 percent of girls and 10 percent of boys who were enrolled in school prior to the pandemic were no longer enrolled (figure 3). Following the rise in COVID-19 cases, schools were closed again and by the time they reopened again (February–March 2021), 8 percent of girls and 19 percent of boys were no longer in school (figure 3). By the third school reopenings (September–October 2021), dropout for girls remained the same, while dropout for boys increased to 21 percent (figure 3). Of those who did return to school, boys spend an average of 4.3 days in school in a 6-day week compared to 3.9 days attended by girls.

Substantially more adolescent boys than girls are not going back to school. This finding is confirmed in other surveys, such as a random-number dialing survey conducted at national level.⁸ At the start of our surveys, we expected that adolescent girls would drop out in higher

⁸ This recent Gallup random-number dialing survey conducted between December 2020 and June 2021 found that by December '20–January '21, re-enrollments were 94% for children aged 8–15 in Punjab and by June 2021, that number was 90%. The same survey also confirmed that drop-outs for boys are somewhat higher than for girls. The ASER 2021 survey, conducted in four districts in Punjab with a much younger study population found a lower dropout rate.

Figure 3: Enrollment by Time Periods



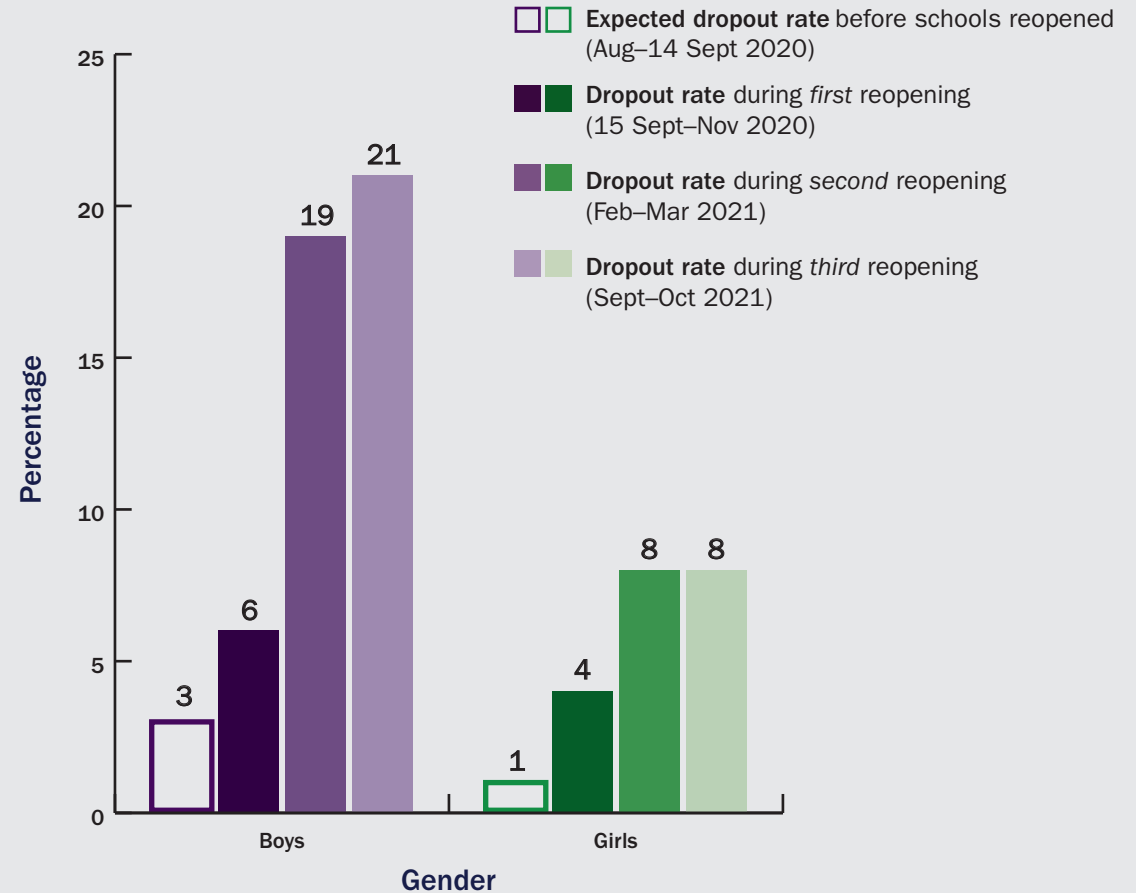
Notes:

- Data for March 20 are based on parents' reporting whether their child was enrolled in school before the first school closure in March 20, collected in the first round of data collection (August–October 2020). September–November 2020 data denote actual enrollment figures while schools were open from 15 September–November 2020. February–March 2021 data denote actual enrollment figures in the months of February–March 2021. September–October 2021 data denote actual enrollment figures in the months of September–October 2021.
- The figure shows weighted estimates.

numbers than boys, given that there are pressures on girls to take on household roles. While the data shows that adolescent girls are in fact dropping out in large numbers, adolescent boys are leaving the school system in even larger numbers than adolescent girls.

Over time, adolescent children are dropping out at much higher levels as compared to parental expectations early into the pandemic (figure 4). Parents in our first survey wave expected a 3 percentage point dropout among boys and a 1 percentage point dropout among girls (see figure 4). The share of students who ended up not returning to school during the first period of school reopenings (15 September–November 2020) is substantially higher, with 6 percent boys and 4 percent girls dropping out. The gaps between expectations and reality grew worse over time as there is a drop in enrollment of 19 percent for boys and 8 percent for girls by the time schools reopened again in February–March 2021 (figure 4). By the third school reopenings (September–October 2021), the gap between girls and boys remained the same, while the gap between expected and actual re-enrollment grew as 21 percent of boys in our sample dropped out of school (figure 4). We can triangulate this finding with household survey data in a regular school year. Household survey data tells us that the dropout rates for adolescents are 2 percentage points (p.p.) on average from grade to grade in the period grade 6–8 (1 p.p. are lost in the transition between grades 6 and 7, 1 p.p. between grades 7 and 8, and 4 p.p. by the end of grade 8, respectively) for both girls and boys (MICS, 2017–18).

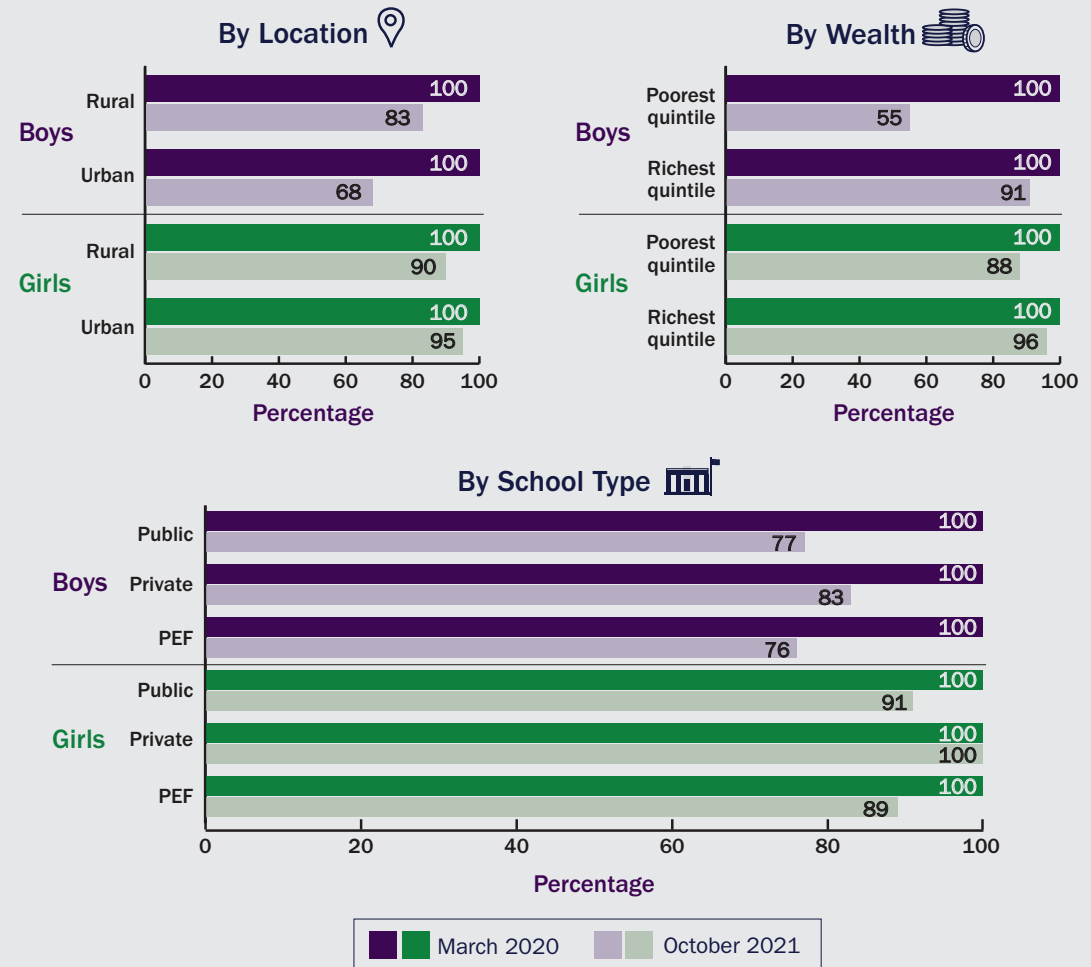
Figure 4: Expected versus Actual Dropout



Note: The figure shows weighted estimates

Dropout rates seem to be more severe for girls in rural areas, and those enrolled in public and PEF schools than girls from other backgrounds; nonetheless, enrollment trends are downward sloping across groups. By the time schools reopened for the third time (September–October 2021), 10 percent of girls in rural areas were no longer enrolled in schools as compared to 5 percent of girls in the urban areas (figure 5). Looking at differences by school type, there was a 23 percent drop in enrollment for boys and 9 percent for girls in public schools by the third period of school reopenings (September–October 2021). Similar trends are observed for both boys and girls in PEF schools. This is in sharp contrast with the situation in private schools, where there is a zero drop in enrollment for girls and a 17 percent drop in enrollment for boys by the third period of school reopenings (September–October 2021) (figure 5).

Figure 5: Changes in Enrollment 18 months into the Pandemic by School Type, Location, Region, and Wealth Status



Notes:

- In the wealth disaggregation figure, rich represent the top quintile in the wealth distribution whereas poor represent the bottom quintile.
- The figures show weighted estimates.

2

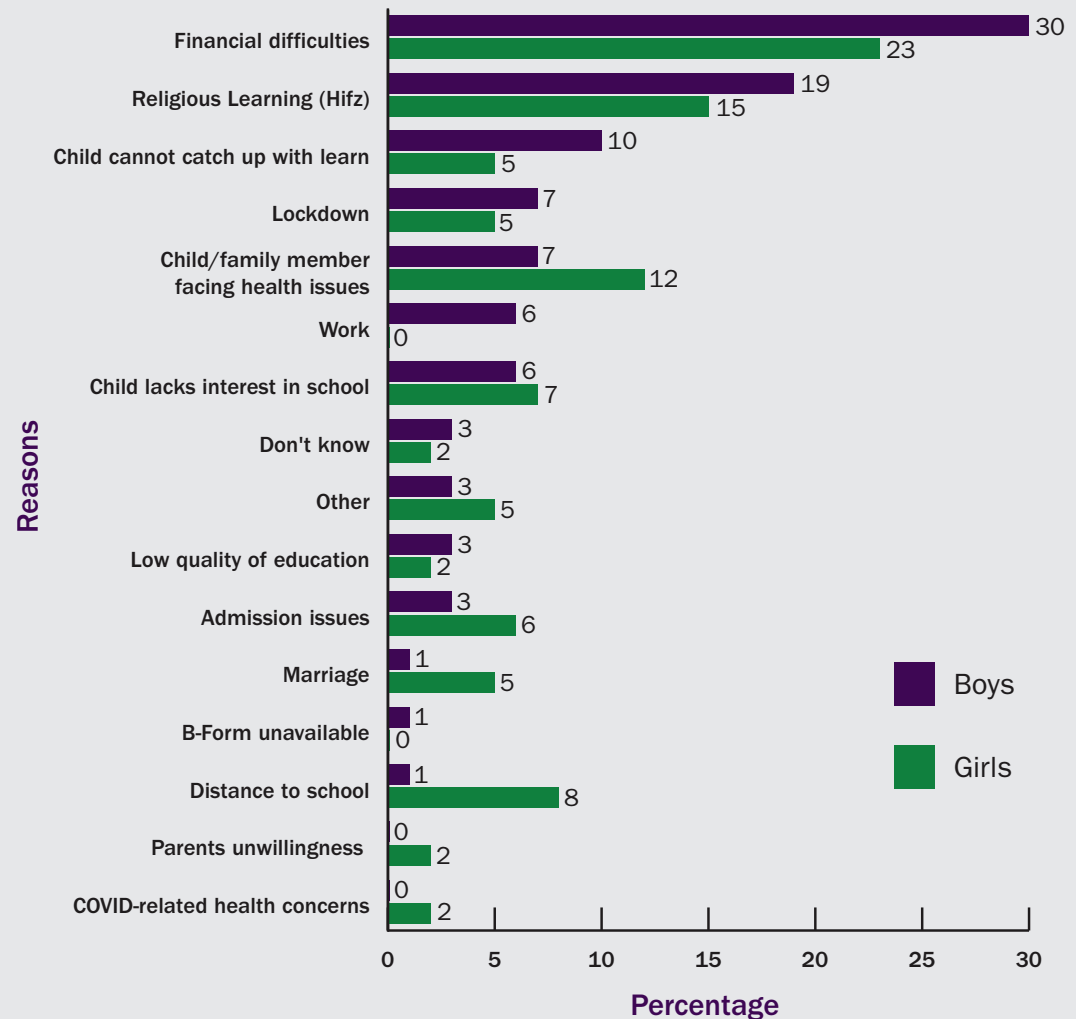
Why are families not re-enrolling their children in school?

Families cite several reasons for not re-enrolling their children, including financial difficulties, religious learning,⁹ and parents' concern that children would not be able to catch up with learning. The latter point is particularly pronounced as a difference between boys and girls, with families much less likely to believe that boys can catch up (possibly due to their involvement in income generating activities). The most common reason parents cite for not re-enrolling their children in schools is financial difficulties (figure 6). Health issues of the child or a family member seems to have a greater impact on girls not returning to school (12 percent) relative to boys (7 percent). The absence of the right level of schools in proximity and marriage are also some of the reasons for parents not re-enrolling their children in school, particularly for girls.¹⁰

⁹ Religious learning might be seen as an alternative to formal schooling.

¹⁰ The respondents were given a list of potential reasons for not re-enrolling children to school which were both pandemic related as well as general, including the option to state any other reasons.

Figure 6: Reasons for Not Re-enrolling Children in School



Notes:

- a) 413 families (9.2 % of the sample) reported not having re-enrolled their children back to school in March 2021, whereas 481 families (12.47 of the sample) reported the same in October 2021.
 b) Admission issues include unavailability of B-form, of schools in proximity and schools not accepting new admissions.

3

How much time do children spend learning, including remote learning?

Self-study at home increased for both girls and boys during the first school reopenings (15 September–October 2020) and second school closures (November 2020–January 2021), with girls spending over half an hour more than boys. By the second period of school closures both girls (139 minutes) and boys (95 minutes) were spending more time on average on self-study. This is higher from the average time spent by both girls (102 minutes) and boys (66 minutes) during first period of school closures (August–October 2020). However, by the time schools reopened in September–October 2021, both girls (107 minutes) and boys (76 minutes) were spending less time on self-study at home (figure 8a).

Student engagement with remote learning has gone down substantially, even when most children have access to either TV-based or online remote learning programs in principle.¹¹ During the first school closures (August–14 September 2020), 14 percent of girls' and boys' parents report that their children engaged with a remote learning activity at home (figure 7). For the second school closures

¹¹ Remote learning includes learning time spent on national and local TV stations, YouTube, and mobile learning apps. 66.7% of girls' households and 59.3% of boys' households in our sample have access to a television, and 34.9% of girls' and 27.8% boys' households have access to the internet.

Figure 7: Share of Children Engaged in Remote Learning during School Day by Gender



Note: The figures show weighted estimates.

(November 2020–January 2021), engagement with remote learning decreased significantly, with only 7 percent of girls and 10 percent of boys participating in any remote learning at home. By the time schools reopened in September–October 2021, 8 percent of girls and 2 percent of boys were participating in some remote learning at home (figure 7).

For both boys and girls, coming from a poor household means spending less time on remote learning relative to a child coming from a rich household. During the first lockdown, girls from rich households spent on average 15 minutes on remote learning in a day, whereas those from poorer households spent 10 minutes on the same. A similar disparity lies in the average time a female student from a public school (10 minutes) and PEF school (11 minutes) spends on remote learning relative to one who attends private school (16 minutes). Girls in urban areas also spend slightly more time on remote learning (19 minutes) relative to girls in rural areas (8 minutes).



4

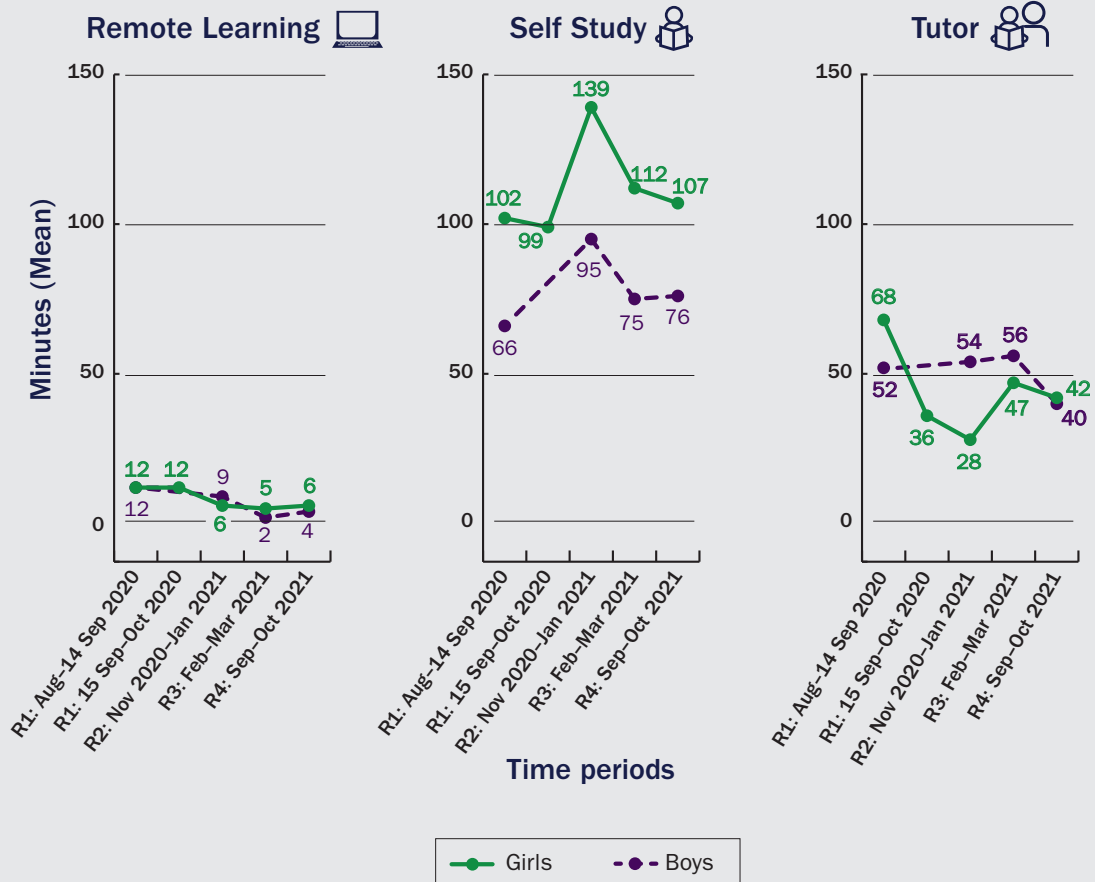
Are private tutors filling the learning gaps left by the pandemic and for whom?

Time spent studying with a private tutor is high, especially during periods of exams. By the second school reopenings (February–March 2021) girls spent a daily average of 47 minutes studying with a tutor, whereas, boys spent 56 minutes. Girls' time spent with a tutor decreased during the initial period that schools were open but equalized again in February–March 2021. However, by the third school reopenings, the time spent with tutor in a day decreased (girls spent: 42 minutes and boys: 40 minutes). The most time spent by girls when schools were open was near the end of the academic year, potentially in anticipation of end-of-the-year exams (figure 8a).

Engagement with remote learning and private tutors is higher among economically advantaged groups. Students who come from households that are wealthier, located in urban settings, and those who attend private schools are significantly more likely to have access to and engage in remote learning. This is consistent across both genders as well as time periods.

When looking at time spent with private tutors, a similar and sharper inequality is observed. Both girls and boys in urban areas spent close to twice the amount of time with private tutors relative to those in rural areas (rural girls: 36 minutes versus urban girls: 73 minutes). A more severe disparity is seen between students from the poorest versus wealthiest households (22 minutes and 48 minutes for girls respectively).

Figure 8a: Typical Student's Time Use in a Day by Gender



Notes:

- Time Periods:
 - Round 1: Schools closed (Aug–14 Sept 2020)
 - Schools open (15 Sept 2020–Oct 2020)
 - Round 2: Schools closed (Nov 2020–Jan 2021)
 - Round 3: Schools open (Feb–March 2021)
 - Round 4: Schools open (Sept–Oct 2021)
- All boys were surveyed in the first part of the baseline.
- The figures show weighted estimates.

5

How are household chores and family care distributed?

Girls spent more time on household chores, such as cooking and cleaning, relative to boys consistently across periods and spent over twice the amount of time as boys on household chores during the first school closures (August–14 September 2020). Time spent by girls on household chores peaked during school closures and decreased when schools reopened (figure 8b). During the first school reopenings and second period of school closures, boys were spending more time, on average, on family care relative to girls. However, when schools reopened in February–March 2021, boys and girls spent almost the same time on family care. This trend changed when schools reopened for the third time in September–November 2021, and girls (47 minutes) were spending considerably more time than boys (29 minutes) on family care. During the same time period, boys spent a lot more time working outside the household (11 minutes) relative to girls (1 minute) (figure 8b). However, the time both boys and girls spent working outside the household decreased considerably as compared to the second school reopenings in February–March 2021 (figure 8b).

Figure 8b: Typical Student's Time Use in a Day by Gender



Notes:

a) Time Periods:

- Round 1: Schools closed (Aug–14 Sept 2020)
- Schools open (15 Sept 2020–Oct 2020)
- Round 2: Schools closed (Nov 2020–Jan 2021)
- Round 3: Schools open (Feb–March 2021)
- Round 4: Schools open (Sept–Oct 2021)

b) All boys were surveyed in the first part of the baseline.

c) The figures show weighted estimates.

CONCLUSION

This brief presents key takeaways from four consecutive telephone surveys that have been conducted to assess the impact of school closures on girls' education in Punjab, Pakistan. The brief highlights the need to focus on both boys and girls to ensure continued enrollment in schools. It also documents a reduction in time spent on remote learning, although engagement was low to begin with. Whereas families appear to be resorting to private tutoring for additional support as schools continued a closing and reopening pattern during the pandemic, this option appears to be positively correlated to wealth, leaving the children from poorer families at a greater disadvantage. In the subsequent and final round of data collection (planned for November 2021), we seek to collect student assessments data to understand the pandemic effects on the learning levels in Punjab.



SMS GIRL DATA INSIGHTS

This brief is part of a series produced by the team managing the SMS Girl Impact Evaluation. This includes Koen Geven, Tazeen Fasih, Amer Hasan, Rabea Malik, Javaeria Qureshi, Kevin MacDonald, Ayesha Tahir, Sheena Fazili, Najaf Zahra, and Naveed Hussain. Data has been collected by RCons (quantitative) and CERP (qualitative).

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Figures

Authors' calculations based on SMS Girl survey data.

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