The Prospects for Remote Assessment: A Comparison of Phone vs In-person Interviews in Nigeria

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Key Findings

- Amid the ongoing Boko Haram conflict in Nigeria and the COVID-19 health crisis, surveying people via mobile phone proved to be an effective method for gathering timely, high-quality, accurate, and reliable data, comparable to the data collected via in-person interviews.

- There are no significant differences between refusal rates to answer sensitive questions regarding the type of interview conducted (by phone or face-to-face).

- In most cases, there are no significant impact of administering the survey by phone or in person on the answers to a series of sensitive questions.

- There was one exception: people interviewed by phone were more likely to acknowledge the use of drugs, perhaps suggesting that admitting to behaviour considered by local communities as shameful and un-Islamic is more difficult to do when sitting face to face with another person.

- The type of interview had no influence on the level of anxiety reported by people pre-and post-survey.

This Findings Report, and the research that supported it, were undertaken as part of UNIDIR’s Managing Exits from Armed Conflict (MEAC) project. MEAC is a multi-donor, multi-partner initiative to develop a unified, rigorous approach to examining how and why individuals exit armed conflict and evaluating the efficacy of interventions meant to support their transitions. While the Findings Report benefited from feedback from MEAC’s donors and institutional partners, it does not necessarily represent their official policies or positions.

Background

About MEAC
How and why do individuals exit armed groups, and how do they do so sustainably without falling back into conflict cycles? These questions are at the core of UNIDIR’s Managing Exits from Armed Conflict (MEAC) initiative. MEAC is a multi-year, multi-partner collaboration that aims to develop a unified, rigorous approach to examining how and why individuals exit armed conflict and evaluating the efficacy of interventions meant to support their transition to civilian life. MEAC seeks to inform evidence-based programme design and implementation in real time to improve efficacy. At the strategic level, the cross-programme, cross-agency lessons that will emerge from the growing MEAC evidence base will support more effective conflict resolution and peacebuilding efforts. In 2022, when the research featured in this report was undertaken, the MEAC project and accompanying case studies benefited from support by the Norwegian Ministry of Foreign Affairs; Switzerland’s Federal Department of Foreign Affairs (FDFA); the UK Foreign, Commonwealth and Development Office (FCDO); the Irish Department of Foreign Affairs; the UN Development Programme (UNDP); and the International Organization for Migration (IOM); and was run in partnership with the United Nations University Centre for Policy Research (UNU-CPR); the Secretariat of the Regional Strategy for Stabilization, Recovery and Resilience; UN Department of Peace Operations (DPO); UNICEF; and the World Bank.

About this Series
The MEAC findings report series seeks to put evidence about conflict transitions and related programming into the hands of policymakers and practitioners in real time. The reports present short overviews of findings (or emerging findings) across a wide range of thematic areas and include analyses on their political or practical implications for the UN and its partners.

About this Report
This report is based on a research study about the effects of the interview method on non-response rates and honest reporting on sensitive question topics. Specifically, the study set out to compare the answers to a set of five questions on drug use, victimization experiences, and social connectedness with the Boko Haram armed group between interviews conducted by phone and those administered face-to-face with an enumerator. The data come from a survey carried out between May 2021 and early June 2022 (amid the COVID-19 health crisis) in the Maiduguri Metropolitan area and the communities of Jere and Konduga, in Borno State, Nigeria, a region hard hit by the Boko Haram insurgency. This report provides empirical evidence on the potential for utilizing remote assessment of UN-supported programmes in insecure and/or inaccessible areas. The report examines what works to overcome methodological challenges in remote data collection.
in the context of armed conflict, specifically by identifying the specific roll-out practices that appear to bolster responses.

**Introduction**

According to the 2022 United Nations’ Sustainable Development Goals Report, armed conflicts affected approximately one out of four people worldwide in 2020, claiming the lives of thousands and leaving in their wake a trail of hunger, human rights violations, damage to livelihoods, and long-lasting disruptions to development.1

Gathering timely, high-quality, accurate, and reliable data is the starting point for designing and implementing an efficient humanitarian response that addresses the effects of conflict and minimizes the risk of future hostilities. Commonly, this information is collected via surveys. However, traditional survey methods, such as face-to-face interviews, may not be feasible or appropriate in conflict areas. Insecurity, restricted access to certain regions, and the persistent fear and mistrust of people raise many issues regarding potential bias, representativeness, and validity of the sample. Inaccurate or unreliable data can lead to incorrect diagnoses and, consequently, poorly designed public policies and practices that could even exacerbate the very problem they intend to solve.

In this regard, coupled with the steadily increasing access to mobile phones globally, including in regions with low-income levels,2 numerous studies are now promoting the use of mobile phone surveys to collect data from individuals who may be otherwise difficult to contact.3 For instance, the World Bank has used this approach in their Listening to Africa initiative on living conditions in Madagascar, Malawi, Senegal, Tanzania, Togo, and Mali.4 During the Ebola virus disease outbreak in West Africa in 2014, phone surveys were used to safely estimate mortality, morbidity, and health-seeking behaviour in Liberia.5 More recently, the United Nations Development Programme (UNDP) implemented this method to study the experiences of people in Latin America and the Caribbean during the COVID-19 pandemic,6 and the United Nations World Food Programme (WFP) used mobile phone interviews to monitor food security in Africa and the Middle East.7

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In the aforementioned examples, the use of mobile phones in data collection proved to be an effective method not only for gathering information from populations in remote areas but also as a relevant alternative for providing faster turnaround times, timely data for quick responses, cost savings, and for ensuring the safety of enumerators from health risks. These advantages also apply in the context of armed conflicts. Médecins Sans Frontières (MSF), for instance, used this interview method to estimate the access to healthcare and mortality rates in the far North region of Cameroon, a zone hard hit by the Boko Haram conflict.\(^8\) The WFP conducted a monthly survey on the socioeconomic impact of COVID-19 on Iraqi families who had been displaced due to the Islamic State of Iraq and the Levant (ISIL) conflict.\(^9\)

Notwithstanding the potential benefits of using mobile phone surveys in the context of armed conflicts, there is still ongoing debate about how to overcome some challenges when aiming to conduct robust assessments of sensitive topics, such as affiliation to armed groups, individuals' perceptions, attitudes, and beliefs towards the conflict, and experiences of crime victimization (including abduction and sexual offences).\(^10\) This information is key and relevant, for instance, for developing and monitoring reintegration policies and programming, promoting the transition of ex-combatants into civilian life, better designing strategies to help conflict-affected populations, avoiding the recruitment of people into armed groups, and facilitating the exit of those already associated with them.\(^11\)

Surveying people via mobile phones about sensitive topics may have some advantages, such as creating a better sense of anonymity for the respondent, as well as improving data privacy and confidentiality.\(^12\) Nevertheless, two main concerns remain, particularly in conflict-affected contexts where they might be exaggerated: non-response bias and the misreporting effect.\(^13\)

- The **non-response bias** occurs when respondents refuse to participate in a survey or drop out without completing a follow-up questionnaire. For people living under threat from armed

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\(^8\) Etienne Marc Hugues Gignoux, Olivier Tresor Donfack Sontsa, Ayoola Mudasiru, Justin Eyong, Rodrigue Ntone, Modeste Tamakloe Koku, Dailil Mahamat Adjji, Alain Etoundi, Yap Boum, Christine Jamet, Jean-Clément Cabrol, and Klaudia Porten, “A telephone based assessment of the health situation in the far north region of Cameroon,” *Conflict and Health* vol.14, No. 82. (November 2020)

\(^9\) The World Bank, “High Frequency Phone Survey - Internally Displaced Persons (IDP) and Returnees Sample 2020,” 26 October 2021.


\(^12\) United Nations, Department of Economic and Social Affairs, *Guidelines for Producing Statistics on Violence against Women: Statistical Surveys*. (United Nations, 2014)

actors, talking about certain topics may endanger them, which can impact higher refusal rates.

- On the other hand, even when respondents agree to participate, there may be a **misreporting effect** due to the information they provide. This effect occurs when individuals have incentives to conceal the truth, either due to social stigma or pressure to adhere to social conventions - the so-called social desirability bias - or because of fear of retaliation or legal sanctions. Evidence of these biases has been found in previous studies on violence against women, in surveys on sexual trauma in militias, and even examined in conflict-affected contexts, empirical evidence is still insufficient.

In light of the possibilities of remote phone assessments but the concerns about the potential bias introduced in using them, the MEAC project set out to test the impact of two different interview methods - namely in-person and by phone - on non-response rates and misreporting when collecting information on sensitive topics in the context of the Boko insurgency in the North East of Nigeria. To achieve this goal, 1,600 respondents were randomly selected and assigned to be interviewed via face-to-face interviews (687 respondents – 43 per cent) or by phone (913 people – 57 per cent), and their answers were then compared to statistically examine differences in terms of non-response and misreporting.

The main policy objective of this report is to provide empirical evidence on what works to overcome methodological challenges in the data collection processes via phone and in-person surveys in the context of armed conflict. Particularly, this research aims to share the MEAC experience and lessons learned about the best strategies to collect high-quality, accurate, and reliable data via mobile phones as a method to interview people who are otherwise hard -or impossible- to reach.

**Methodology**

**About the Sample**

The data examined in this report come from a baseline survey carried out between May 2021 and early June 2022 in Jere, Konduga, and the Maiduguri Metropolitan area (MMC), in Borno State, Nigeria. The sampling frame for this baseline survey was created based on a Participant Recruitment (PR) survey, which was conducted between 6 November 2020 and 26 March 2021. The PR survey campaign targeted 24 different communities, in the area that was chosen to provide an array of

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17 Maisandari, Maimusari, Maisandari - Stadium IDP Camp, Shehuri North, Gwange, Bolori, Bolori 2, Bale Galtimari, Bakasi Camp – MMC, El-Maskin IDP Camp, Muna Garage – MMC, Farm Centre Camp – Jere, Lamisula, Mairi, Hausari, Mashamari, Limanti, Lamisula - EYN IDP Camp, Mafoni, Gamboru, Shehuri South, Gomari, Fezzan, and Bulabulin.
conflict experiences, variation in experience with recruitment and ex-combatant/ex-associate returns, and diverse ethnic and socioeconomic demographics, as well as because they were the locations of UN reintegration related programming.

**Figure 1 – Communities Targeted in the PR Survey Campaign**

During the recruitment stage of the PR survey, interviewees were provided with an overview of the proposed follow-up survey and topics it would cover and asked for their consent to be contacted in the future to participate in this or another survey (when they would have a second opportunity to consent to participation).  

In total, the PR recruited 13,473 persons, i.e., respondents who consented to be part of the PR survey pool, who were at least 12 years old, and who provided contact information (their phone number and a backup phone contact where possible).

In order to test the impact of survey modality (e.g., phone v. in-person interviewing), the MEAC team randomly selected PR recruits (with age/location, and gender quotas) to participate in a follow-up baseline survey and randomly assigned them to be interviewed in person or by phone (687 face-to-face (40 per cent) and 913 via phone (60 per cent). To conduct the interview, the enumerators

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18 For all MEAC surveys and research activities, there is a two-stage assent and caregiver/guardian consent process for 12-17-year-olds.

19 At the time of designing this baseline survey, Nigeria had not had a population and housing census in more than 15 years (the last census dated back to 2006). Therefore, the potential sampling frames were out of data and unavailable at the community geographic level. Moreover, the Boko Haram conflict forced millions of people to flee, hampering the use of existing sampling frames due to their obsolescence.
contacted the interviewees to set up an appointment that flexibly matched the respondent’s time availability. This sample is composed of 827 women and 772 men. Of the total of surveyed people, 121 were minors, 414 were youth, and 1048 were adults. Figure 2 depicts the distribution of the total sample in this study by gender, and Figure 3 shows the distribution by age of the respondents.

**Figure 2 – Distribution of the Sample by Gender and Type of Interview**

<table>
<thead>
<tr>
<th>Type</th>
<th>Female (n=827)</th>
<th>Male (n = 772)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In person</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Phone</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Figure 3 – Distribution of the Sample by Age and Type of Interview**

<table>
<thead>
<tr>
<th>Type</th>
<th>Minor (n=121)</th>
<th>Youth (n=414)</th>
<th>Adult (n=1048)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In person</td>
<td>13%</td>
<td>26%</td>
<td>61%</td>
</tr>
<tr>
<td>Phone</td>
<td>4%</td>
<td>26%</td>
<td>70%</td>
</tr>
</tbody>
</table>
It is important to mention that although the two samples were initially designed to have equal gender and age representation, the team faced particular difficulties in reaching children on the phone and men at home. Many factors could explain this difficulty, including age gaps in mobile ownership, gendered work patterns (e.g., men were more likely to be away from home during the day when enumerators came to the house for interviews in person) and population dynamics related to the conflict. The gender and age differentials between samples are not ideal but having controlled for gender and age in the analyses, it becomes clear that, in this case, the sample differentials did not impact the findings, as detailed below.

**Study Design**

To the total sample of 1,600 respondents, we applied three different analyses. The first analysis examines if nonresponse is associated with the interview method employed. In other words, does interviewing someone by phone versus in a face-to-face interview affect their willingness to honestly answer certain questions? Five questions on topics that are very sensitive to the local population were selected to do this study:

- **Today, how often do you use drugs?**
- **If you had a friend who wanted to join an armed group, like Jamā’at Ahl as-Sunnah (also known as Boko Haram), how long would it take you to get in touch with someone to help them join?**
- **Were any of your marriages forced?**
- **Were you ever beaten, tortured, or shot as a result of the conflict?** and,
- **Has anyone ever forced you to have sex or touched you in any way without your consent?**

After consultations with people from local communities, these questions were chosen because they were widely considered sensitive. They are the types of questions people may feel uncomfortable answering and maybe even be incentivized to provide inaccurate answers because of concern about stigma or out of embarrassment or fear. For example, drug use is highly stigmatized in northern Nigeria. Drug use is culturally unacceptable and religiously forbidden (in the Islamic faith). Addiction is considered to be a very shameful condition, especially when it begins to prevent users from functioning normally in their communities. The social consequences of being known to use drugs could be quite severe, especially for women. Likewise, admitting to having contact with Boko Haram has been quite dangerous, particularly in communities that have been occupied or attacked by the group. Even though many in northern Nigeria agree that forced marriage is not acceptable, it is still quite prevalent. There is a general reluctance to talk about forced marriage as doing so may be seen as questioning parents and religious leaders that help perpetuate the practice, a questioning of authority that is usually strongly disapproved of. Others may find it shameful or embarrassing to admit their lack of agency in their own marriage. Lastly, and understandably, asking about injury and violence experienced during the conflict is not easy, as there is still a lot of pain, fear and anger.

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associated with conflict experiences. Particularly, sexual violence is such a taboo subject to talk about that some local languages do not even have widely used terms for describing such acts.

For the second analysis, the five questions on sensitive topics were transformed into binary response variables to posteriorly test if the type of interview is associated with a particular response. For this transformation, if the question offered a scale, the scale was then collapsed into a binary response. For example, the question “Today, how often do you use drugs?” originally offered respondents the following answer options: “Most times”, “Sometimes,” and “Never”. To transform these answers into binary responses - and then make them more comparable across different question types - the “Most times” and “Sometimes” answer options were coded as 1 to represent at least some drug use, and “Never” was coded as 0 to represent no drug use. In particular, the categories and transformations for each question are as follows:

- **Today, how often do you use drugs?** (1 if “Most times” or “Sometimes”; 0 if “Never”),
- **If you had a friend who wanted to join an armed group, like Jamā’at Ahl as-Sunnah (also known as Boko Haram), how long would it take you to get in touch with someone to help them join?** (1 if “A few hours”, “About a day,” “About a week”, “More than a week”; 0 if “I would not be able to do it”),
- **Were any of your marriages forced?** (1 if “Yes”; 0 if “No”),
- **Were you ever beaten, tortured, or shot as a result of the conflict?** (1 if “Yes”; 0 if “No”); and,
- **Has anyone ever forced you to have sex or touched you in any way, without your consent?** (1 if “Yes”; 0 if “No”).

Participants who refused to answer these questions were not considered in this second analysis. This approach tests for the presence of a (mis)reporting effect (i.e., if conducting the survey by phone or in person encourages or discourages respondents from truthfully reporting some behaviours, perspectives, and experiences).

Finally, there was a third analysis of the question *How worried are you feeling right now?* which is asked at the beginning and end of the survey. The MEAC research team includes this question in most of its surveys worldwide as part of its effort to ensure the research does no harm. The questions are intended to measure any changes in anxiety due to taking the survey. By asking these questions in both in-person interviews and over the phone, it is possible to isolate whether the interview modality is affecting how comfortable the respondents feel during the interview.

In the three above-mentioned analyses, the regressions controlled for age group (minor, youth, adult), gender, and association with an armed group to statistically isolate the effect of the survey method on the corresponding response variables by limiting the influence of these variables. These

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22 There is also concern about retraumatizing people who have been victimized. The MEAC project takes a number of steps through its consent/assent process, external survey review, anxiety checks, professional enumerator training programme, respondent feedback, and referral support protocol to ensure its surveys do no harm in this regard.
factors were included as control variables as they have been found to be relevant in other MEAC studies.\textsuperscript{23}

**Findings**

The study found that the survey interview modality - being administered in person v. by phone - did not impact response rates. Respondents who were interviewed face-to-face agreed/refused to answer these questions in the same proportion as those who were interviewed by phone (see Figure 4). Particularly, the use of mobile phones had no significant effect on the willingness of interviewees to answer the questions on sensitive topics (0.1 - 0.4 percentage fluctuations). In this particular survey in the North East of Nigeria, when the respondent was initially recruited in person and followed up within 13-15 months later, whether or not the respondent was interviewed in person or over the phone did not impact non-response rates.

**Figure 4 – Percentage of People Who Refused to Answer by Question and Type of Interview Method.**

Secondly, the findings suggest that the survey method does not alter how respondents answer many sensitive questions. Survey respondents on the phone and in person were just as likely to report

knowing a person who could help them to contact someone to join Boko Haram, having a forced marriage, having been hurt during the conflict, and/or being a victim of sexual violence.

Nevertheless, when it comes to the question on the use of drugs, respondents interviewed by phone were more likely to admit to using drugs. These results held true for both male and female respondents, with about 10.7 per cent of all phone respondents acknowledging current drug use compared to 6 per cent of in-person respondents (disaggregated in Figure 5 below).24 One potential explanation for this discrepancy is that since the use of drugs is often viewed as extremely undesirable behaviour, respondents may be tempted to underreport their use to an enumerator, and in consequence, the respondent answers this question in a more socially desirable way.25 Up to this point, responses to sensitive questions did not vary regardless of the survey method employed. Drug users are treated with so much contempt and disgust in communities in northern Nigeria, however, that the fear about the potential social sanctions around answering this question honestly may be significantly higher than the other aforementioned sensitive questions (even, surprisingly, questions about Boko Haram). This finding indicates how important it is to consider local contexts, particularly local norms, and mores when designing surveys so as to anticipate questions that may elicit more dishonest responses in order to contingency plan on how to better measure related metrics.

**Figure 5 – Percentage of People Answering, “Most times” or “Sometimes” to the Question ‘Today, How Often Do You Use Drugs?’**

<table>
<thead>
<tr>
<th></th>
<th>In person</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6.0%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Female</td>
<td>6.1%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Finally, the study showed that the level of anxiety experienced by respondents during the interview was not impacted by the survey method. The results indicate that feeling worried at the beginning of or at the end of the survey is independent of the survey being conducted by phone or in person.

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24 It is worth noting that these estimates align with estimates from the 2018 National Survey on Drug Use and Health in Nigeria. According to this survey, between 11 and 12 per cent of the people aged 15-64 in Borno reported using drugs. See United Nations Office on Drugs and Crime, *Drug use in Nigeria*, (United Nations, 2018).

Moreover, changes in the respondents’ anxiety level (at the end in comparison to the beginning) are not significantly affected by the type of survey modality. In particular, the level of anxiety at the end of the survey is exclusively associated with the level of anxiety before the survey. It is interesting to note that in both phone and in-person interviews, respondent anxiety levels generally decrease during the course of the survey. That is to say, in this particular case, and with the care taken to design and administer the survey, the MEAC survey does not appear to be causing harm despite the sensitivity of the subject at hand.

Figure 6 – Percentage of People by Answer to the Question ‘How Worried Are You Feeling Right Now?’

![Bar chart showing percentage of people by answer to the question 'How Worried Are You Feeling Right Now?' with categories: 'Not at all worried', 'A little worried', 'Very worried'. The chart compares phone and in-person interviews before and after the survey.]

Practical Implications

MEAC’s test of survey modalities in the North East of Nigeria indicates that the use of mobile phones for collecting information in conflict-affected areas can be a largely effective method for gathering honest information from hard-to-reach populations. In addition, phone assessments have the added benefits of being efficient, reducing costs - both in terms of travel and staff hours - and enhancing the safety of enumerators (and possibly respondents as well). These benefits are important given the limited impact assessment budgets and timeline limitations of most UN-supported programming. Nevertheless, despite these advantages, there have still been concerns about the effect of interviewing people by phone on non-response rates and misreporting behaviour. The study detailed in this report, however, rigorously shows that these methodological concerns do not exist to the extent once thought in remote assessments in the North East of Nigeria.

The MEAC study found evidence pointing to the fact that both face-to-face and phone interviews can provide high-quality, accurate, and reliable data in the Boko Haram conflict context. Although
enumerators reported feeling more comfortable and finding it easier to ask sensitive questions in person, phone surveys may even reduce the misreporting effect in these types of sensitive questions (such as those on drug use) by improving respondents’ sense of privacy and anonymity.

This report is not intending to promote that mobile phone surveys should replace traditional face-to-face surveys or be used in all contexts but rather seeks to identify the specific circumstances where the relative benefits of mobile phone surveys can be leveraged based on the MEAC experience in the context of the Boko Haram insurgency and amid the COVID-19 health crisis in Nigeria. It is important to acknowledge that the MEAC mobile assessments in Nigeria may have worked well across all metrics - non-response rate, truthful responses, and anxiety impact - because they were part of a two-stage strategy mixing in-person and by-phone methods. The initial participant recruitment survey was important not only for methodological reasons to create a sampling frame but also to have a first personal face-to-face interaction with respondents, creating rapport and contributing to trust in the nature and ownership of the survey (e.g., not being run by government or security actors). Additionally, the particular participant recruitment sampling method registered heads of households and received their permission to register other members of the household. The recruitment survey was run by a well-trained, professional enumerator team. This approach was key to creating buy-in for participation across age and gender categories. All of these aspects of the participant recruitment process likely contributed to equivalent response rates and a sense of safety in answering sensitive questions regardless of follow-up modality (e.g., phone v. in-person interviews). These survey practices are essential, particularly before a remote questionnaire is applied.

It is not only the foundation upon which a mobile assessment matters (in this case, the in-person participant recruitment) but how mobile surveys are administered. A few key aspects of the survey implementation are worth noting as they would likely impact the quality of survey data collected by phone. During the MEAC’s survey data collection, data quality checks were continuously made to incoming survey submissions to monitor high rates of missingness and to ensure quality information by taking quick remedial actions. The survey process was designed to be flexible enough to expand the hours of the day that enumerators worked to reach different respondents and to reschedule interviews around their constraints. Highly trained enumerators are a key element in conducting a successful survey in the conflict-affected context since they are aware of local cultural sensitivities. This is particularly relevant in some communities where historical inter-ethnic disputes and distrust exist. In general, working with local enumerators helps ensure they are able to use the language a respondent prefers - something that is essential regardless of whether a survey is administered in person or on the phone. Ensuring that all enumerators undergo not only general training but specific training on the survey and survey software also enables enumerators to identify any potential issues and entry errors and to overcome potential high refusal rates associated with the use of phones in an environment with an ongoing conflict.

Although the findings of this study are promising, further empirical studies and discussions are needed before conducting remote surveys in other countries to take into account potential challenges associated with mobile data collection - including impacts on gender and age response
rates (especially for reaching women and children), phone turnover, variation in mobile connectivity, respondents’ privacy when living in a crowded house, and the potential impact of energy crises.\textsuperscript{26}

This has been a challenge with subsequent surveys administered by MEAC in Nigeria. In early 2021, ISWAP attacked Maiduguri’s electrical infrastructure, which, combined with subsequent assaults, created a severe and sustained energy crisis in the region. As a result, many registered respondents often struggle to keep their phones charged, which can create an obstacle to reaching the registered sample. According to different local reports, insurgents have perpetrated systematic attacks leading to energy cuts in many other places, which raises questions about how best to apply mobile assessments in such contexts. See Council on Foreign Relations, “\textit{Boko Haram Cuts Electricity to Maiduguri in Northern Nigeria},” 22 January 2020; The Premium Times, “\textit{Boko Haram throws Maiduguri into darkness again, blows up power tower},” 27 March 2021; and VOA Hausa Service, “\textit{Attack on Transmitters Cuts Power to Nigerian City — Again},” 29 March 2021.

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