This research brief is one of a series that explores the impact of COVID-19 on education. It focuses on the potential parental role in learning and its association with foundational reading and numeracy skills.

KEY FINDINGS

- COVID-19 is depriving many children of learning opportunities at school. The availability of child-oriented books and engagement of parents can play an important role for continued learning at home, especially where there is no access to technology.

- All policy decisions and implementation on continuing education remotely should also be cognizant of the need to ensure parents’ capability to help their child learn, to prevent exacerbating further global learning inequities to the detriment of the most vulnerable.

CONTEXT

Although Sustainable Development Goal (SDG) 4 aims to ensure inclusive and equitable quality education and to promote learning opportunities for all, 53 per cent of children in low- and middle-income countries cannot read and understand a simple text by the end of primary school age. In low-income countries, the learning crisis is even more acute, with the ‘learning poverty’ rate reaching 90 per cent (World Bank). In the midst of the COVID-19 pandemic, 191 countries have implemented countrywide school closures, affecting 1.6 billion learners worldwide (UNESCO). In India alone, 320 million students from pre-primary to tertiary level are affected by school closures. In sub-Saharan Africa, 240 million are affected.

With children currently not able to study in classrooms, the importance of learning at home is amplified and the task of supporting children's learning has fallen on parents at a much larger rate. This is a significant burden, particularly for those who are also teleworking and those with limited schooling themselves.

UNICEF presented disparities in the home learning environment across and within countries in a recent blog post. The disparities in home learning environment, such as the availability of child-oriented books and support for homework, are striking across household wealth levels within countries. This research brief explores the disparities across and within countries in children’s learning outcomes and looks at the associations between parental engagement and learning, using the data from the MICS6 new modules on foundational reading and numeracy skills (used for monitoring the SDG 4.1.1 indicator) and on parental engagement (see more details on MICS6 and the foundational skills module and measurement here.)

FOUNDATIONAL READING AND NUMERACY SKILLS AND DISPARITIES

Despite the global efforts, many children still do not achieve foundational literacy and numeracy skills.

For children aged 7–14, the acquisition of reading skills varies a lot, both across and within countries (see Figure 1). And even in middle-income countries like Kyrgyzstan, Mongolia or Tunisia, only around 60 per cent of children acquire foundational reading skills. Among the ten countries where MICS6 data has been analyzed, Sierra Leone and Madagascar are the two countries with the lowest achievements in children’s reading skills.
All countries, except Mongolia, show large disparities against the poorest. In Sierra Leone only 2 per cent of children from the poorest quintile reach the foundational reading skills. This signals that much more should be done for the most vulnerable children in order to achieve quality learning for all.

Although they are more limited, gender differences also exist, to the detriment of boys, with the exception of Sierra Leone where the trend is reversed (see Figure 2). The gender gap is the largest in Lesotho where 53 per cent of girls achieve the foundational reading skills, compared to only 34 per cent of boys. As for reading skills, there are large differences across socioeconomic status, to the detriment of children from the poorest households, with the exception of Mongolia. In Zimbabwe, for instance, only 13 per cent of children from the poorest households achieve foundational numeracy skills, compared to 47 per cent of those living in the wealthiest households. In Madagascar, only 1 per cent of children from the poorest households get a chance to learn basic maths.

Gender differences are overall more limited for numeracy skills than for reading skills. In Tunisia, Pakistan (Punjab) and Sierra Leone, boys perform slightly better than girls while in Kyrgyzstan, Mongolia, Bangladesh, Zimbabwe, Suriname, Lesotho and Madagascar they perform slightly worse (see Figure 4).

Gender differences among children from the poorest households are also more limited than for reading skills, with the exception of Kyrgyzstan and Zimbabwe where differences are larger, to the detriment of the poorest boys.

In reference to numeracy, the situation is no better. Among the ten countries with data, Kyrgyzstan is the only country with half of the children aged between 7 and 14 achieving foundational skills (see Figure 3). In some countries, only a marginal proportion of children are acquiring foundational numeracy skills: 13 per cent in Lesotho, 12 per cent in Sierra Leone and Pakistan (Punjab) and 7 per cent in Madagascar.

In Kyrgyzstan, Mongolia and Suriname, gender gaps are marginal overall but larger gender disparities exist among children from the poorest households, to the detriment of boys. For instance, in Suriname, only 28 per cent of the poorest boys acquire reading skills, compared to 37 per cent of the poorest girls.
HOME ENVIRONMENT, PARENTAL ENGAGEMENT AND ASSOCIATIONS WITH LEARNING OUTCOMES

The importance of the home environment for learning has been documented in many studies. Robust evidence has demonstrated the association between the home literacy environment (represented by access to reading material and related support for its use) and children’s reading scores (see, for instance, Dowd et al., 2017).

Availability of child-oriented books at home

In reference to child-oriented books availability and use at home, UNICEF’s recent blog post showed large disparities across and within countries, to the detriment of the poorest children. During school closures, these children without access to literacy materials at home are at very high risk of not being able to continue their learning at home. Figures 5.a and 5.b show learning outcomes (measured by the share of children acquiring foundational reading and numeracy skills) in reference to the availability of child-oriented books at home.

A similar pattern is observed for numeracy skills, to a lesser extent. In Madagascar, 17 per cent of the children who have access to at least one book acquire foundational numeracy skills, compared to only 6 per cent of those living in households without any child-oriented book.
Parental engagement in reading books to children and in helping with homework

In spite of evidence showing that, together with having learning materials available at home, reading to children and supporting them for homework can help improve learning (see, for instance, Fletcher and Reese, 2005; Senechal and LeFevre, 2002), UNICEF’s recent blog post showed that, in some countries, the share of children receiving learning support from their parents is limited, with large disparities also within countries.

**Figure 6: Share of children aged 7–14 with foundational reading skills by wealth quintile and reading given to them, Pakistan (Punjab) (%)**

<table>
<thead>
<tr>
<th>Quintile</th>
<th>No one reads books</th>
<th>Someone reads books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>Middle</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>Richest</td>
<td>57</td>
<td>61</td>
</tr>
</tbody>
</table>

Source: UNICEF Multiple Indicator Cluster Survey 6 in Pakistan (Punjab), 2017–2018

Having someone reading books is particularly important for children in households from the poorest quintile. For example, Figure 6 shows, for Pakistan (Punjab), the differences in reading skills between children to whom someone reads books at home and those without such support. The differences are more significant for children living in the poorest households. Among families in the poorest quintile, 29 per cent of children with someone reading books to them achieve foundational reading skills, compared to only 15 per cent of children to whom nobody reads books. For children in wealthier families, differences are less marked.

**Figure 7: Share of children aged 7–14 who receive help with homework by mothers/caregivers’ education level completed (%)**

<table>
<thead>
<tr>
<th>Country</th>
<th>None less than primary education</th>
<th>Primary education or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zimbabwe</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>Tunisia</td>
<td>83</td>
<td>17</td>
</tr>
<tr>
<td>El Salvador</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>Suriname</td>
<td>61</td>
<td>39</td>
</tr>
<tr>
<td>Mongolia</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Pakistan (Punjab)</td>
<td>35</td>
<td>65</td>
</tr>
<tr>
<td>Madagascar</td>
<td>51</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: UNICEF Multiple Indicator Cluster Survey 6 for various countries, 2017–2019

Consistently, in all countries with data, the share of children acquiring foundational skills (both in reading and numeracy) is much larger in households where the mother/caregiver has completed at least primary education than in households with a mother/caregiver who has not gone to school or who dropped out before the end of primary education (see Figures 8.a and 8.b). On average, in households where the mother/caregiver has completed at least primary education, 48 per cent of children acquire reading skills, compared to only 31 per cent when the mother/caregiver has not completed primary education. For numeracy skills, the difference is also large: 25 per cent on average if the mother/caregiver has completed at least primary education, compared to 16 per cent when this is not the case.

Related to some extent to household wealth, the lack of education of mothers/caregivers also impedes the support they are able to provide to their children’s learning, with the high risk of perpetuating an intergenerational learning poverty cycle. In all countries with data, less-educated mothers/caregivers are less likely to help children with their schoolwork at home (see Figure 7). On average in the eight countries with data, in households where the mother/caregiver has completed primary education, 69 per cent of children receive help with homework, compared to only 50 per cent when the mother/caregiver has not completed primary education. Parents’ lack of education may crucially affect child learning outcomes, especially during school closures.

---

2 The analysis is restricted to children who were attending school and receiving homework at school.

3 Simple (unweighted) average of the eight countries with data. Data from Kyrgyzstan and Lesotho are excluded because the number of children with a mother/caregiver who had completed less than primary education was too small in the MICS sample.

4 ibid.
CONCLUSIONS AND RECOMMENDATIONS

In addition to its health and economic impacts, COVID-19 is depriving many children of learning opportunities at school. As the above findings reveal, the availability of child-oriented books at home and the engagement of parents can play an important mitigation role for continued learning, in particular in the most disadvantaged areas where there is no access to technology (see Innocenti Research Brief 2020-10, Promising practices for equitable remote learning). It is crucial, in these difficult times of school closures, to provide reading material and support for parental engagement and to ensure that the most vulnerable are not left behind. All policy decisions on continuing education remotely should also be cognizant of parents’ capability to help their child learn in order to prevent further exacerbating the global learning crisis and amplifying the learning gaps across socio-demographic groups.

With this in mind, Governments and their development partners are recommended to:

- Support the delivery (with context-based modalities) of ‘take-home’ learning packages and child-oriented books to parents, in particular where there is no IT connectivity or even electricity.

- Support and train parents and communities in reading to children, providing support for homework and using ‘take-home’ learning packages.

- Advocate to parents and communities the importance of quality learning, in particular for foundational reading and numeracy skills, including through the use of ‘Community for Development’ tools and processes, and factoring in gender, cultural and social norms.

- Analyse further the impact of parental engagement on learning outcomes and carry out implementation research on the most cost-effective modalities of support to parental engagement in children’s learning, including for parents with no or limited education themselves.
ANNEX: LIST OF COUNTRIES WITH MICS6 DATA

- Bangladesh (2019)
- Kyrgyzstan (2018)
- Lesotho (2018)
- Madagascar (2018)
- Mongolia (2018)
- Pakistan, Punjab (2017–2018)
- Sierra Leone (2017)
- Suriname (2018)
- Tunisia (2018)
- Zimbabwe (2019)

REFERENCES


