Gender & Racism: Considerations for Digital Learning Among Young Refugees and Asylum Seekers

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Abstract. Young refugees and asylum seekers (RAS) in the UK face barriers related to language and accessing formal schooling. While HCI research has focused on migration, less work has been done with young RAS and less so on how digital platforms may be used to support young RAS during times in which they are unable to access schooling. Through co-design workshops with young RAS in the UK, we explored social and contextual factors influencing their engagement in and experiences with digital tools to learn and develop their learning skills outside of school. Our findings highlight and nuance gender, culture and racism as factors that need to be accounted for when designing digital education tools for this population. More specifically, we detail how accounting for the aforementioned factors may inform the: (1) learning approaches that may underpin such technologies, (2) the timing and duration of digitally facilitated learning activities and (3) the platforms through which learning activities may be mediated. We argue that not accounting for these factors may result in reduced engagement and in propagating existing gender inequities. As such, our research contributes to a growing body of work focused on HCI, migration and education.

Keywords: learning technologies, migration, youth, cultural norms, racism

1   Introduction & Related Work

The United Kingdom (UK)– where our research is conducted– is home to only 1% of the world's Refugee and Asylum Seeking (RAS) population [1]. Re-settling in new countries poses challenges to RAS as they encounter barriers related to language [2] and accessing services [3, 4]. In the UK, young RAS often spend a significant amount of time outside of formal schooling due to: (1) a lack of available spaces and resources to support RAS students, (2) the schools' hesitance to admit RAS students "due to fear of negatively influencing results profiles" and (3) RAS arriving outside the typical school registration window [5]. Additionally, RAS are initially placed in temporary accommodation– usually overcrowded hotels– where they may enroll in nearby schools only to find themselves relocated to other parts of the country during the school year

and thus disrupting their education. Due to such challenges, local councils and charities are encouraged to generate innovative programmes to support young RAS during the times in which they are excluded from formal schooling [5].

There has been over a decade of HCI research focused on migration [6] however, relatively less work has been conducted with young RAS. Nonetheless, existing research brings to the fore the specific technological considerations warranted when designing for and with this population. Tachtler et al. [3] highlight the need for mental health technologies to adapt to the constrained settings in which RAS youth might find themselves in. Research in Jordan indicated that young RAS often utilize internet services to overcome challenges they encounter as well as take on roles of information wayfarers supporting others within their community [7].

For RAS learning the language of the host country is paramount as language poses a major barrier to accessing services and building social capital [8]. Accordingly, Kharrufa et al. [9] developed a web app that promoted language and cultural learning through media authoring tasks. In Germany, Wiebert et al. [2] designed a digital tool to support RAS in accessing language courses in their locale. Dahya & Dryden-Peterson [10] demonstrate how RAS leverage social media platforms to construct pathways for accessing higher education. Lastly, Computer Clubs have been established as a means for providing ICT education for refugees with the support of volunteers. Such initiatives have highlighted the value of such spaces for learning digital skills and become spaces for intercultural learning [11], the building of social ties between refugees and volunteers [12, 13] and overcoming gender-related barriers to learning [14].

Our research is situated within the above-detailed context and literature. The project is being conducted in partnership with North East Solidarity and Teaching (N.E.S.T.). N.E.S.T. approached one of the research team members, who volunteers for the organization, to explore how digital platforms may be used to support young RAS during the time periods in which they find themselves unable to access schooling. The aim of the research was not to codesign digital educational platforms that would substitute formal education. Rather we aimed to codesign digital tools and/or approaches that enable young RAS to develop their learning skills (i.e. learning how to learn). In this paper we report on the first phase of our research, where we explore: *What social and contextual factors influence the ability of young RAS in the UK to engage with digital learning interactions?*

We explore our research question through codesign workshops with 10 young RAS. Participants are currently enrolled in schools after spending periods of time excluded from schooling and therefore were able to draw on their experience of using digital tools to develop their learning skills while outside of school and which strategies aided them in their transition back into formal education. Our findings highlight and nuance the need to account for gender, culture and experiences of racism when designing digital education tools, including tools that mediate and facilitate both online and offline learning. We discuss: (1) how gender differentials intersecting with culture and the occupying of carer roles complicate when and where young RAS who identify as girls may engage with digital learning interactions and (2) how wariness of racism influences the degree of online sharing participants are willing to engage in when undergoing online learning activities. The research contributes to a growing body of

work focused on HCI, migration and education by nuancing how gender-related factors and racism may be accounted for when designing digital tools for learning.

2 Methods

We adopted a codesign approach informed by research on creating a safe space for RAS youth and mitigating unequal participation during the design process [15]. In addition, our choices of data collection tools and activities drew on research documenting codesigning with young individuals, e.g. co-constructing a code of conduct [16], storytelling as a research tool, e.g. use of scenarios and storyboards [17, 18], and educational research, e.g. use of Pupil View Templates (PVTs) [19]. The research received ethical approval from Northumbria University and was conducted over a series of 3 workshops with 10 young RAS in the Northeast of England. All the researchers attained a Disclosure and Barring Service check and attended Childhood Trauma training.

Recruitment & Participants. Recruitment was done through N.E.S.T. A meeting with potential participants was held, where the research team introduced the project and participants' rights were communicated. Informed consent was attained from participants and their parents/guardians. We made sure to highlight that participation was voluntary and the choice not to participate would not impact their relationship with N.E.S.T. and any services they access. Participants' ages ranged between 11-15 years. 5 of the participants were siblings from Eritrea who spoke Tigrinya and Arabic; another 3 were from El Salvador and spoke Spanish (2 of whom were siblings); and another 2 were from Turkey and Kurdistan, speaking Turkish and Kurdish respectively. All participants also have a working knowledge of the English language and were therefore able to participate in English. Some participants were not as confident in speaking and writing English at times; however, they were supported by participants who spoke their mother tongue and/or by two members of the research team who spoke Arabic.

Co-creating a Safe Space. At the first workshop, we drew on Duarte et al.'s [15] work on the utilisation of iterative ethics when engaging with young RAS, and as they suggest, we revisited the research project with the participants, discussing how data is going to be collected as well as their rights within the project and its activities. The 'project revisiting' was subsequently repeated at the beginning of each workshop. Furthermore, at the start of each workshop, participants (and all workshop facilitators) were asked to draw a quick self-portrait and write down their favorite food to be used as a pseudonym. Both, the use of pseudonyms connected via a common theme (here: food) and the self-portraits, aimed to ease-in the days' activities and establish a sense of togetherness/community and protection [20]. Furthermore, in order to create a safe space for participation, we engaged in a reflective process [15] on how we want to treat one another, which was facilitated through the co-creation of a code of conduct. Using post-it notes, elements such as 'respect', 'empathy', and 'listening' were placed on a flipchart paper that was then hung up on a wall in the room. The code of conduct was revisited and added at the beginning of each workshop and as the need arose during the workshops. After the code of conduct creation/revision, each workshop continued with

the main activities (see Table 1) and ended with a feedback round, in which the participants could share their day's reflections, insights and suggestions.

Table 1. Table detailing workshop aims, activities and methods used

Activities	Methods *and Participation*
Workshop 1 *(WS1) Aim: Exploring how participants learn to learn something new*	
Describe how you learn(ed) something new while (not) enrolled in school.	Draw-Write-Tell *individually* (with sentence completion for Tell)
Workshop 2 (WS2) *Aim: Explore participants' existing digital ecosystem*	
Tell the story of someone who just arrived in the UK and is not in school. What do they want to learn, with whom, where, with which technology? Choose a scene, re-tell or re-enact it. Discuss it in the group.	Visual Storytelling *in groups* (with drawing and card facilitation) Roleplay *in groups* Discussion *all*
Workshop 3 (WS3) *Aim: Explore benefits and challenges of online technologies*	
What do you/others say and think about the online technologies you use? Discuss what is good and bad about them (benefits and dangers).	Pupil View Templates (PVTs) *individually* Discussion *groups, then all*

Workshops. The workshop series aimed to interrogate how participants learn how to learn, how they use/may use digital technologies to do so and their perspectives on the safety, benefits and challenges to using technologies as part of their learning strategies (See Table 1). The technologies identified and further reflected on were varied, but mainly focused on WhatsApp, Snapchat, TikTok, YouTube, Spotify and digital games. Activities and facilitation were structured in a manner that enabled continuous interrogation of the social and contextual factors that interplay with their use of technologies for learning. Audio recordings and the artefacts made by participants were collected from the workshops.

Data Analysis. Through initial exploration of the data– transcription of audio recordings, multiple readings of the transcripts and joint reflection on the data by the research team– the following challenge areas were identified for follow-up analysis: gender, racism, access and sustainability. This paper focuses on the first two and analysis is limited to the audio transcriptions from the workshops. Data was thematically analyzed [21] using an inductive approach within each theme. After data familiarization through joint transcription and individual (re-)reading of the data, (semantic) coding of the whole data set was undertaken individually, with one researcher focusing on gender, the other on racism. Thereafter, the researchers jointly worked on identifying, reviewing and describing themes, thus fleshing out the challenge areas and setting the stage for the collaborative write-up.

3   Findings

English language learning was a prevalent topic repeatedly chosen by the participants. Our findings illustrate ways in which gender and racism are interrelated with the participants' use of technologies for offline and online learning. Gender and its interplay

with culture and caring roles was a factor in availability and choice of (safe) platforms and physical spaces for learning. Racism was a factor in the (un)willingness to engage on publicly accessible platforms.

3.1 Gender and Cultural considerations for online and offline learning

The issue of gender as it relates to learning with one another, and online/offline learning was prominent throughout the workshops. This was especially true for participants who identified as girls from Eritrea, who followed culturally based gender roles. Within the code of conduct, participants demonstrated a sensitivity to issues of gender by indicating that we should not discriminate against each other based on gender and sexuality: *"respecting different sexualities" [Chow Mein, WS1]*

However, when engaging in activities participants tended to want to work with peers of the same perceived gender. In Workshop 2, participants requested that they be divided into groups based on gender. The boys formed a group and generated the character of a boy named Lionel– after Lionel Messi– and those identifying as girls formed the second group and developed a girl character named Suleyfa. The research team conceded to this grouping with the intention of respecting participants' agency within the codesign process. Furthermore, the division of groups based on gender allowed us to identify nuanced gender related distinctions regarding the use of digital tools for learning and subsequent design considerations primarily as they relate to culture, caring roles and physical/digital places of learning.

Places for engaging in learning. Interestingly, in the first scene the boy's group situated their character Lionel in a summer camp being run by N.E.S.T., whereas the girl's group placed Suleyfa in her bedroom at home with each group citing the aforementioned places as ideal for online and offline learning. Upon further discussion participants highlighted that there are gendered differences regarding where they can engage in offline and online learning pointing to how boys are more likely to go to public spaces to learn things like speaking English: *"You know, boys they are asking to go outside. Not girls" [Noodles, WS2]*

Furthermore, participants indicated that *"learning English for boys and girls is different" [Noodles, WS2]* and attributed it to boys' use of body language: *"they [boys] use gestures", [Injera, WS2].* These sentiments were broadly shared by all participants. After further discussion, facilitated by the research team, participants highlighted that the root of this gender inequality is not necessarily related to how they use technologies and the use of body language but rather stems from their gendered social experiences in the U.K: *"Technology is not a reason, boys they, like, they can play football together" [Pizza, WS2]; "boys are always trying to have friends. And when you come to England, the British boys, they are friendly with you." [Chow Mein, WS2]*

Participants who identified as girls from Eritrea also attributed this distinction to the cultural norms they hold and are held to: *"yes, especially in our culture girls stay at home" [Noodles, WS2].* Additionally, participants who identified as girls from Eritrea indicated they, unlike those who identified as boys, do not feel safe in public spaces such as parks but rather, if they were to engage in learning in a public space, it would

more likely be in a shop where there are members of staff. Indeed, in another scene participants in the girls group situated their character, 'Suleyfa', in Primark – a clothes retailer– where she comfortably interacted with staff members, handing over her phone to a member of staff: *"I give to the staff my phone for them to write down what they are saying and I translate it"* [Noodles after conferring in Tigrinya with group, WS2]

The gendered difference regarding the ability to go to public spaces had implications on ways to access technologies. Participants highlighted that during the times in which they did not have access to Wi-Fi at home, the boys would go into the town center and use publicly available Wi-Fi in restaurants (e.g. McDonalds) and the local college. However, the girls tended to rely on hot spotting from their parent's phone and on visiting relatives in the area that have Wi-Fi. This further highlighted the gendered and cultural consideration needed when designing education technologies for both online and offline learning.

Platforms for engaging in learning. Another issue that arose from the girl's group that was not apparent within the work and discussions held in the boy's group was the gendered preferences of the use of social media platforms. Indeed, participants in the girl group (WS2) indicated that they would rather use Snapchat for learning rather than WhatsApp as with Snapchat they do not have to share their phone number: *"[On WhatsApp] you must know the person you are talking to"* [Noodles, WS2]

Instead, they said that if 'Suleyfa' was to use WhatsApp to learn it should be to only speak with a 'trusted friend'. Additionally, participants in the girls group elaborated that girls have less time to use social media platforms for learning due to the gendered and cultural nature of the responsibilities that they hold: *"in our culture girls needs to be in their home and doing stuff like cleaning and making food for the boys. But the boys can watch phone more than the girls so they have more chance to learn"* [Noodles, WS2]; *"like when she wakes up in the morning she has to do breakfast and she has to clean after people eat and make lunch and eat lunch…she maybe use her phone in the evening before she goes to bed."* [Noodles translating for Fish, WS2]

Here it is important to note that this particular group of girls are the carers of their ill mother and therefore the responsibility of caring for their siblings has fallen to them.

3.2   Experiences of Racism Influencing Online Sharing

Participants instigated several discussions related to racism and how it impacts their interactions online and in turn would impact their willingness to generate and share content, such as videos and comments, as part of online learning. As one participant indicated it is common for their presence in UK (online) spaces to be questioned: *"some people make fun of your race...they say 'explain the reason why you've come [here]'* [Chow Mein, WS3].

Their sensitivity to issues of race was exemplified during the co-creation of the code of conduct where participants made it a point to include: (1) Not being racist; (2) Don't make fun of each other's appearance and (3) No discrimination. While at first glance, 'Don't make fun of each other's appearance' may not have any relationship to race, however, in further discussions among participant's they highlighted how they are wary of being made fun of due to their and/or parent's non-White appearance:

Cheeseburger: "like if you make a video […] when you show your appearance"
Researcher: "You get racism there?"
Cheeseburger: yes and discrimination as well" [from WS3]

Another participant iterated on this point by highlighting how the comments they may make online are usually viewed by others through the lens of race: *"if you make a comment like 'OMG Argentina won [in football] and I think that is the best thing'...someone will say 'oh you like Argentina because you are brown'" [Chow Mein,WS3]*

Such wariness to engage online due to expectations held among participants of experiencing racism was not only restricted to appearances and/or making online comments. For example, Chow Mein then continued to elaborate that wanting to avoid racism deters him from sharing videos in which his accent might be picked on: *"basically if you make a video and you are speaking in English...there will always be one stupid British man making fun of your accent and that actually hurts." [Chow Mein, WS3].* Our findings highlight that digital means of engaging with learning, such as tasking young people to take videos and share them on social media platforms in response to a question and/or prompt, need to consider the visibility of such content and how potential exposure to online racism may dissuade young refugees and asylum seekers from completing such tasks.

4   Discussion & Conclusion

Our findings highlight issues of gender, and its inter-relatedness to culture, and of racism as social and contextual factors that impact how young RAS engage with technologies and envision their use for learning.

Considerations for Gender and Culture. The workshops with young RAS of diverse genders and cultural backgrounds bring to the fore how gender and cultural norms intersect in a manner that interplay with where and for how long RAS who identify as girls from specific cultural backgrounds can engage with technologies for learning. Furthermore, we identified that gender and culture play a role in influencing what social media applications they would be willing to use to learn. This complicates the transferability of previous digital education interventions that appropriate social media technologies for coordinating participation in learning [22, 23]. Similarly, while recent research has advocated for the use of place-based learning approaches mediated through online technologies [24], the gender differences identified in this study complicates the use of digital learning tools that leverage public spaces such as parks for learning. Furthermore, the gender divide regarding the ability to access the internet among RAS poses a challenge similar to that previously identified by Yafi et al. [7]. Our research highlights constraints to where and when participants that identified as girls from a specific cultural background may access the internet. Not accounting for such constraints may result in digital learning tools propagating existing gender inequities. This is further compounded by the caring responsibilities held by some of the participants that Dahya & Dryden-Peterson [10] point to as heightening factors of gender inequalities during conflict and migration. Collectively, our findings prompt us

to consider when designing learning technologies how the timing, duration and location of learning activities, as well as the activities they prompt, and platforms used might disproportionally exclude those who identify as girls from specific cultural backgrounds and young RAS who have caring responsibilities. As such, there is a need to design technologies for learning that account for and adapt to the everyday gendered constraints experienced by young RAS. Given that the majority of RAS are migrating from non-Western contexts, there is a need for technological design within this space to explore and work with non-Western feminist theories and views [25] to address the above-mentioned gender disparities while also avoiding the imposition of Western feminist values that might be in tension with the cultures held by young RAS.

Considerations for Racism. Recent research has highlighted how online sharing encourages and enables learning through content creation [26, 27]. However, online technologies have been identified as a resource for RAS while also being spaces in which they are exposed to racism [4]. Our findings indicate that wariness of online racism discourages young RAS from publicly sharing on social media platforms as part of their learning activities. Therefore, nuanced consideration regarding online safety and racism are warranted when designing for online learning interactions for this population. Our research further stresses the importance of codesigning protective measures in the realm of online safety together with adolescents [28] and extending such measures to designing learning technologies to be used by young RAS. Furthermore, there is a need for learning technologies to integrate knowledge on supporting the coping mechanisms of targets of interpersonal racism through social technologies [29] and to create inclusive spaces and counter-narratives encouraging communities subject to racism to engage in learning [30].

In sum, the research presented in this paper brings to the fore issues of gender, race and culture that need to be accounted for when designing technologies to support young RAS in learning and developing their learning skills. We highlight the ways in which these factors interplay and may disproportionally exclude young RAS who identify as girls from non-Western cultural backgrounds and those with caring responsibilities from engaging in technologically mediated learning activities that leverage existing social media platforms and place-based learning pedagogies. Furthermore, we show how wariness of online racism discourages young RAS from engaging in online learning activities. We discuss ways forward when designing learning technologies for this population.

Limitations. While the participant group is culturally heterogenous, the majority of girls was from Eritrea. More research is needed to further explore cultural factors and their interplay with gender.

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