Sandbox Evidence Output

Lack of Means or Lack of Awareness?
Survey findings: barriers to learning with WhatsApp in refugee settings in Lebanon

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### Notes
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# Contents

1. Introduction 5

2. Overview of this study 7
   2.1. Research questions 7
   2.2. Approach 7
   2.3. Major findings 8
   2.4. Limitations 9

3. Switching to distance learning (or not) 10

4. Detailed findings 11
   4.1. Enrolled but not learning 11
   4.2. For learning, one phone is not enough 12
   4.3. The phone as a necessary but not sole solution to lack of engagement 15

5. Our critical beliefs validated 17

6. Next steps 18
Figures

Figure 1. Sandbox timeline. 5
Figure 2. A student practises writing numbers on their device, from home. 6
Figure 3. Respondent's relationship to child. 8
Figure 4. Head of household. 8
Figure 5. Children's registration in an education programme (parents’ answers). 11
Figure 6. Children’s registration in an education programme (children’s answers) 12
Figure 7. Reasons for not using Whatsapp to study (parents’ answers). 13
Figure 8. Receiving Jusoor's material at home (children's answers). 14
Figure 9. Reasons for not engaging with Jusoor's material (children’s answers). 14
Figure 10: Solutions to children's learning (parents’ answers). 15
Figure 11: Solutions to children's learning (children’s answers). 16
Figure 12: Importance of children’s education to parents. 17

Tables

Table 1. Surveys by region / centre 7
Table 2. Use of WhatsApp for study by children according to primary owner of smartphone. 13
1. Introduction

Jusoor’s Refugee Education Program has supported out-of-school Syrian refugee children since 2013 with the aim of bringing them back on to the path of formal schooling. When schools closed in response to the Covid-19 pandemic, Jusoor switched to distance learning via WhatsApp to mitigate learning disruption for participating children.

WhatsApp is a well-established and very widely used communication tool among refugee communities. Yet Jusoor faced difficulties with engagement from some students. Overall, the WhatsApp model appeared to be functioning but needed to be better understood in order to be improved and developed. In partnership with UNHCR, EdTech Hub joined Jusoor to run a Sandbox focused on delving deeper and gathering more evidence on the WhatsApp model. The full activities of the Sandbox can be found on the Hub website.¹

Figure 1. Sandbox timeline.

<table>
<thead>
<tr>
<th>2020</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td></td>
<td>Sept</td>
<td>Oct</td>
<td>Nov</td>
<td>Dec</td>
</tr>
<tr>
<td>Jusoor selected for UNHCR accelerator</td>
<td></td>
<td>Sandbox launch with EdTech Hub</td>
<td>Mobilisation and planning</td>
<td>Sprint 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2021</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>Feb</td>
<td>Mar</td>
<td>Apr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sprint 2</td>
<td></td>
<td>Sprint 3</td>
<td></td>
<td>End of Sandbox</td>
<td></td>
</tr>
</tbody>
</table>

The Sandbox set out to validate or disprove certain critical beliefs that were integral to the design of Jusoor’s distance learning offering. Two of the beliefs were:

- Access to data (internet connectivity) and tech (smartphones, tablets) is what is preventing many from engaging online.
- Parents are interested in supporting the education of their children remotely if given the resources and support because they understand

¹https://edtechhub.org/innovation/whatsapp-messaging-for-refugee-children-in-lebanon/
the benefits and future prospects of continuing education. Some barriers to parental support can / need to be lifted to meet that goal, and incentives can play an important role towards that end.

As one of the first activities in the Sandbox, we conducted a survey in November 2020 to investigate the barriers to student engagement. The results showed that while 88% of refugee families had access to a smartphone, this did not always translate into participation. This appears to depend on who owns the phone. For example, when the father is the official owner of the one phone available, the opportunities for children to use it for studying are significantly reduced. For refugees, the (generally) one device that they can afford is a work tool needed by the breadwinner to secure work and an education tool. Most of the time, it is the former.

In this paper, we set out all the findings of our survey and explore ways in which the barriers to engagement might be lifted.

**Figure 2.** A student practises writing numbers on their device, from home, as part of the mathematics session of the Azima distance learning programme. Source: ©Jusoor 2021 (used with permission).
2. Overview of this study

This section provides an overview including the research questions and the major findings.

2.1. Research questions

The research questions for our study were:

1. What are the main impediments to children’s use of WhatsApp for learning? In particular, to what extent are the impediments to do with external factors, and to what extent do they stem from caregivers' low perception of education?

2. What can trigger children back into distance learning? Are these external factors (like incentives, aid, etc.) or academic components inherent to the programme?

3. In the context of a scarcity of resources (mainly tech and connectivity), does the education service become selectively allocated to children based on age and / or gender?

2.2. Approach

We surveyed a total of 196 respondents. In order to triangulate our answers, we conducted the survey with both caregivers and children and compared the answers. One hundred and forty-one parents (or caregivers) and their children completed the survey together, while 55 parents (or caregivers) completed the survey alone. The reason for children not participating in the survey in the case of the latter group of participants was not always communicated. Among the justifiable reasons given was that the children were typically not available as the parent was at work (sometimes in a region distant from the family). In one case only, when asked, the child refused to participate.

We conducted the surveys over the phone, as Covid-19 social distancing measures and the consequent lockdown did not allow for face-to-face interviews.

Table 1. Surveys by region / centre.

<table>
<thead>
<tr>
<th>Region / Centre</th>
<th># of respondents</th>
<th>Completion rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beirut</td>
<td>7</td>
<td>15%</td>
</tr>
<tr>
<td>Jerrahiyyeh</td>
<td>51</td>
<td>93%</td>
</tr>
<tr>
<td>Jeb Jannine</td>
<td>139</td>
<td>53%</td>
</tr>
</tbody>
</table>
The particularly low number of surveys in Beirut is due to the fact that many phone numbers were incorrect or absent, impeding the centre’s staff from reaching respondents. In Jeb Jannine, on the other hand, unanswered phone calls account for most of the uncompleted surveys.

Demographically, the children surveyed ranged between 5 and 15 years of age, with 75% falling in the 6–10-year-old range. The survey was also reasonably gender-balanced, with 54% of interviewed children being male and 46% female.

**Figure 3.** Respondent’s relationship to child.

![Figure 3](image)

**Figure 4.** Head of household.

![Figure 4](image)

Almost all children had one of their parents complete the caregivers’ part of the survey. In 84% of the cases, the father was the main provider for the family while in 14% of cases, the household was headed by the mother.

### 2.3. Major findings

The most significant findings of our survey are:

1. Both parents and children report that insufficient access to a device (smartphone) is the biggest impediment to distance learning. This is the case in a context where most households have a single smartphone but have several children at home.
2. From the parents' perspective, the primary solutions for child learning are access to devices and financial support.

3. According to parents, challenges relating to internet connectivity regarding their children's learning are seen as secondary to financial challenges.

4. Children view access to internet connectivity as more important than their parents do. Children's reported needs for learning are both data- and technology-related as well as academic (booklets and teachers' help).

5. Demographics (such as children's age or gender, household size, type of shelter, etc.) do not have a significant impact on the education access of children. One exception seems to be the 'head of household' variable, with our data suggesting that children in households headed by females are less likely to be engaged in distance learning.

2.4. Limitations

We only use self-reported data; the answers collected represent participants' perceptions and may not be fully factual. This especially applies to parents who might have understood that the purpose of the questionnaire was to allocate further aid. As a result they may have over-reported or under-reported certain aspects. It is also conceivable the children may have been influenced by the presence of a parent. Face-to-face interviews may have provided the opportunity for more in-depth discussions with the respondents. However, despite some inconsistencies found in the results, answers from both children and parents generally aligned and appear to be reliable.

A comparison between regions was not possible due to the low response rate in the Beirut region, which made the sample size too small for comparison.
3. Switching to distance learning (or not)

Jusoor runs three educational centres in Lebanon. Two are located in the Beka’a Governorate (محافظة البيعاع) and one in Beirut. The centres cater to out-of-school Syrian refugee children, offering an education aligned with the official Lebanese curriculum with the aim of bringing them back on to the path of formal schooling.

In March 2020, the outbreak of the Covid-19 pandemic in Lebanon forced the closure of all schools and educational centres. Like many institutions, Jusoor had to switch to an online learning format. WhatsApp was adopted as the distance learning platform because of the widespread use of the tool and the refugee communities' familiarity with it, as well as its low cost. The ongoing Covid-19 situation meant that the implementation of distance learning continued into the 2020–2021 academic year.

Through the Sandbox conducted in partnership with EdTech Hub, Jusoor is looking to improve the WhatsApp learning provision for its beneficiaries by designing experimental sprints to test critical beliefs — a set of hypotheses that the organisation believes to be true, based on observation and experience in the field. As a first step in the process, we conducted a survey of registered but non-participating beneficiaries (with a 0% programme participation rate, six weeks into the programme at the time of the survey) with the objective of understanding the barriers to engagement and the corresponding potential solutions. Given the lockdown imposed in the country, surveys had to be conducted via phone.

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2 https://www.openstreetmap.org/search?query=Beqaa%20Governorate#map=10/33.6807/35.8772
4. Detailed findings

4.1. Enrolled but not learning

Despite the lack of participation in educational activities, 77% (n=149) of children were registered in an education programme, according to their parents. Most of the cases (78%) reported Jusoor as the education programme they were enrolled in, while 6% did not name the programme. Five per cent of the cases cited Jusoor in combination with another programme. In the remaining instances, the children were found to be mostly registered in public schools.

The number of children not registered in an education programme was low (n=44), the percentages associated with the reasons for non-registration are not statistically significant. However, predominantly, the two most cited barriers to registration were the absence of benefit to the child due to public school closures and the need for the child to work.

One hypothesis put forward for exploration suggested that in some cases, a particular child’s education was being deprioritised for the sake of a sibling’s education. The findings, based on reporting from both parents and children, mainly reject this hypothesis as a dominant narrative, as shown in the graphs below. In 87% of cases, the number of children and siblings registered in an education programme is the same. Similarly, in those cases where a particular child was not receiving education, generally, this was also true for their sibling(s).

**Figure 5. Children’s registration in an education programme (parents’ answers).**
4.2. For learning, one phone is not enough

We explored the barriers to engagement in distance learning from the perspectives of both parents and children. The answers of both children and parents indicated that an average of 52% of the children surveyed did not use WhatsApp to study online with Jusoor.

Figure 7. Students work collaboratively on homework sent to them via WhatsApp. Source: ©Jusoor 2021 (used with permission).
Access to a device emerged as the major impediment to participation. Indeed, while 88% of respondents declared having a smartphone at home (n=162), in 77% of the cases, the family possessed only one phone.

Furthermore, when the father was the de facto phone owner, the opportunities for the children to use the device for their study decreased substantially. Typically, as the breadwinners, the fathers took the phones with them to work for the day, hence rendering them unavailable for the children.

Table 2. Use of WhatsApp for study by children according to primary owner of smartphone.

<table>
<thead>
<tr>
<th>Smartphone owner</th>
<th>Child uses WhatsApp to study</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No / Yes</td>
<td></td>
</tr>
<tr>
<td>Both caregivers</td>
<td>32% / 68%</td>
<td>100% (n=41)</td>
</tr>
<tr>
<td>Father</td>
<td>69% / 31%</td>
<td>100% (n=88)</td>
</tr>
<tr>
<td>Mother</td>
<td>42% / 58%</td>
<td>100% (n=26)</td>
</tr>
</tbody>
</table>

For the parents, the unavailability of the phone is generally the main reason for lack of engagement (in contrast to data issues, time availability, or the children’s struggles with learning or interest). In the survey, the question relating to barriers to engagement had a multiple-choice format. Interestingly, even when parents listed several barriers, if the unavailability of the phone featured as one, it was always given as the primary obstacle. This goes to emphasise the considerable effect of lack of access to a device on children’s engagement in learning.

Figure 7. Reasons for not using Whatsapp to study (parents’ answers).
Meanwhile, 42% of children who said they were not studying at home (in other words, not engaged in an education programme) said they were still receiving material from Jusoor.

**Figure 8. Receiving Jusoor’s material at home (children’s answers).**

In terms of the reasons for non-engagement with the materials, the children’s (n=66) responses corroborated the parents’ responses. The chief reason for children’s lack of engagement remains access to the device (44%). This is compounded by competition over the device (smartphone used by siblings 24%). At the same time, the second most cited reason for non-engagement is the precedence of work over education due to economic needs and priorities.

**Figure 9. Reasons for not engaging with Jusoor’s material (children’s answers).**
4.3. The phone as a necessary but not sole solution to lack of engagement

Technological devices constitute the central challenge as well as the main solution to the lack of engagement in distance learning. Both parents and children see access to a device as a key factor in a child's ability to participate in WhatsApp lessons.

For the caregivers, an additional phone or technological device ranks as the first solution to their children's learning. Other forms of assistance — material, incentives, or, in particular, financial help — also feature prominently as possible solutions.

Figure 10: Solutions to children's learning (parents' answers).

Respondents were asked to give their first and second choice solutions to improve their child's learning. When we focus on the first choice selected by parents, financial support typically surpasses access to a device (39% vs. 21% respectively). This means that financial support was typically given as a primary answer. The importance of financial support for some parents can be attributed to the dire financial and economic situation of some refugee households, where children need to work to contribute to household income.

Overall, children agreed with their parents that access to a smartphone would be the best way to lift barriers to learning. Meanwhile, children considered internet connectivity more important than their parents. It came in second place for children in contrast to a more distant fourth place for the caregivers.

Technology is not the only gap that needs to be addressed to enable better learning opportunities for children. Academic elements, mainly in the form of help from teachers and the provision of booklets are highly valued by children and far less by parents. Children might be more concerned about
such academic solutions because they are the direct recipients of Jusoor’s education services.

**Figure 11:** Solutions to children’s learning (children’s answers).
5. Our critical beliefs validated

One of our most critical beliefs — ‘access to data (internet connectivity) and tech (smartphones, tablets) is what is preventing many from engaging online’ — has indeed been validated by the survey, both from the parents’ and children’s perspectives. However, of these two reasons, access to tech is the main barrier to distance learning, over and above internet connectivity.

A second critical belief is — ‘parents are interested in supporting the education of their children remotely if given the resources and support because they understand the benefits and future prospects of continuing education.’ Seventy-eight per cent of parents said they considered their children’s education to be very important. Given the self-reported nature of the survey, this finding may need to be further explored based on parental behaviour in order to fully validate and understand their beliefs regarding the importance of children’s education.

![Figure 12: Importance of children’s education to parents.](image)

The second part of this critical belief — ‘Some barriers to parental support can / need to be alleviated for that goal, and incentives can play an important role towards that end’ — was clearly verified, with parents themselves reporting that access to technology and aid constitute the key ways to improve or initiate their children’s learning.
6. Next steps

Through the Sandbox project, Jusoor’s aim is to improve its WhatsApp-based education provision to ensure continued access to learning during the Covid-19 crises for Syrian refugee children, and to scale its use beyond the Covid-19 context by reaching students unable to physically attend classes.

In trying to identify the reasons that keep some refugee children away from learning, this survey constituted a first step in Jusoor’s mission to provide access to education. In the second phase of the project, Jusoor built on these findings to design an experiment to lift the barriers identified by the survey. The aim was to test parental behaviour and understanding and to see if these matched reported attitudes.

The full activities of the Sandbox can be found on the Hub website.³