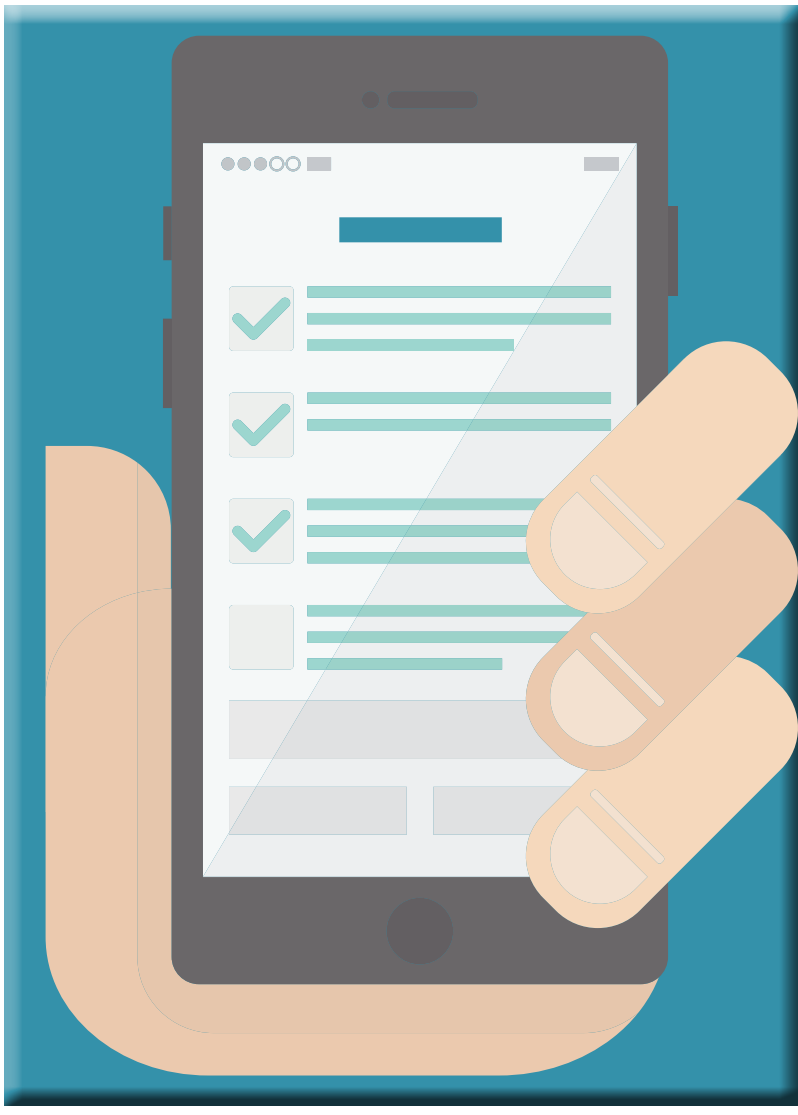
WHATSAPP SURVEYING GUIDE

LESSONS LEARNT FROM TWO QUALITATIVE WHATSAPP SURVEYS IN LEBANON



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Poster announcing the WhatsApp Survey and UNDP's Number

Introduction

This guide provides an overview of the key considerations and practical steps involved in qualitative WhatsApp surveying. It reflects our lessons learnt from conducting two WhatsApp pilot surveys in two villages in Lebanon, Qaraoun and Bar Elias, in 2017 and 2018. The surveys focused on the needs, perspectives, fears and local conflict dynamics of host communities and Syrian refugees in Lebanon. WhatsApp is a pertinent tool for qualitative surveying in the Lebanese context for two reasons.[1] First, it is very popular and widely used in Lebanon including among refugees with 84% of refugee households using WhatsApp.[2] Second, it has the voice message function which allowed us to send survey questions as voice messages and collect people's stories directly including from people who are illiterate.

Different Uses of WhatsApp

WhatsApp can be used in multiple ways to support research, programming and coordination in the humanitarian and development sector.

1. **Deep-Dive Qualitative Survey Tool**: WhatsApp can be used to collect rich narrative data from vulnerable population groups/localities to better understand their needs, fears and perceptions of various topics including security, social stability, governance and international aid.
2. **Human-Centred Design (HCD) Tool**: HCD is a problem-solving strategy that incorporates the needs, feedback and suggestions of end users of services at every stage of the design process. As an HCD tool, WhatsApp can facilitate consultation, prioritization, ideation, and prototyping with end users. By systematically including people's perspectives into our work, we ensure that our services are effective and relevant for their intended end users.
3. **Real-Time Monitoring Tool**: WhatsApp can also support programming as a 'real time monitoring' tool by collecting input and feedback from beneficiaries and the wider community before, during and after project implementation. As such, the tool helps to remove barriers to inclusivity, facilitates 'on the spot' adjustments to programming and measures the impact of our interventions.
4. **Cross-Country Communication Tool**: The tool also allows for continued contact with respondents after they cross borders. Even when people change phone numbers as they move to new countries, they often maintain their WhatsApp contacts either by linking their existing WhatsApp account to a new phone number or by continuing it on the previous number. Such cross-country communication could help protection actors to better understand the protection needs of refugees who returned or resettled. For instance, the tool could offer a means of communication with Syrian refugees after they leave Lebanon.

In fact, research on refugee phone usage in Lebanon suggests that humanitarian agencies should consider moving away from mass SMS communication with refugees and towards WhatsApp.[3] Since humanitarian agencies use the Lebanese mobile phone network to send SMS, refugees have to maintain a costly Lebanese line (which they need to recharge monthly to retain their number) to receive these messages. They use WhatsApp for most other communication, which they can also operate on a much cheaper Syrian SIM card.[4]

Why do Qualitative WhatsApp Surveying?

For us, the main purpose of using WhatsApp as a qualitative survey tool was to produce more nuanced social stability and tension analysis. While quantitative surveying is important to achieve representative results, it tends to pull people towards generalizations and stereotyped discourse simply by the way questions and answers are framed (e.g. 'how is the relationship between "the Lebanese" and "the Syrians"?' - which assumes that these are relatively homogeneous groups that have only one type of relationship). By asking people about their personal experiences, qualitative surveying, on the other hand, produces narratives which are personal, complex and situational. The vast majority of respondents chose to reply to our survey questions via voice messages.

Contributions of WhatsApp Surveying

- **Scale and Speed**: The unique contribution of WhatsApp surveying is that it makes the collection of a large qualitative sample possible in a very short time. More than a 1000 people participated in our survey, demonstrating that WhatsApp is an effective tool for collecting qualitative data at scale (it would take weeks, if not years, to interview a 1000 people).
- **Cost-Effective and Convenient Communication**: Sending messages via WhatsApp is free for both parties where Wi-Fi or 3G is available. People in Lebanon are very comfortable with and used to WhatsApp communication. Board any minibus or service in Lebanon and you will find people talking to their phones, sending voice messages to friends and family, some very short, others exhaustingly long descriptions of daily routine, work issues or personal stories. This habitual relationship to WhatsApp helped to produce very intimate and interesting narrative data.
- **People-Generated Data**: The WhatsApp survey limits the power and interference of the researcher in people's stories. While the researcher still asks the questions, she cannot steer the narrative through follow-up questions or prompts, thereby giving people more space to talk about the issues that matter to them. There is also no personal relationship between researcher and research participant that could produce social desirability or silencing effects.
- **Reducing the Power of Local Gatekeepers**: WhatsApp also helps to collect story data from very vulnerable populations, who are often hard to access for qualitative research, such as the unemployed and the illiterate. It thus reaches beyond the 'usual suspects' who tend to be referred for Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). In doing so, the mobile method reduces the role of local gatekeepers in accessing vulnerable people for research.

Limitations

- **Dependence on Phone Numbers**: Sending WhatsApp messages requires phone numbers which can be difficult to access depending on the country and data context (see next section).
- **Sampling Biases**: While creating larger qualitative samples, the WhatsApp survey also introduces sampling biases. In fact, our samples were skewed towards men and Syrians, meaning that our results were weaker for women and Lebanese. There may also be other biases in who chooses to respond to the questions and who does not that we cannot fully account for.
- **Survey Credibility and Self-Censorship**: There may be limits to what respondents, especially vulnerable groups such as refugees, feel comfortable and safe reporting given their legal precarity and the novelty of administering humanitarian surveys through WhatsApp. That said, in our surveys, we were surprised by how many people felt sufficiently comfortable to talk to us about sensitive issues such as army raids, detention and harassment.

How to get the Phone Numbers?

- **Data Sharing Agreement with a Phone Company**: The best route to representative sampling would be by accessing phone numbers directly through a data sharing agreement with a phone company. The phone company could then supply a database of phone numbers stripped off all personal identification (other than locality of phone registration, if the survey is focused on a particular area) which could be then used for administering the survey.
- **Collecting Numbers through Local Stakeholders**: Since we did not have access to a database of phone numbers, we had to collect the numbers ourselves. In Qaraoun, the municipality supplied us with the phone numbers of Lebanese and Syrians registered in the village. In Bar Elias, local informants helped us to collect phone numbers through Shawishes (local camp managers), local NGOs, professional and private networks. Such collection was facilitated by the fact that much information sharing and organization around refugees and aid distribution already works through WhatsApp. Shawishes often set up WhatsApp groups to share information and send instructions and so do many NGOs and municipalities. Local informants often only had to pull the numbers off existing WhatsApp groups from their phones into an excel table which can be done easily through a

gmail account. Using different sources (NGOs, Shawishes etc) to collect phone numbers helps to create better, more representative samples. It is also advisable to create random sampling groups within the overall database to facilitate comparisons.

- **Self-Subscription**: We also tried to enlist survey participants by inviting them to subscribe to the survey through SMS messages that we had sent to all phone numbers registered in the area around the two pilot locations.[5] Prospective participants were asked to save our number and send us a WhatsApp message to initiate the survey. This approach, unfortunately, yielded very few participants and creates further selection biases.

Practical Considerations

- **Survey Phone**: To administer the survey to a large sample and to ensure safe data storage, a separate survey phone should be purchased (this can be used to administer multiple surveys). The phone should be of good quality (500-600USD) and use Android so that you can import the phone numbers through gmail. The survey phone should be stored at a safe location (locked) with access limited to the Information Manager and the Data Clerk.
- **Sample Size and Response Rate**: In our experience, WhatsApp surveying works best as a deep-dive qualitative tool to better understand particular localities or demographics. The ideal sample size is between 2000 and 3000 numbers which should give you between 340 and 510 respondents. Our response rate in both surveys was 17%. Our pilots suggest that the response rate varies substantially depending both on the question as well as the sending and follow-up strategy. We found that the response rate can be significantly increased through individual follow-up via WhatsApp and SMS messages. Calling respondents (which we did not do) could also increase the response rate.
- **Compressing Data**: The regular WhatsApp application worked well with up to 3000 numbers but started bugging when we tried to send questions to 5000 people (this might be different for WhatsApp business). To facilitate sending voice messages to many phone numbers (particularly long ones such as the introductory message) they need to be compressed through a free online software (e.g. http://www.mp3smaller.com/).

Survey Design

- **Co-Designing the Survey with the Community**: We developed the survey through a workshop with community stakeholders in the two pilot locations to ensure our questions are conflict-sensitive and align with people's habits in using WhatsApp. Workshop participants informed us that WhatsApp is used for everything – from personal and work communication to local organization of assistance and medical treatment. Participants preferred survey questions that are short and personal.
- **Inclusivity and Conflict Sensitivity**: Since we did not know who the phone numbers belonged to, we framed the questions in a way that was inclusive of both Lebanese and Syrians.[6] We also avoided overly political questions so as not to antagonize participants, while keeping questions sufficiently broad so that people could talk about politics, if they wished. In fact, respondents gave us more insight into politics and conflict dynamics when asked broader questions about safety, fears or unemployment than when directly asked about conflicts and tensions. This speaks for framing questions more openly to provide people with the space to talk about the issues that matter to them.
- **Number of Questions and Sending Intervals**: We sent two to three survey questions each week over a period of a month. To avoid survey fatigue, it is advisable to limit the survey to eight to ten questions (one demographic question and seven substantive questions). Numbering the questions clearly helps to organize the data as people can more easily reply to specific questions (Q1, Q2 etc) throughout the month of survey administration in the order they prefer. We experimented with sending questions at different times of the day and with varying intervals and our conclusion was that a two-to-three-day rhythm (Monday evening, Wednesday evening and Friday evening) worked best. We gave people 48 hours to reply to questions and collected the answers before we sent out the next question. We avoided sending questions during prayer times. Sending questions on public holidays or weekends did not increase the response rate

How to build the Credibility of the Survey?

- **Community Mobilization and Outreach**: In both pilot locations, we organized a community workshop that also served as a platform for community mobilization and outreach. We encouraged community stakeholders and refugee focal points to promote participation in the survey especially among younger people and vulnerable communities. They received flyers and posters to distribute. We also put up posters in the municipality and in the Informal Settlements (IS) announcing the survey and asking people to save our phone number to receive the survey questions. One key obstacle in terms of building the survey's credibility was that people are not used to the United Nations communicating through such an informal application and thus suspected the survey to be spam or fraud.
- **Survey Announcement via SMS**: Announcing the survey via SMS was an effective way of making the subsequent WhatsApp communication more credible. Two thirds of survey respondents in Qaraoun said they knew about the survey through a SMS message we had sent to phone numbers registered in the area. Around a quarter of respondents learned about the survey from the municipality (they advertised the survey on their facebook page) and only 8% through friends and family. Calling phone numbers at the beginning of the survey could also be a way of making the survey more credible and achieving higher response rates. We did not choose this approach for reasons of cost and time effectiveness.
- **Potential of WhatsApp Business**: Going forward, WhatsApp business, a new App developed by WhatsApp, can boost the survey's credibility as it verifies the account of 'businesses' (in our case UNDP) and allows for automated messages and better organization of data. [7]

Explaining the Survey

- **Introductory Message**: An introductory message should be sent both as voice and as text message via WhatsApp. The message explains the purpose of the study, informs about data protection and usage and clarifies that the data will only be used for research purposes and on an anonymous basis. It also informs participants that this is not an emergency number and provides them with the number of the police in case of emergencies and UNHCR's number for protection and assistance needs. We personalized our voice messages using a female voice ('Hi, this is Sarah from UNDP' – Sarah even received a marriage proposal by one WhatsApp respondent) to shed the image of being an overly technical and removed bureaucracy. The message should also make clear that people of all nationalities, genders and ages are welcome to participate to make the study as inclusive as possible. To facilitate gender-equal representation, it might be worth highlighting that women are particularly encouraged to participate.
- **Survey Compensation**: We also announced in our introductory message that we would compensate participants for their data use, upon completion of the survey, with phone credit without specifying the amount. The message clarified that this is a one-off compensation and that there are no other direct benefits to survey participants, even though it is possible that information from the study could be used to improve public safety and community well-being in their area, now or in the future. Eventually, we compensated everyone who replied to at least two substantive questions over a month with 10 USD in phone credit, taking into account that some people combined several questions in one long voice note. Some respondents made clear that data compensation was necessary to make communication possible. One respondent explained, 'I always like to answer your questions and I have so much to say, but my problem is credit and data.'

Design Thinking Workshop in Qaraoun (Bekaa)

Survey Administration

- **Sending Strategies**: We sent each question both as voice and text message and gave people the choice of replying either through voice or text message. The majority (75% in the first pilot, 89% in the second pilot) chose to reply with a voice message. The most convenient way to send messages to a large number of people is via broadcast lists. Both voice and text messages can be sent to up to 256 people in one group which means that for larger sample sizes you will have to create several groups (with WhatsApp business you can send messages to unlimited numbers of people in your broadcast list). Your respondents will receive the message as a normal message in a chat screen between them and you. Their reply will not be sent to other recipients in the broadcast list. Messages sent via broadcast list (unlike personal messages) will only reach those people who have already saved your number in their phone's address book.
- **Saving our Number**: To ensure that prospective participants have saved your number (and thus receive the questions sent through the broadcast lists), it is important to send the introductory message and a reminder to save the number individually to each phone number. While this is time-consuming particularly for larger sample sizes, it ensures everyone receives the introduction and can then make an informed decision as to whether or not to continue receiving your questions (by saving your number). In parallel, we sent reminders via SMS to all phone numbers asking them to save our number, if they would like to participate in the survey.
- **Ongoing Communication**: To ensure ongoing communication, it is important to create as much follow-up and engagement as possible. We would send survey participants regular messages such as 'We apologize for not answering personal messages and phone calls. Thank you for replying to our question.' Many of our respondents were very apt with WhatsApp and checked if we had played their voice message. If we did not play it before sending a new question, some people would respond, 'why should I reply to your question when you haven't even listened to my previous reply?'. Our Data Clerk would thus open and play each voice message before downloading it to reassure people that their stories were listened to.

Data Management and Analysis

- **Data Safety:** To ensure data safety, it is important to limit the number of people who have access to the survey phone and the computer on which the data is saved (people with access should sign non-disclosure agreements). Both devices should be safely locked in an undisclosed location. Apart from safe data storage, WhatsApp end-to-end encryption reassured our respondents that their messages could not be accessed by third parties. We also ensured data security by holding as little personal data as possible in the first place. Once the phone numbers entered our data systems, they were already stripped of any personal information (e.g. names). We also advised people not to give out any personal information (e.g. names, ID numbers) in their messages to keep the survey fully anonymous.
- **Data Analysis**: To save and analyze the data outside your phone, you need to download WhatsApp on your computer (the computer needs Windows 10). You can download all the voice messages you received and save them to a folder (create ID numbers for each voice note to better manage your data). To compare different groups, we requested some demographic data at the beginning of the survey (gender, nationality, age, employment situation). Respondents could also choose not to provide any biographical data. To ensure systematic demographic data collection, it would be advisable to start the survey with a short questionnaire that people fill out via KoBo or SurveyMonkey before they receive the first qualitative survey question.

Sampling Biases

- **Vulnerable Demographics and Age Groups**: The WhatsApp survey was good at reaching more vulnerable demographics. Almost 90% of respondents were Syrians (most of them refugees). Among those who indicated their employment situation, 50% were unemployed. We also managed to reach all age groups with most respondents being between 30 and 40.
- **Increasing Participation of Women**: Our sample suggests that the main bias of WhatsApp surveying is an underrepresentation of women and host communities in Lebanon. Women only represented one third of our respondents. Among refugees, female participation is lower as women have less access to the household phone. Their participation can be somewhat increased by varying the times at which questions are sent and running surveys for longer time periods to ensure women have more chances to reply to questions. Yet, lower female participation was not only a function of restricted mobile phone access but also reflected an underlying assumption that our survey questions were addressed to men. Some women would write to us that their husbands are currently at work and would reply to our question when they come home in the evening. For future surveys, we would suggest labelling a few questions as 'for women only' to make sure men hand over the phone to female household members or to make clear in the introductory message that we would like to hear from all male and female householders above 18.
- **Increasing Participation of Host Communities**: Host community participation was very low at only 13% and 11% respectively. This partly reflects less interest among Lebanese to participate in a study by the 'UN', an institution, many Lebanese believe, focuses exclusively on Syrians and Palestinians. Another bias is produced through the phone numbers itself. Local and international actors are more likely to hold phone data from Syrian refugees as part of their management systems than from Lebanese citizens. By more systematically collecting demographic data at the beginning of the survey, it is possible to send more tailored questions to underrepresented groups (e.g. women and Lebanese) to increase their response rates.

Ethics

There is a risk that such a WhatsApp survey raises expectations of concrete assistance among people who struggle to survive on an everyday basis. We tried to manage these expectations through a carefully worded introductory message that explained the purpose of the study. However, some of the messages we received showed that it is almost impossible not to raise expectations when engaging with very vulnerable communities. We compensated survey participants with phone credit for their time and data use at the end of the survey and with the hope that this may somewhat offset the frustration with research work that does not provide any tangible benefits.

ENDNOTES

1. For the survey results, see Leila Ullrich, 'Losing Control: Results of a WhatsApp Survey of Syrian Refugees and Host Communities in Lebanon', UNDP Research Report (September 2018); Leila Ullrich, 'Speak up Via WhatsApp: Understanding the Life Worlds of Syrian refugees and host communities in Lebanon', UNDP Research Report, April 2018, available at https://data2.unhcr.org/fr/documents/download/63370.
2. UNHCR, UNICEF and WFP, 'Vulnerability Assessment of Syrian Refugees in Lebanon (VASyR 2017)', available at https://reliefweb.int/sites/reliefweb.int/files/resources/VASyR%202017.compressed.pdf, at 18.
3. See Markus Göransson, 'Apping and resilience: How smartphones help Syrian refugees in Lebanon negotiate the precarity of displacement', Policy Brief, Clingendael, July 2018, at https://www.clingendael.org/publication/how-smartphones-help-syrian-refugees-lebanon, at 9. The researchers conclude that 'by retaining a Lebanese number they do not need for other purposes, many Syrians are effectively paying a monthly fee for the ability to receive SMS messages and calls from UNHCR.'
4. Ibid.
5. We paid a phone company to send these SMS messages. We did not have access to the phone numbers ourselves.
6. We failed to explicitly include other groups, particularly Palestinian refugees, in the survey, which should be done in future surveys to ensure inclusivity.
7. Of course, the logic of community engagement by the UN is very different from the communication between for-profit businesses and their clients, but it may nevertheless be possible to adapt WhatsApp business for humanitarian and development surveying.

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