

How Refugees Accessed and Used Technology for Non-Formal Education During the COVID-19 Pandemic: A Comparative Study of the United Kingdom and Türkiye

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Refugees may be uniquely situated to benefit from Educational Technology (EdTech) because of its ability to reach students wherever they are and provide education continuity as they seek safety. Due to the protracted nature of conflicts, refugees can expect to stay abroad for many years while the conflict plays out in their home countries. This leads to problems with access to education and attainment for a variety of reasons that will be explored in detail. This study looks at how refugee children use technology to access education in the contexts of neighboring countries and resettled countries. Most refugees remain in neighboring host countries while only a very small percent of refugees are resettled into high income countries. This study also examines the impact COVID-19 had on refugee education. These topics represent gaps in academic literature. They represent under-studied topics on the use of EdTech in refugee education, especially at the primary school level.

The research questions are: (1) How is technology currently used in informal refugee education programs? and (2) How did COVID-19 affect the use of or access to technology within the refugee context? The aim of this study is to understand how refugee children at the primary school level use technology for learning purposes. It also seeks to understand how the pandemic changed access to learning technology.

Literature Review

Host country context (Türkiye)

Türkiye hosts about 4 million refugees which is significantly more than any other country. 3.5 million are from Syria (UNHCR 2023). Before students can be enrolled in state schools, they need a residence permit which can be obtained through a lengthy application process in Turkish (Aydin & Kaya, 2019). Under Turkish law, there is no curricular freedom or innovation allowed (McCarthy, 2018) which means that classes are taught in Turkish and students receive very little support in acquiring that language (Toker Gokce & Acar, 2018). Few Turkish teachers receive training in teaching Turkish as a Foreign Language pedagogy, in part due to the monocultural and monolingual education system in Türkiye (Kotluk & Aydin, 2021). Student motivation to learn Turkish can be limited because of the difficulty in learning Turkish for Arabic speakers (Karsli-Calamak & Kilinc, 2021), and the belief that their stay in Türkiye is temporary (Aydin & Kaya, 2019). Additional factors that have a negative correlation to school attendance include low family income, low educational attainment of parents, the number of children in the family, child labour (Uyan-Semerici & Erdogan, 2018), and bullying (Yilmaz & Uytun, 2020).

Resettlement country context (United Kingdom)

The United Kingdom (UK) hosts just over 130,000 refugees and like Türkiye, refugees are able to freely enrol in public education (UNHCR, 2021). The main challenges in refugee access to education in the UK is at the policy level. Education in the UK is controlled separately

between England, Scotland, Wales, and Northern Ireland. While accommodation is initially provided, refugees in the UK do not choose where to live. Most refugees are resettled into just a handful of Local Authorities (LA) which has led to problems with the quality of accommodation, slow processing times, and a concentration of asylum seekers in a small number of deprived areas (McIntyre & Hall, 2020).

The lack of explicit policy from the central government regarding refugee education is a common concern expressed in UK-based literature (Madziva & Thondhlana, 2017; McIntyre & Hall, 2020; Refugee Support Network, 2020). As the private education sector continues to rise and the capacity of the LA weakens, the challenges of meeting inclusive education targets increase. Public school admissions policy shows a 20-day target for processing admissions applications, but this target has not been met by any region in the UK (Gladwell & Chetwynd, 2018). Reasons for delays include mid-year arrival time, complexity of the online application process, challenges related to language proficiency, and pressure on schools to meet key performance indicators and achievement through standardized testing (McIntyre & Hall, 2020).

Education technology

There is a well-established research gap in the use of EdTech in refugee education. This is partly due to the vulnerability of refugees, the transitory nature and relative inaccessibility of refugees, and a relative lack of technology in refugee education in general (Almasri et al., 2019; Ashlee et al., 2020; Carlson, 2013; Dahya, 2016; Joynes & James, 2018; Kleine et al., 2013; Menashy & Zakharia 2020; Taftaf & Williams, 2020; Verger et al., 2017). Learning technology is expensive to develop and refugees reflect a diverse, global group of people, so a one-size-fits-all approach does not work (Bauer & Gallagher, 2020).

Education technology (EdTech) is an attractive *potential* solution to the problem of refugee access to education. Unlike physical schools, EdTech can provide mobile education that moves with refugees and can address issues of education continuity and learning gaps. While estimates vary, the global EdTech industry is rapidly growing and it was valued at over US\$100 billion in 2021, in part spurred by the COVID-19 pandemic that rapidly increased the market for online learning solutions. The accessibility of EdTech from any device with an internet connection can provide education continuity amid displacement. It can adapt to the needs of the student by adjusting learning goals and the subject matter to where the student is now and where they need to be in the future (Ashlee et al., 2020).

There are four main challenges in using EdTech in refugee education. These include: (1) significant issues with reliability and availability of infrastructure to support connectivity (Taftaf & Williams, 2020); (2) a lack of pedagogy to support learning (Almasri et al., 2019); (3) problems with culturally relevant learning which exacerbates inequality and reinforces North-South power dynamics as a result of the EdTech industry being highly concentrated in North America and Western Europe (Menashy & Zakharia, 2020); and (4) the extent to which low-income countries where the majority of refugees are located can successfully implement EdTech solutions due to rampant corruption and scarce resources (Rodriguez-Segura, 2022).

Methodology

Approval to conduct this study was granted by the University of Leicester's ethics board. This study used a mixed methods approach to data collection and analysis. There were 11 participants from the UK group and 23 participants from the Türkiye group. Research took place

between June and August 2021 using an online questionnaire that was translated into Turkish for the Turkish-speaking UK group and Arabic for the Arabic-speaking Türkiye group. General information about the participants including the country of origin and language were provided by the NGOs, but no other identifying information including names, specific locations, or contact information was collected. Online surveys were provided to the NGOs to distribute to the refugees themselves with a short introduction and link to the survey with more information.

Findings

There were significant differences in how each group accessed and used technology for learning purposes including the types of devices used, the time spent in formal education during the pandemic, perceived opportunities for online learning, and motivation to learn. When asked about the types of devices used to access digital education, eight out of 11 students in the UK group had access to a laptop. The Türkiye group largely used smartphones. Seventeen out of 23 students in the Türkiye group had access to smartphone while 6 had access to a laptop for learning (Figure 1).

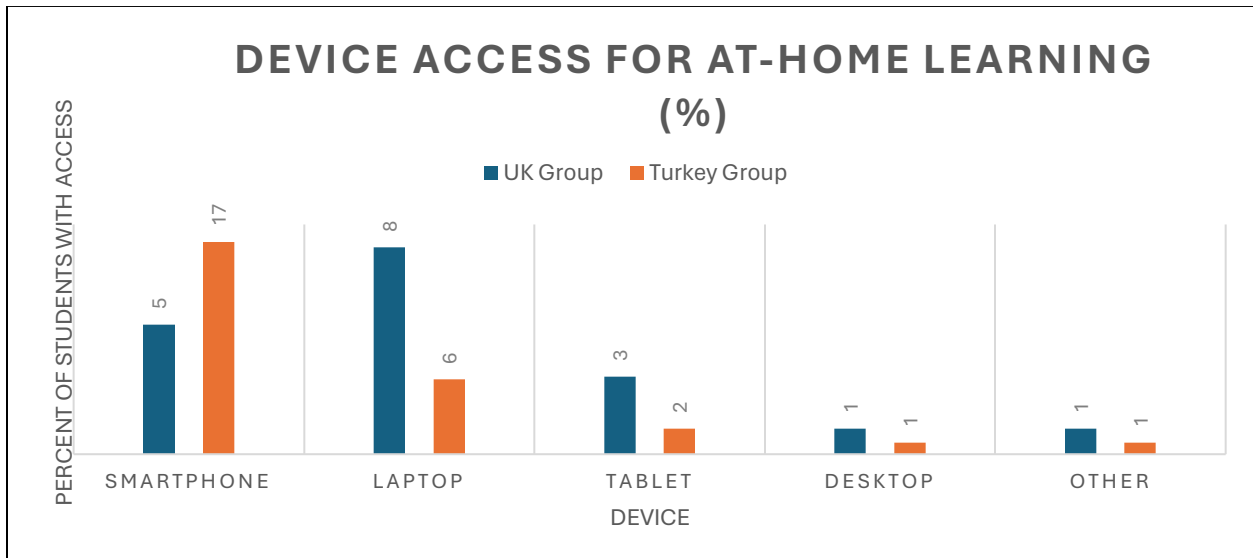


Figure 3: Device access for at-home learning

The length of time in school varied significantly between the two groups. Nearly 75% of children in the UK group spent three or more months in school during the previous 15 months whereas more than 75% of children in the Türkiye group spent three months or less in school during the previous 15 months. Significantly, 31% of the Türkiye group reported that their child does not go to school at all (Figures 2.1 and 2.2).

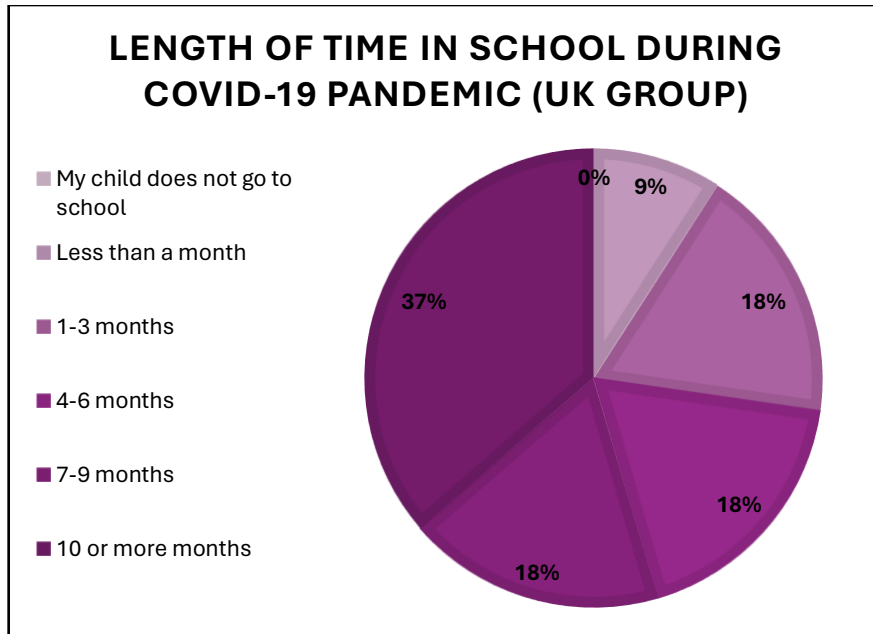


Figure 2.1: Length of time spent in school during Covid-19 pandemic (UK group)

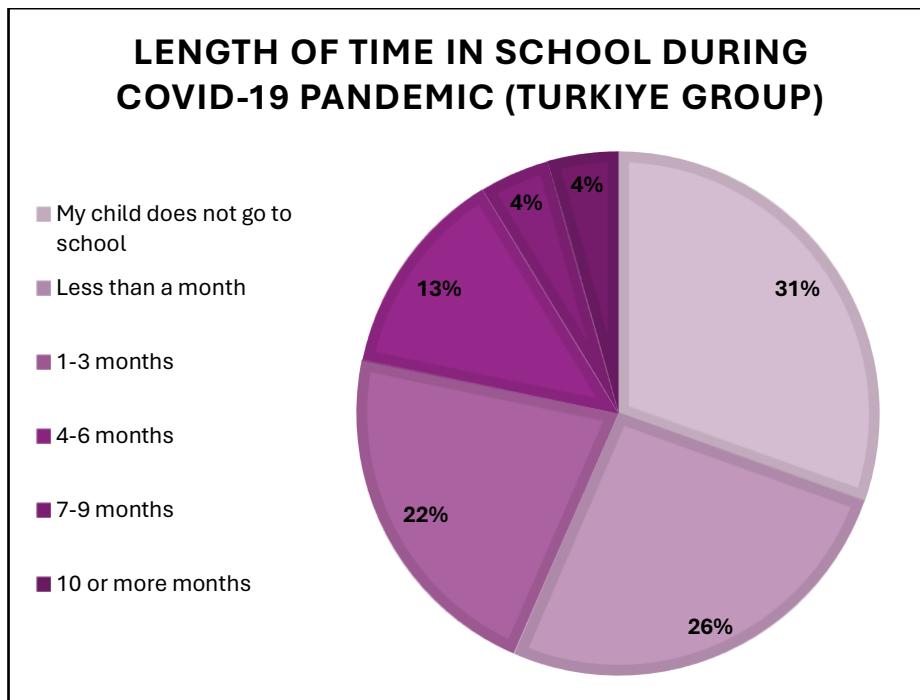


Figure 2.2: Length of time spent in school during Covid-19 pandemic (Türkiye group)

The next question asked was about the increase in online education opportunities as a result of the pandemic. Given the massive shift toward online learning, one could expect this to be seen in both groups, but this was not the case. All the UK group participants reported an increase in online learning opportunities, but just 26% of Türkiye group participants were able to

How Refugees Accessed and Used Technology for Non-Formal Education

report the same (Figure 3). This is a significant difference given that both the UK and Türkiye had active online learning systems in public education.

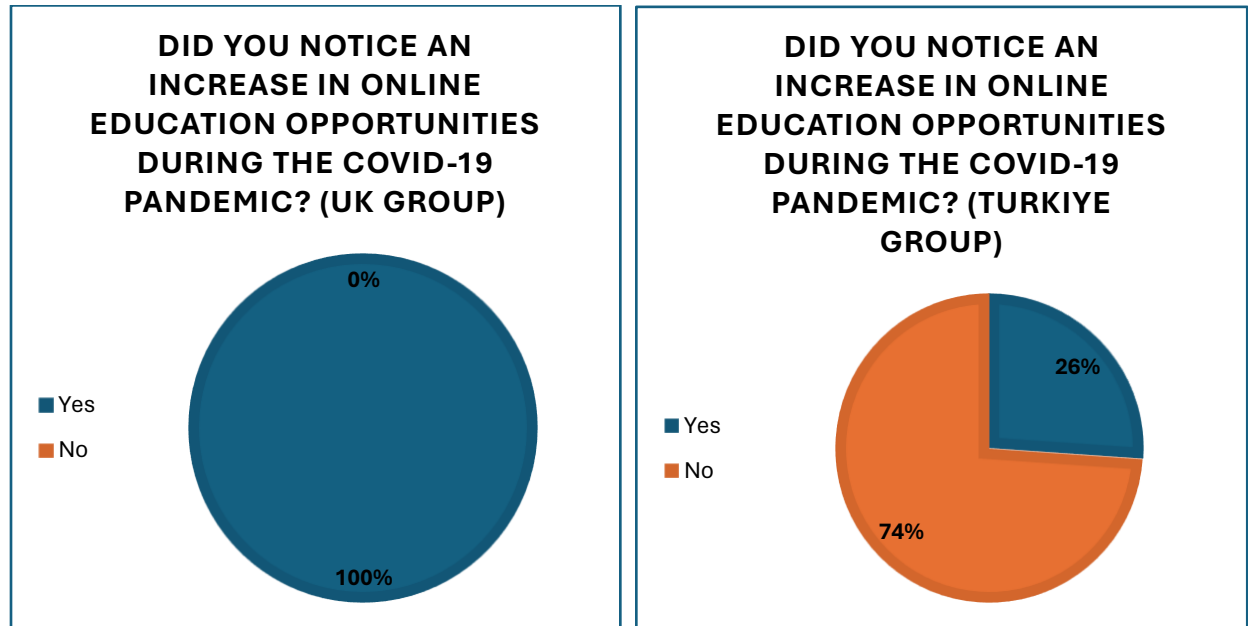


Figure 3. Online learning opportunities

Finally, nearly all respondents from the UK group responded favorably to the statement that their child was motivated to learn, while many respondents in the Türkiye group did not agree with the same statement (Figure 4). Motivation to learn can stem from a variety of factors including having access to adequate resources to learn, being taught at the right level, and individual attitudes about where ‘home’ is.

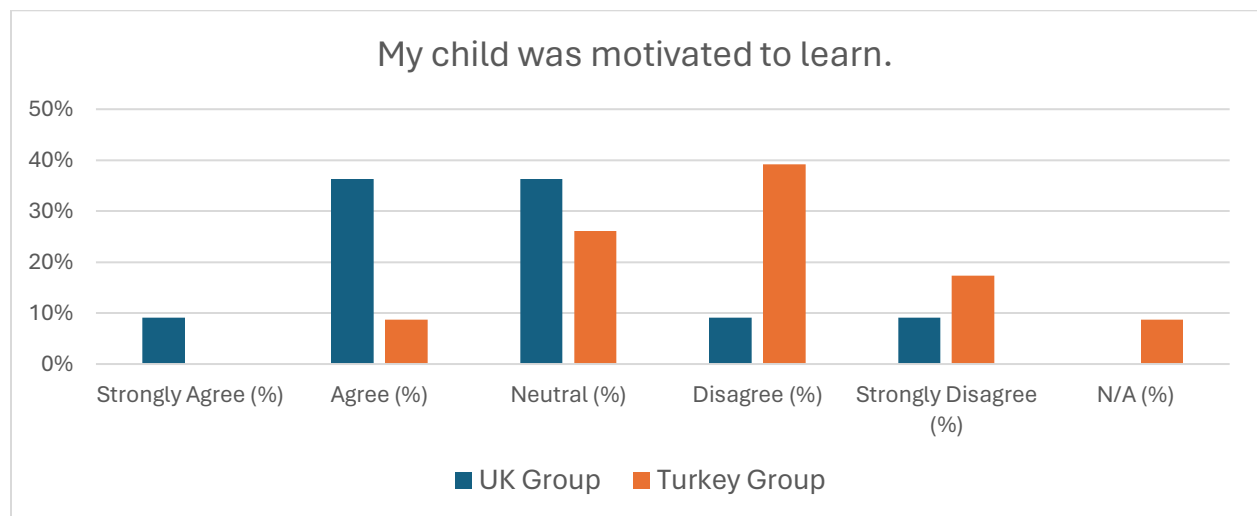


Figure 4. Motivation to learn

Discussion

This section discusses four main themes identified through the findings. This includes the type of device used and accessibility of devices that support online learning, the disconnect between state policy toward in-person learning and how students accessed education, language support for learning, and student motivation for learning.

Findings indicate that the Türkiye group, located in a neighboring country to conflict, faced significant challenges in accessing EdTech primarily because of a lack of suitable device that supports online learning and fewer opportunities to access online learning. These challenges are well supported in the literature that cites the need for basic inputs of electricity and internet to make EdTech tools accessible (Rodriguez-Segura, 2022) and how mobile phones are the preferred method of accessing EdTech in the Global South (Dahya & Dryden-Peterson, 2017; Ashlee et al., 2020). We see a higher rate of smartphone usage from the Türkiye group where it is the most cited device used amongst laptops, tablets, and desktop computers.

The length of time spent physically in school in the first 15 months of the pandemic varied significantly between the Türkiye and UK groups. While this was largely determined by state policies around in-person learning during the pandemic the expectation would be that the group who spent less time physically in school would have spent more time utilizing online learning opportunities, especially within the public education system. This was not the case.

There was a significant disparity between the Türkiye and UK groups in terms of experiences with increased learning opportunities during the pandemic. While both states switched public education to online modalities and many EdTech platforms saw a marked increase in users at this time, the Türkiye group was largely left out of these opportunities. This could have been for a number of reasons including lack of school enrollment (preventing access to Eğitim Bilişim Ağı (EBA), Türkiye's public education online learning platform), use of smartphones over larger devices, and language (EBA is notably available in Turkish and English, but not Arabic). Furthermore, the vast majority of content online is offered in English, with Arabic accounting for approximately one percent of online content (Visual Capitalist, 2021). This puts the Türkiye group at a disadvantage because there are inherently fewer learning opportunities available to them online in a format that is accessible to them. This is an area that could use more research to better understand why mobile learning is not better utilized amongst this group.

The last theme focuses on struggles with student motivation to learn. While the literature suggests that EdTech can play a positive role in increasing student motivation to learn, it is not yet clear if there is a positive correlation (Ashlee et al., 2020; Tauson & Stannard, 2018) and if students are motivated to learn or simply excited to be using new technology (Christodoulou, 2020). It is also possible that the COVID-19 pandemic may have a different impact on student motivation to learn regardless of the use of EdTech for education continuity and delivery.

Conclusion

This study has provided insights into how technology is currently used in refugee education programs and how the COVID-19 pandemic has affected the use of and access to technology within the context of refugee education. A comparative study between a group of refugees in a resettled context (UK) and a neighboring country context (Türkiye) was examined to show how refugees access technology differently for education purposes and how the

pandemic provided increased opportunities for online education in the resettled country context, but less so for the neighboring country context.

Key findings indicate that the Türkiye group faced greater challenges in accessing and using technology for refugee education purposes, and that this continued through the pandemic despite the significant increase in global online education initiatives at the time. Although Türkiye is not a low-income country and has relatively stable electricity and internet infrastructure, the results are consistent with what previous studies have shown about neighboring country experiences (Ashlee et al., 2020; Dryden-Peterson et al., 2019; Rodriguez-Segura, 2022; Tauson & Stannard, 2018). Though the UK group also faced challenges in accessing online learning opportunities, they were more likely to have a suitable device and were able to access online learning opportunities, especially during the pandemic.

The importance of understanding refugee education and improving access to, and quality of, that education cannot be stressed enough. EdTech offers a suitable solution in that it can be accessed by children anywhere in the world with an internet connection, and once built, can ensure the continued education of millions of refugee students around the world. Though EdTech is expensive to develop, and this is a justified concern, questioning the cost of *not* educating the approximately 37 million displaced children in the world (UNICEF, 2022) must be asked.

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