

Key Points on the Strengths and Weaknesses of Utilizing WhatsApp for Data Gathering When Working With Refugee Settlement Communities:

Strengths

The WhatsApp group generated a sense of community and feelings of belonging among participants. The Venezuelans in this study appreciated the possibility of being connected to new people as well as learning about their professional and personal developments throughout the research process.

1. Spontaneous interactions:

From the outset, participants were engaged in jointly creating a community by starting their own conversations. This offered the researchers **the possibility to observe how conversations unfolded in the group, which might have been different if the researchers had initiated the conversations**. The group interaction occurred in a spontaneous way, allowing everyone to participate as they would like, including us, the researchers.

The development of **spontaneous interactions** among group members enabled by the informal, free-and-ease communication style (e.g., light responses, emojis, visual illustrations) also allowed researchers to obtain insights into moments of anxiety affecting participants' experiences.

These **voluntary, unstructured conversations in the group** had the advantage of providing rich, unexpected insights into participants' lived experiences and "in real-time".

The methodology in the WhatsApp group context we studied was not designed to have control over participants' posting behavior (e.g., fixed schedule for posting new content or sending messages). Instead, the possibility that members had to engage in **spontaneous interactions** in the group offered better opportunities to access different forms of knowledge that were not foreseen but spontaneously brought by participants.

2. Engagement and community-building:

Many were willing to share with the group information about their everyday life, which they knew was also being shared with researchers. Participants shared humorous content about their daily lives and routines. The group facilitated relationship building and support that extended beyond the app. Aside from bringing direct benefits to the participants, **the group also enabled us (researchers) to better understand participants' immediate requests for help and provision of assistance in ways that would not have been possible had the researchers adopted another method of digital ethnography (e.g., conducting individual WhatsApp chats with participants, or following participant interaction on Facebook groups)**.

3. Group conflicts

Conflicts in the context of the WhatsApp group can function as a means for further observation of how relationships among refugees resettling take place and are being negotiated in real-time. Furthermore, conflicts in the group provided researchers with access to information about how participants negotiate appropriate sharing and group norms.

4. Participants can establish their own rules of engagement in the group:

Several times, we as researchers did not participate in group discussions due to the uncertainty throughout the project on whether our role as project leaders could have any coercive effect on participants' interactions in the group (Arroz et al., 2019). Such an approach highlights the opportunity of collecting data in ways that might have not been possible due to power differentials that tend to lead to self-censorship among participants. For instance, participants chose not to accept that certain contents (e.g., pornography) are shared in the group while reinforcing the rule regarding group membership after one of the members asked if an acquaintance could be added to the WhatsApp group.

5. Obtaining and sharing all kinds of information:

The WhatsApp group became a relevant space that participants used to share messages and website links related to job opportunities, education, health, legal procedures, recipes, cultural celebrations, and news from Venezuela, functioning as a source that participants had access to daily. Within this context, it was also possible to observe that the group space was used as a mechanism for collective checking of contents that raised suspicion among participants.

Weaknesses

1. Limitations to spontaneous interactions:

Yet it was important to account for the differences that emerged regarding the engagement of participants in WhatsApp group communication, as this can be a disadvantage when using WhatsApp as a tool for data collection in research with refugee communities.

The varied engagement of participants in WhatsApp group chats could potentially lead to an imbalanced representation of participants' voices and experiences.

2. Challenge of retaining participant interaction:

A small number of participants did not engage constantly, highlighting the challenge of retaining participant interaction in remote research. Reasons not to engage, according to participants:

3. Difficulties following the discussion in the group app

We recognized from our experience of using WhatsApp in a group context that it was not always possible to follow the discussions as they happen because of the great amount of information shared and the relatively quick time of emergence and resolution of conversations in the group. **The alternative we found** was to at least once during the day in our different time zones, we checked the group activity and interacted with participants by answering questions they raised (e.g., about legal procedures, city addresses, etc.), or commenting on the content they shared in the group chat.

4. Limitations of data collection:

We needed to consider the limitations of data collection and sharing using WhatsApp in research with low socioeconomic status populations. It became clear that some choices when it comes to sharing are related to internet capacity, which may constrain the availability of data for analysis in ways that cannot be predicted. In our WhatsApp study, we observed the employment of digital strategies among participants regarding the data economy, such as avoiding the download of very heavy video

content and apps or storing them in their devices to avoid using internet data and searching for free Wi-Fi.

5. Concerns over datafication practices

The process of datafication transforms individuals or populations into digital data that can be traceable and categorized (Adey, 2004). Digital data generated from social media activity (searching for information, navigating through a specific location, or sharing photos online) can be captured by government and private actors to verify refugees' identities and determine their access to rights, assistance and services (Madianou, 2019; Witteborn, 2021).

While **datafication concerns a major challenge to the development of contemporary digital methods**, this process does not necessarily make WhatsApp a problematic platform for data collection in refugee contexts. In fact, previous research suggests that the end-to-end encryption introduced in the application to protect user privacy can facilitate data security (Rössler et al., 2018, as cited in Kaufmann et al., 2021). In her study with Syrians in their new city of Vienna, Kaufmann (2018) showed that her participants felt comfortable using WhatsApp to engage in daily chats with the researcher, which helped build trust throughout the process. This is particularly relevant when projects include vulnerable populations.

6. Physical risks, safety issues

Concerns regarding the possibility of having the smartphones stolen were widely spread among participants, given the insecurity of life in Boa Vista. It is recommended that researchers and participants discuss these risks and collectively create guidelines around safety, such as not using smartphones in dangerous areas.

Summary of Lessons learned and Critical Considerations

We demonstrated the potential of WhatsApp to capture refugees' digital and physical spaces of everyday life through its application for data collection **in a less structured way**. This enabled us to access unique and unexpected occurrences and situations within participants' daily routines and follow important events, changes, and hardships during their lived experiences of adjustment to the new surroundings. We also showed that the experience of accompanying refugees in the WhatsApp group revealed relevant insights into relationship-building in a group context and that went beyond the digital chat, which in turn allowed us to meaningfully engage with the agency of participants to reach out to each other to request and provide help as they resettled.

- Researchers need to account for the existing social and economic inequalities that can affect the adoption of messaging apps in the research process.
- Research cannot serve to further reinforce digital vulnerabilities and inequalities in these locations. Precarious digital infrastructures in some places in the Global South, financial difficulty in acquiring a digital device with constant access to data packages and digital literacy issues can be frustratingly impactful for participants and researchers aiming to use WhatsApp as a research methodology.
- It is important to reflect on geographic locations, social markers, and collective life trajectories, as well as the specificities of refugees' experiences and needs in relation to digital connectivity. Thus, researchers should ensure that the lack of financial means to own a mobile phone device with internet and digital skills levels are not aspects constraining the selection and participation of refugee populations in research.
- Researchers should adopt methodological approaches to help reduce the risk of reproducing power inequalities in refugee research by taking into consideration participants' motivations to join the research project, including both material benefits and the possibility of access to various forms of support. This can foster the development of reciprocal relations between researchers and community members.

- Combine digital methods with traditional qualitative methods to get more in-depth insights into participants' motivations and build reciprocal relations: Through initial interviews as part of the multi-method approach adopted, we could identify participants' needs related to media use, which informed the design and implementation of our WhatsApp-based intervention. At the same time, the opportunity we had to conduct monthly face-to-face meetings with participants during the project supported further reflections about their settlement experiences across online and offline spaces, enhancing their trust and engagement in the WhatsApp group.
- There is an opportunity for increased digital media literacy that researchers need to meet by engaging participants in discussions about data obtained via mobile phones, apps, or social media.
- A collaborative and spontaneous approach to the use of messaging apps, such as WhatsApp, can help refugees and researchers construct new forms of knowledge production that are inclusive, sustainable, and meaningful in forced migration contexts.