

## Research opinion

### In the room where it happens: in-person or remote data collection in qualitative research?

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#### Introduction

Qualitative research is founded on the collection of rich data, usually with all parties together in the same place (referred to thereafter as the 'in-person' approach). However, since the onset of the COVID-19 pandemic in early 2020, access to health and social care settings has been restricted and many researchers have been subject to 'work-at-home' orders. Consequently, many interactions and meetings take place, using remote technologies such as videoconferencing. This has impacted substantially on opportunities for in-person data collection. But has the pandemic damaged the ability to gather rich qualitative data, or has it served as a catalyst for more effective, efficient and pragmatic approach to qualitative data collection? In this paper, we explore the arguments for and against remote data collection in qualitative research.

#### Data collection in qualitative studies

One-to-one interviews or focus groups allow researchers to gather detailed data regarding participants' opinions, perspectives or experiences about a research topic. Approaches will vary from study-to-study, with some interactions very structured and researcher-guided, whilst others are much more flexible and participant-led. The positioning of interviews and focus groups on this 'structural spectrum'<sup>1</sup> will depend on the skills of the researcher, characteristics of the research question, and underpinning methodology. However, regardless of the approach and tools used, traditionally data has been gathered through the research and participant(s) being co-located ('in-person').

In recent years have seen interest grow in using technology for remote data collection)<sup>2,3,4</sup>. A number of drivers explain this: first, in order to enhance transferability, researchers are often keen to collect data from a wide range of geographical settings. This gathers a broader set of experiences, but can make in-person interviews or groups expensive and impractical. Second, technological advances in functionality and societal acceptance of telephone or video-mediated conversation has enhanced use of remote data collection. Finally – and most significantly in recent years, the COVID-19 pandemic effectively shut down access to settings for research purposes, thereby leaving virtual communication as the only possible means of data collection. Within this paper, we explore the use of two such technologies – telephone and videoconferencing.

#### Telephone-based data collection

Telephone technology has existed for almost 150 years, and has a more extensive evidence-base than that of other methods. Telephone interviews are useful when working with participants that do not have reliable access to the internet, and can be a valuable way to ensure participation of people who might otherwise be excluded<sup>2</sup>. Telephone interviews are time and resource efficient, allowing for access to a geographically diverse group of participants<sup>5</sup>. However, as a verbal-only conversation, researcher sensitivity to participants non-verbal communication can be affected by the lack of visual cues, changing interaction dynamics. The researcher is also unable to provide encouragement through non-verbal means (e.g. nodding, smiling) which may impact development of rapport<sup>6</sup> and data quality<sup>7</sup>.

Despite these potential disadvantages, undertaking an interview over the telephone may make some participants feel more relaxed or less intimidated by the researcher, encouraging information disclosure<sup>2</sup>. As the researcher cannot 'see' the interviewee, this may prevent assumptions being made based on personal presentation or characteristics. For some (participants and researchers), telephone interviews may be the least disruptive and intrusive option. When telephone and in-person approaches are compared; there is little difference in the amount or quality of data generated<sup>4,7</sup>. When selecting telephone interviews as an approach, awareness of the limitations is key and advance preparation undertaken to mitigate them. For example, additional hardware may be required to record conversations via telephone. **Without visual cues, multiple participant interviews (telephone-focus group) are especially challenging and require careful management by the researcher to ensure recording clarity.**

### **Video-mediated communication**

Video-mediated communication offers a means of remote data collection<sup>2,3,4</sup>. It allows for data capture without the need for parties to be co-located thereby reducing the need for travel time and cost, but non-verbal cues to be seen and observed<sup>4,9</sup> (something that is lost in telephone interviews.) Applications such as Microsoft Teams or Zoom lend themselves well to either interviews or focus groups. They also allow for recording and even automated transcription (which does, however, need manual review and amendment). The chat function can also be used by participants to add specific comments or questions (this can later be downloaded to add further data to the transcription). Consent can be gained via email beforehand and confirmed verbally at the start of recording. For video-mediated focus groups, multiple participants can be invited and involved, though this requires skill and expertise from the researcher to ensure all get the opportunity to talk (without talking over each other). As visual cues are present; non-verbal communication and dynamics within the focus group can be observed, recorded and explored to enrich analysis and interpretation<sup>4</sup>.

Though the use of video-mediated communication has become normalised during recent years – but it still presents challenges as a research tool. First, there can be practical issues, such as the quality of audio, communication pauses caused by limits on internet bandwidth, security and confidentiality of the chosen platform. Access to IT, and skills and confidence to use technology can exclude some from participating<sup>10,11</sup>. This may impact recruitment, and also instil bias in the sample, excluding those who are less comfortable or able to use or access IT. Whilst the technicalities and logistics of video interviews are important practical issues, researchers also need to consider how best to establish rapport remotely<sup>8,11</sup>.

It is important to avoid assumptions that video provides the same level researcher 'presence' as being physically co-located with a participant. For example, most systems only allow for a 'head and shoulders' view of participants<sup>8</sup> which may limit extent of body language that can be observed. Equally, the positioning of video cameras on the top of most screens – coupled with the fact people tend to look directly at the images on the screen – gives the appearance of someone gazing downwards, thereby compromising 'natural' eye contact<sup>13</sup>. The short and sometimes imperceptible pauses and delays in video-mediated interactions can impact on the flow of conversation and ability to build rapport<sup>14</sup>. Ever-improving systems, platforms and connectivity help reduce these technological limitations, but researchers must remain aware of the possible impact on communication quality and richness.

### **Conclusions**

This paper has discussed strengths, weaknesses and opportunities presented by remote approaches to qualitative data collection specifically using telephone or video. We would argue that recent developments have changed the landscape of qualitative data collection. Previously, there was a simple better-to-worse hierarchy of approaches from in-person, through video, to telephone, with the use of remote modalities viewed simply as 'better than nothing'. Technological strides taken in the last decade, enhancing functionality particularly with regard to video communication (recording; transcription; screen sharing) – and societal acceptance (and arguably expectations) of this modality, has changed this dynamic. **For people who are comfortable using technology, remote approaches may be more appropriate and effective and can allow lone researcher and participant safety concerns to be addressed.** We should therefore view this as another approach in the toolbox of qualitative researchers – not a last resort when in-person data collection is impractical - but an approach which, when used effectively and appropriately, can gather rich and varied qualitative data.

## References

1. (Barrett & Twycross, 2018) DB
2. Saarijärvi and Bratt 2021 Markus Saarijärvi, Ewa-Lena Bratt. When face-to-face interviews are not possible: tips and tricks for video, telephone, online chat, and email interviews in qualitative research, *European Journal of Cardiovascular Nursing*, Volume 20, Issue 4, April 2021, Pages 392–396, <https://doi.org/10.1093/eurjcn/zvab038>
3. Archibald MM, Ambagtsheer RC, Casey MG, Lawless M. Using zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. *Int J Qual Methods* 2019, 18 160940691987459
4. Daniels et al 2019 Nicola Daniels<sup>1</sup>, Patricia Gillen<sup>1,2</sup>, Karen Casson<sup>1</sup>, and Iseult Wilson [STEER: Factors to Consider When Designing Online Focus Groups Using Audiovisual Technology in Health Research \(ulster.ac.uk\)](https://www.ulster.ac.uk/research/steer) 2019 STEER: Factors to Consider When Designing Online Focus Groups Using Audiovisual Technology in Health Research
5. WARD K., GOTT M. & HOARE K. (2015) Participants' views of telephone inter-views within a grounded theory study. *Journal of Advanced Nursing* 71(12), 2775–2785. doi: 10.1111/jan.12748 [Participants' views of telephone interviews within a grounded theory study \(wiley.com\)](https://onlinelibrary.wiley.com/doi/10.1111/jan.12748)
6. Trier-Bieniek, A. (2012) Framing the telephone interview as a participant-centred tool for qualitative research: a methodological discussion. *Qualitative Research* 12 (6), 630–644
7. Shapka et al 2016 Jennifer D. Shapka, Jose F. Domene, Shereen Khan, Leigh Mijin Yang, Online versus in-person interviews with adolescents: An exploration of data equivalence, *Computers in Human Behavior*, Volume 58, 2016, Pages 361–367, ISSN 0747-5632, <https://doi.org/10.1016/j.chb.2016.01.016>.
8. Seitz 2016;); [Pixilated partnerships, overcoming obstacles in qualitative interviews via Skype: a research note - Sally Seitz, 2016 \(sagepub.com\)](https://www.sagepub.com/journalsPermissions.nav)
9. (Bohannon et al., 2013)?? DB
10. Stone 2021 Digital exclusion & health inequalities [Good-Things-Foundation-2021—Digital-Exclusion-and-Health-Inequalities-Briefing-Paper.pdf \(hull.ac.uk\)](https://www.goodthingsfoundation.org/research/digital-exclusion-and-health-inequalities-briefing-paper)
11. Watts 2020 [COVID-19 and the digital divide in the UK - The Lancet Digital Health](https://www.thelancet.com/digital-health)
12. Weller S (2016) [Using internet video calls in qualitative \(longitudinal\) interviews: some implications for rapport: International Journal of Social Research Methodology: Vol 20, No 6 \(tandfonline.com\)](https://www.tandfonline.com/doi/10.1080/10439862.2016.1191111)
13. (Tam et al, 2007) Tam, T., Cafazzo, J.A., Seto, E., Salenieks, M.E. & Rossos, P.G. (2007) Perception of eye contact in video teleconsultation. *Journal of Telemedicine and Telecare*, 13, 35–39.

14. Powers,S.R., Rauh,C., Henning,R.A., Buck,R.W. &West,T.V.(2011) The effect of video feedback delay on frustration and communication accuracy. *Computers in Human Behaviour*,27,1651-1657.