Negotiating with technology: advancing the virtual in qualitative research methods

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Negotiating with technology: advancing the virtual in qualitative research methods

Abstract:

Purpose:
This study aims to describe key elements that are critical to virtual qualitative research especially while working with practitioners as participants.

Study approach:
This paper takes a reflexive researcher approach using a case study to explore how researchers adopted a qualitative research approach using digital technology. We use five principles suggested by Boland et al. (2022) as a framework to consider and reflect on our experiences as researchers and those of our participants.

Findings:
We highlight the gatekeeper’s support, trusted relationship with the organisations, interpersonal skills of interviewers, stringent measures of securing data and shared experiences of interviewee and interviewers helped complete virtual research. We recommend that four key factors such as digital competency, feasibility, flexibility and resilience should be considered while undertaking or commissioning virtual, qualitative research studies.

Originality/Value:
Social care practitioners and qualitative researchers increasingly negotiate with digital technologies to undertake their work. In this paper, we evidence how online qualitative approaches can be effective provided challenges are dealt with diligently in each stage of the research process.

Keywords: Virtual research, Qualitative research, Remote data collection, Online interviews, Reflexive analysis.
**Introduction:**

This paper aims to contribute towards the advancement of the theory and method of undertaking methodologically rigorous, ethical, online qualitative research as called for by Boland et al. (2022). This work is essential to build a body of knowledge about how to develop online, virtual studies that are carefully designed, and which meet the ethical practices relevant to qualitative research and area of practice. The importance of doing this is because in part the pandemic drove qualitative research to take up practices which were previously under-explored. As Khan and McEachen (2022:9) argue the ‘potential for using videoconference interviews in qualitative research is expanding’ and was before the pandemic through technological advances which the pandemic itself then accelerated. It is important therefore that we take the time to further examine this qualitative data collection method and reflect upon it and the actions we take as qualitative researchers.

During the Covid 19 pandemic, lockdown measures created a new set of challenges for everyone, including social care practitioners and academic researchers. Qualitative researchers faced particular interruptions in traditional data collection methods. In the early reflective discussions, researchers have begun to consider the advantages and disadvantages of remote data collection methods (Seff et al. 2021; Smyrnakis et al. 2021; Khalil et al. 2021). Sheather et al. (2022) consider we could have done more to revisit the suitability of ethical guidance, whilst Grantz et al. (2020) emphasised that in addition to access considerations, the ability to use or not use technology can limit participation highlighting that this might affect certain groups. In addition, the considerations which have always dominated qualitative research methods have been emphasised, namely the importance of establishing trust between the researcher and the participant; the ability to establish a rapport with people; the inclusion of the appropriate participants relevant to the context studied to avoid further marginalisation of vulnerable groups; a need to validate research findings, and consider research impact (Singh et al., 2021; Khalil et al., 2021). Virtual qualitative research offers a safe, cost-effective and convenient way to gain different perspectives and in so doing to understand how people construct meaning about their
daily working practices; in our instance about the ability to construct that understanding about providing care and support to people experiencing violence during unprecedented situations.

Understanding practitioners’ experiences during Covid became the focus of many health and social care research studies (Hanna et al., 2021; Taylor et al., 2021; McGlinchey et al., 2021). During this emergency period, practitioners adopted changes to deliver their services because they had no alternatives but to do so, although they did not know if these would be successful. Numerous studies took place, amongst them our own and a study by Richardson et al. (2021) who adopted remote research techniques to find out how the criminal justice system responded to domestic abuse during Covid. Richardson et al. (2021) undertook rapid qualitative research methods where data collection and data analysis were completed simultaneously. McGlinchey et al. (2021) adopted a qualitative interpretative research approach while exploring the lived experience of healthcare professionals during lockdown in Northern Ireland.

In this paper, we reflect on our experience while focusing on the methodological, technical and personal challenges of remote data collection. We respond to key questions about methods and ethical enquiries and provide our responses to those with worked examples. We aim to contribute to and build a body of knowledge about how to develop ethical, virtual qualitative studies that are carefully designed, planned, standardised and coordinated. Through critical reflection on our work with practitioners and the existing literature, we propose there are lessons which can be learned that will contribute to the planning and design of virtual, digital research and enable research commissioners to recognise methodologically and ethically strong, virtual, qualitative research.

**Study design**

The study which forms the basis of this paper, was a qualitative study with one frontline domestic violence and abuse organisation in England. In the study we examined the experience of practitioners seeking to meet the needs of families where domestic violence and abuse were a feature during the COVID period. Our findings (discussed in a separate paper) included innovative and adopted measures and changes in practice. Qualitative methodology from a constructive ontological position and an
interpretivist epistemological position was adopted for the study. The subjective experiences of
tfrontline domestic violence practitioners formed the main source of knowledge to enable us to form an
understanding of how Covid-19 impacted service delivery. We adopted this method because it is a
proven and useful method for exploring sensitive topics and understanding personal experience (Silvero
et al., 2022). Like the studies discussed above, we had no choice but to employ alternative virtual data
collection methods due to the health policy restrictions in place across the UK. We developed semi-
structured interview questions with added prompts to engage participants in dialogue. Semi-structured
interviews are accepted as the most suitable method for gathering knowledge from a participant’s
perspective (McIntosh and Morse, 2015) and these allowed us to explore and develop an understanding
of the practitioner’s experience of working remotely with families during Covid where domestic abuse
was a feature. The MS team platform was used to conduct the interviews as this online platform was
user-friendly and newly ‘familiar’ to the research team. Research participants were given options of
telephone interviews in case, they were not familiar with MS Teams, but just one person was
interviewed by telephone as they struggled to access MS Teams.

Participants were referred to as practitioners as they were professionals from a frontline organisation.
Non-probability purposive sampling was applied for participant recruitment. We wanted to gather
responses from practitioners across a range of the organisation’s services, practitioners with different
lengths of service and experiences of working with families, hence the inclusion criteria for the
sampling were based on practitioners working in domestic violence organisations and aged over 18.
Overall, 21 female professionals participated in this study, the majority (52%) with an age range
between 41 and 50, the highest being in 61 to 70 while the lowest being in 18-30. Professional roles
varied from victim support worker, violence prevention worker, and service managers to CEO of the
organisation. The wide range of practitioner's work experience allowed the research team to explore
both the personal and institutional impact of working during Covid. Almost all of the practitioners were
already working with the families experiencing domestic abuse before Covid, except a few
professionals who were recruited during the pandemic.

A reflexive discussion of method
Boland et al. (2022) in their rapid review identified five key areas they suggested should be addressed in online data collection methods. In undertaking a reflexive account of our study, we, therefore, subjected our research methods and methodology to their analytical framework to see, firstly if it was something which we could apply, secondly if it was appropriate to what we found and thirdly if it summarised all of our reflexive findings on our methodology and methods.

The adoption of their framework (p. 4) was useful in enabling us to reflexively consider and now showcase how we overcame some of the issues with online qualitative research. The table below shows 5 key elements from Boland et al. (2022) and a summary of what we did in each of the proposed areas, so the reader has some sense of, and connection to, the method used or the approach taken. In the final column, we show how we consider this paper contributes to advancing analytical learning by enabling others to understand why we reflexively consider it worked and thereby highlighting the key elements critical for others to employ. The intention is to move virtual, qualitative methodologies forward in the utilisation of digital, virtual methods. In the table I below, we go on to discuss each of those steps in more detail.

Table I: Key issues of online qualitative research

Planning

Practitioners were drawn from an umbrella organisation of services in the Midlands of England with whom some of the researchers had worked for over five years on a variety of projects. This trusted relationship with gatekeepers helped us to access practitioners from the organisation; it meant the organisation was willing and able to support the research and enable us to gain access to staff and willing to allow staff time for online interviews. The gatekeepers’ role in gaining and maintaining access to participants in social research is well documented (Lamprianou, 2022; Wilson, 2020; Sing and Wassenaar, 2016) and their involvement in enabling access to practitioners during Covid became essential (Richardson et al., 2021). The senior managers who acted as gatekeepers in this study, were actively involved in several stages of the research process, consulting with us and feeding back on the
development of the interview schedule, sharing the information sheet and consent form with potential participants, undertaking virtual introductions with the research team, maintaining confidentiality and finally disseminating the findings alongside the research team. Their involvement was critical to the success of this study. The pre-existing relationships were also critical to help build rapport between participants and researchers (Richardson et al., 2021; Boland et al., 2022) who were aware we were trusted within the organisation with whom we had been working, that we had a track record of working on prior projects and delivered relationships and research which the organisation considered trustworthy. At a time of considerable social upheaval and stress, we acknowledge that the importance of that trust in building rapport should not be underestimated, but we consider it a future learning point for digital qualitative methods because rapport in a virtual space needs to be valued, if imagined and understood differently, even when the stressors are not so enormous.

**Ethics:**

The fundamental ethical principles remain the same for online qualitative research as face-to-face where a participant’s safety is the centre of attention. In our work ethical principles were maintained throughout the research process to respect the rights of participants, confidentiality and safeguarding the identity of participants. Ethical approval of this study was gained from the University of _ Faculty of _ and _ (_) Ethics Committee. A new ethics application form was introduced in 2020 to comply with the government guidance of social distancing and safeguarding participants in the online environment was the key focus (University of _, 2020).

The changes to the ethics form that the university instituted during this period and their required considerations sought to ensure researchers devised systems for safeguarding digital data and protecting the anonymity of participants. Following this approach therefore we operated initially through the participating organisation’s gatekeepers, sending them the information sheet and consent form by email so that they could share it with potential participants on our behalf to help inform the decision to take part. Participation was voluntary and practitioners and the gatekeepers also shared on our behalf a schedule of pre-fixed dates when we as researchers were available; those who chose to do so could then simply go on to the schedule and sign up to one of those dates if they decided to take part. This meant
that we had to be very responsive as a research team as some participants signed up with quite short notice, so we had to show our commitment to being available as we had outlined and keep an eye on the schedule. In this way, we could ensure that the online data collection offered the flexible scheduling which best suited working with practitioners and their busy schedules (Irani, 2019), especially during such pressured times. This approach also benefitted the research team; once they signed up, we had the name of the person we would be interviewing and which email address we would send a Teams link to. The participant signed up with their work email and used their work computer equipment to engage with us.

Each participant had the opportunity to request to withdraw their data before the start of data analysis. General Data Protection Rules (The UK Government, 2018) were followed by informing practitioners about the reason for data collection, access to those data and data processing. Informed consent is one of the ethical principles and internationally recognised requirements that became more relevant during the pandemic; each participant could be considered as vulnerable by being geographically isolated from the rest. Newman et al. (2021) argued that the expectation of digitally signed consent might also put extra pressure on participants as many of them may not have electronic signatures and digitally signed consent also has the possibility of creating an increase in online data. To make the signed consent process less complicated, we did not ask for the electronic signatures from the participants and accepted signing using word fonts. Signed consent forms were received before the start of the interview stage by email and informed consent was rechecked at the start of the online interview on Teams with the researcher ensuring the participant knew what the purpose of the research was and was familiar with the information sheet. Newman et al. (2021) endorsed the recording of verbal consent during the data collection stage as an alternate method of signed consent.

Absolute confidentiality is difficult to achieve in online qualitative research even though one-to-one interviews using online platforms may feel completely confidential and secure for the participants. Because of the nature of online MS Team video interviews practitioners were identifiable to the research team members and this issue was made clear on the information sheet. We refrained from providing any deceptive assurance of confidentiality. Practitioners had options of audio interview
using MS Team or telephone interview in case they preferred over MS Team video interview. Practitioners were also notified before start of recording in case they like to switch off the video camera and the research team reiterated the right to withdraw at any point during the interview.

Qualitative researchers often face ethical dilemmas (Taquette and Borges da Matta Souza, 2022) with challenging interview topics and sharing personal experience may cause emotional distress during the interview stage (Silverio et al., 2022). Subtle ethical (Pasco Leahy 2022) dilemma during an interview creates further challenges when interviewer and interviewee are geographically distanced and only can see or hear each other. Nonverbal signs of discomfort may be more difficult to pick up on online audio interviews, but this is possible when participants are using video (Irani, 2019). Recognising nonverbal cues during video conferencing requires an increased level of attention than face-to-face discussion (Bullock et al., 2022), experienced research team members were able to identify and respond to any discontent or uneasiness. Practitioners we interviewed were also experienced in discussing domestic violence as part of their job and therefore had many skills and resources to draw on; nonetheless, we ensured that information about support and links to reach that support were shared in case practitioners felt discomfort while answering the interview questions.

Online data management and storage were not new to the research team however extra measures were taken while recording and saving digital data. Boland et al (2022) raised a potential problem of participant disengagement due to fear of data leaks in an online environment. Even though we did not have any disengagement issues, we stored each digital data such as interview transcripts and videos on a password-protected shared folder on a cloud server that only the research team could access. Online data storage safety was a new feature of the ethics application, we adhered to the rule by using a code for each participant combining words and letters to safeguard the practitioner’s identity on the server.

Technical Issues, Rapport and Equity
Online data collection during the pandemic was advocated by researchers around the world (Gray et al., 2020; Dodds and Hess, 2021; Tremblay et al., 2021; Khalil et al., 2021; Howlett, 2022; Khan, and MacEachen, 2022) because of the flexible nature and ‘socialised form of interaction’ (Joinson, 2005 cited in Lobe et al., 2020) that it offered. The online approach we adopted is defined as the Elicited Method according to Salmons (2022). In this method, researchers use the online platform as a medium through which they can interact with participants using questions or prompts in interviews (Salmons, 2022). The MS Team platform is considered as a medium that facilitates data collection because of the platform’s user-friendly video conferencing tool. Salmons (2022, p.47) pointed out that ‘Researchers sometimes choose ICT as a medium for interviews or observations because online communications allow for significant reduction or elimination of constraints that would make in-person data collection impractical’. In our study, the virtual interview was the best option for individual data collection due to social isolation measures. This method was also convenient for participants as they were already working from home and due to Covid, familiar with the platform as many used it to deliver support sessions and other interventions.

A semi-structured questionnaire was created as data collection tool following traditional semi-structured interview principles. The questionnaire was sent to the practitioners before the interview so that they were familiar with the questions. Participants preferred knowing the questions before attending their interview and Gray et al., (2020) have claimed that this practice can improve the interviewee experience. Our semi-structured questionnaire was divided into two-part Section A and Section B for collecting subject-specific knowledge and demographic data. Participants had the option to complete the demographic details themselves and send these back to the research team by email, but no participant opted for this, which evidenced their preference for the online interview method for sharing information.

There were sixteen semi-structured questions with further prompts attached and nine demographic questions using mainly closed questions. Because our participants were being asked to discuss a critical issue such as domestic abuse which is not easy to talk about, our interviews were structured to make the participants comfortable, in line with one of the key elements of successful face-to-face interview techniques. To overcome the challenge of the interviewer and interviewee being
separated by physical distance, we added two questions on organisational information and their role to start the conversation with ease. We also allowed extra time to make practitioners feel comfortable online at the start of the interview before asking specific questions on the topic. This practice could raise the challenge of whether we inadvertently wasted participants' time or gained information on the organisation and their role which we did not necessarily require for the study, although we considered it successful in terms of settling the interviewee and building rapport. In line with Boland et al. (2022) from their rapid review we found that allowing additional preparation time for participants in online qualitative data collection was the best practice.

MS Team meeting links were created for interview purposes by the research team according to the agreed schedule and shared with the participants. Interview times varied between 30 to 60 minutes with an average time of 48 minutes. Practitioners with more experience were able to finish quickly but shared detailed responses, whereas new employees took more time to respond. The researcher spent the first few minutes making the practitioner comfortable on the online platform and explaining the options of audio and video recording. Research information was discussed, and consent was rechecked after pressing the record button. Prompts we used in the interviews were equally important as questions (Leech, 2002) and helped the practitioners to respond to the main question. One such example is a question on changes in working patterns with families. Participants could take some time to answer this question as they pondered on it and that might not lead to them clearly defining the change in working pattern that they were suggesting had occurred due to the pandemic. The researcher would therefore then use one of the predefined prompts such as ‘How is it different or the same?’, ‘Is it the location/format that is different?’ , ‘Or is the intervention different?’

MS team creates one integrated file of audio and video along with a data transcript. All the files were downloaded and saved with a code name to a password-protected folder in university-owned cloud storage. This rigour was necessary to maintain confidentiality and anonymity. In our new normal environment, the usage of digital tools increased rapidly and as a result productivity associated with these technologies also improved. MS Team transcription facility is one such element whose development coincided with our interviews. At the beginning of early March 2021, no live transcription
was available on MS team, however MS Team recording had an embedded webvtt (Web Video Text Tracks) file that was available to download. Each line of this file consisted of two-second data transcription, making over 90 pages of transcription for a 50-minute interview. The post-interview phase therefore consisted of checking and correcting automatic transcripts which took approximately 1 hour per 1 hour interview. This represents a large time saving over manual transcription, which would have taken 5 to 6 hours for each hour of a face-to-face interview. At the end of March 2021, MS Team introduced live transcription facilities in Team meetings (Chabra, 2021) in response to increased demand from varied industries. This feature was easy to use and offered written records of audio files. Another added benefit was each text was captured by the speaker’s name and in real-time, hence the transcription standard became very high. The introduction of auto transcription and availability meant we were able to produce comprehensive transcripts of every interview. In total, we collected approximately 25 hours (or 200,000 words) of data. The transcription cleaning and data analysis were divided between the researchers and allocated the same interview the researcher did. Familiarity with the interview helped with quicker cleaning. Each transcription was coded and analysed following Braun and Clark’s (2006) thematic analysis method. Qualitative researchers like us may have overlooked the benefits of digital data collection platforms such as MS Team or Zoom before the Covid pandemic, but the improved individual digital competencies and availability of new technologies helped to incorporate the new practices of collecting qualitative data.

A Reflexive Analysis

Four main elements made this online qualitative study successful, and we want to draw them below from our analysis of why we consider they are important for future virtual, digital studies. The four critical elements are - flexibility, feasibility, resilience, and digital competency.

Flexibility
The pandemic provided an opportunity for researchers to find innovative practices and increase their flexibility in approaching participants and data collection. In this study, we utilised the benefits of online working and found this saved us time in terms of the physical interview set-up and travel. With the help of the participating organisation, the research team scheduled interviews within a very short period. Further, by adopting video interviews, we met participants on a one-to-one basis in an online, virtual world that offered flexibility for the researchers and participants. Practitioners were based in their homes during the lockdown which meant they were able to accommodate a research team interview schedule because they were not out undertaking lengthy travel to and from meetings with clients. Flexibility worked for both the research team and participants.

Occasionally multiple interviews were scheduled in one day. This process was effective and supported rapid data collection during this crisis time however the pressure of accommodating available time of practitioners created extra pressure for the research team. Following the suggestions of Silverio et al., (2022) of appropriate scheduling of data collection, we recommend qualitative online interview schedule is planned carefully because although researchers can accommodate more interviews in a day because of online arrangement flexibility, they need the space and time to move emotionally from one interview to the next where the subject matter is quite difficult. This will result in increasing time demands to allow enough subsequent time for the cleaning of the interview transcripts which researchers may have more of because it is easier to complete a larger number of interviews within a short period.

**Feasibility**

During the time of pandemic and social isolation measures, online data collection platforms such as MS Team, Zoom, Skype and Google Meet offered timely opportunities for qualitative data collection which would not otherwise have been feasible. Online interviews were time and cost-efficient (Gray et al., 2020) and could reach diverse participants (Boland et al., 2022). Qualitative research with practitioners required flexibility to fit around their busy schedules and online platforms offered that convenience (Richardson et al., 2021) hence the virtual qualitative study was the most suitable approach for us. Even though research participants were distanced geographically, digital video platforms allowed the
researcher to overcome difficulties in capturing emotional cues and body language (Irani, 2019). Video conferencing facilities also enabled the researchers to respond to non-verbal clues (Boland et al., 2022) and this is similar to traditional face-to-face interviews.

Some other challenges were however unavoidable. Interruptions might be similar or different from those commonly, previously experienced, but during online interviews participants occasionally needed to respond to answer a doorbell, collect a delivery, or respond to an interruption by house pets or home-schooled children. During the interviews, these became almost part of the process and researchers learned to pause the interviews to avoid non-ethical data capture. Experienced researchers were able to collect the perspectives of practitioners fully in our case, but for future reference, a research team should be aware of such nuances while designing online qualitative data collection, especially interviews.

Online data collection using MS Team might also disclose a participant’s private home environment to the research team (Boland et al., 2022) and this could result in ethical issues and/or potential disengagement. Gray et al. (2020) suggested making this point to participants and encouraging them to choose a space which allows them to maintain their privacy and confidentiality. In our study this issue did not occur, perhaps because participants were professionals, and already working with service users living with domestic abuse, hence managing confidentiality of the conversation was paramount to them. They did discuss with us during the research interviews the potential for ‘blurred boundaries’ between office and home, particularly emotional boundaries, whilst working from home, however, all of them used a quiet, private, reasonably non-descript space as an office space from where they took part in the online interview. Therefore, we would suggest that the equity between researcher and participant in this study again contributed to the success of the study with the participant’s role as practitioner and their professional awareness of the confidential nature of data benefiting our online data collection.

We also found that overwhelmingly practitioners appeared comfortable in the online space and confident in sharing their experiences. Collecting data this way may also have influenced the interviewers’ abilities to establish an interpersonal connection with the participants and to pick up
important non-verbal behaviour (McGlinchey et al., 2021). In the one instance where the participant did not make logging onto the Teams call and the interview was conducted by telephone, this might indicate they were less confident in the digital space. In this study period, the time-constraints were such that we were not able to re-schedule for when they were able to connect via MS Teams, but this may be learning for future digital research and considerations of feasibility.

**Resilience**

Some risks and concerns of non-engagement are usually connected with online qualitative research; however, our experience was different due to the participant group we worked with. Researchers and practitioners were both working from home during the study and this similarity helped to establish rapport (Richardson et al., 2021). Practitioners shared their challenges of working with service users who were in general said to be less confident in using cameras which could hinder connections and easy communication. At the same time, the researchers were delivering online lectures and other virtual, professional interactions and negotiating those changes with students and others. These parallel experiences may have helped to reduce power differences in the virtual interview setting. And at a difficult time where isolation and anxiety prevailed in everyone’s life (Surmiak et al., 2022), the interview provided an opportunity for connection.

Practitioners demonstrated their resilient nature and adapted practice while working during the pandemic. The research team were also impacted by the social distancing rules maintained in the UK higher education sectors which meant academics had to work from home during January 2021 to May 21 and they too experienced isolation (Knight et al., 2021). In both sectors solutions were found. The domestic violence organisation established a ‘buddy service’ to enable informal collegiate support and allow colleagues with similar experiences to share and care for each other. For the researchers frequent MS Team meetings and ad hoc calls enabled them to stay connected with each other during this period and helped resolve data collection and analysis challenges or issues.

**Digital competency**
The Covid pandemic tested digital competency in general by requiring many people to switch to a
digital space. Although working from home was not a new practice in the UK, lockdown measures
intensified the integration of digital technologies worldwide. Digital skills had been requirements for
many jobs, however, the necessity to work in this way multiplied immeasurably during the pandemic
due to the enforced, accelerated digital transformation. The transformation from the traditional process
such as face-to-face meetings to virtual meetings using MS Team or Zoom was rapid. Although these
virtual meeting platforms were available before the pandemic, remote working accelerated their
adaptation and implementation (Soto-Acosta, 2020). Alongside this, the digital proficiency of
researchers who facilitate the interviews is vital (Boland et al, 2022). As a research team, we did not
have time to evaluate our digital competency level before adopting the new technology but found this
rapid transformation unlocked the potential of online interviews using the available digital platforms.
This sudden change in our adaptability and willingness to work in a ‘digital manner’ was a product of
the pandemic and one replicated by other researchers worldwide (Nagel, 2020).

For us, when undertaking the review of digital access and the competencies of research
participants for this paper, we reflected on the evident access to digital devices such as a laptop or tablet
that all our participants had and, in general, their being reasonably well-informed about the MS Team
application. During this time digital platforms such as MS Team and Zoom became part of a work
culture because they provided an easy interface for meeting and exchange. Therefore, as practitioners,
our participants were already familiar with the technological challenges and were thinking about digital
safety, because their service had previously offered face-to-face services to their service users and
adopted digital methods as an alternative during the pandemic. The research team’s familiarity with the
virtual platform as Irani (2019) suggests undoubtedly aided and increased the comfort level of
participants.

The digital competency of participants in our study contributed to the timely completion of the
online interviews, but we also found it facilitated building ease and rapport created an equity of
experience and eased the physical distance between us.

**Limitations:**
The original study was rapid and sought to explore Domestic Abuse practitioners’ points of view during Covid. However, we did not engage practitioners from more than one organisation in the UK and a study with more organisations may have resulted in different responses. The appropriateness of the MS Team platform for international research, especially where digital poverty prevails, along with internet access difficulties cannot be assessed from this study. The useability of the MS Team platform for other qualitative data collection methods such as focus groups was not explored.

Conclusion:

In this paper, we have reflexively considered our qualitative data collection practice and highlighted methodological changes made in each phase of the virtual qualitative research project. We have emphasised components that worked and helped the research team to cope with and solve the challenges of online data collection and analysis. In the new normal and changed work and research environment it is probable, that online qualitative research will gain more popularity because it is flexible and accessible. The steps we took in each stage of the research life cycle can be adopted widely while working with practitioners from any field. Workspaces have moved from office settings to home settings and resulting in the rapid expansion of video-conferencing platforms. Practitioners are more accessible in digital space as we evidenced in this paper. From this study, we propose there is value in adopting virtual, qualitative research methods while working with practitioners in the future. We recommend research teams understand the digital competency of their research team members, the digital access of participant groups and any possibilities of digital poverty before the initiation of any virtual qualitative study. We also intend the reflexive learning of this paper to assist research commissioners to recognise methodologically and ethically strong, virtual, qualitative research. The time of crisis advanced digital research practices and in this paper, we have shown how digital, qualitative research methodology can be enhanced by taking account of four key factors: digital competency, feasibility, flexibility and resilience.

Acknowledgements

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References


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<th>What helped</th>
<th>Our Reflexive Learning: Why did it work</th>
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<td>Planning</td>
<td>Coordinated schedule of interviews based on participant’s availability.</td>
<td>Support from gatekeeper.</td>
<td>Flexibility</td>
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<td></td>
<td>Sent questionnaire to participants before interview.</td>
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<td>Drew on, embedded and utilised the trusted relationship.</td>
<td>Interpersonal skills of team/interviewer.</td>
<td>Resilience</td>
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<td></td>
<td>Spent time at the start of the interview to make participants comfortable.</td>
<td>Resilience of research team and participants.</td>
<td>Taking time to build ease and rapport.</td>
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<td>Ethics</td>
<td>Time spent developing ease and rapport at the start of the interview.</td>
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<tr>
<td>Sent information sheet and consent form to participants, explaining the process and withdraw clause.</td>
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<tr>
<td>Rechecked consent verbally during interview.</td>
<td>Following Government guideline of social distancing.</td>
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<tr>
<td>Ensured confidentiality and anonymity of online recorded data.</td>
<td>Feasibility</td>
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<td>Pausing recording when interrupted (such as phone call) or someone (such as delivery person).</td>
<td>Enabled participant to feel secure in this newly normal online virtual environment.</td>
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<td>Following extra measure of security.</td>
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**Ethics**

- Sent information sheet and consent form to participants, explaining the process and withdraw clause.
- Rechecked consent verbally during interview.
- Ensured confidentiality and anonymity of online recorded data.
- Pausing recording when interrupted (such as phone call) or someone (such as delivery person).

**Feasibility**

- Enabled participant to feel secure in this newly normal online virtual environment.
- Following extra measure of security.
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<th>Technical issues</th>
<th>Checked availability of the MS team for participants.</th>
<th>Participant organisation had access to the MS team.</th>
<th>Digital competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Offered flexibility over interview date and time.</td>
<td>Participant and interviewer both working from home – improvised office setting.</td>
<td>Resilience</td>
</tr>
<tr>
<td></td>
<td>Power dynamics were reduced by shared experience during the pandemic.</td>
<td>Participants and interviewers both learn new systems and adapt to them to undertake their job.</td>
<td>Shared experience</td>
</tr>
</tbody>
</table>
Negotiating with technology: advancing the virtual in qualitative research methods

Abstract:

Purpose:

This study aims to describe key elements that are critical to virtual qualitative research especially while working with practitioners as participants.

Study approach:

This paper takes a reflexive researcher approach using a case study to explore how researchers adopted a qualitative research approach using digital technology. We use five principles suggested by Boland et al (2022) as a framework to consider and reflect on our experiences as researchers and those of our participants.

Findings:

We highlight the gatekeeper’s support, trusted relationship with the organisations, interpersonal skills of interviewers, stringent measures of securing data and shared experiences of interviewee and interviewers helped complete virtual research. We recommend that four key factors such as digital competency, feasibility, flexibility and resilience should be considered while undertaking or commissioning virtual, qualitative research studies.

Originality/Value:

Social care practitioners and qualitative researchers increasingly negotiate with digital technologies to undertake their work. In this paper, we evidence how online qualitative approaches can be effective provided challenges are dealt with diligently in each stage of the research process.

Keywords: Virtual research, Qualitative research, Remote data collection, Online interviews, Reflexive analysis.
Introduction:

This paper aims to contribute towards the advancement of the theory and method of undertaking methodologically rigorous, ethical, online qualitative research as called for by Boland et al. (2022). This work is essential to build a body of knowledge about how to develop online, virtual studies that are carefully designed, and which meet the ethical practices relevant to qualitative research and area of practice. The importance of doing this is because in part the pandemic drove qualitative research to take up practices which were previously under-explored. As Khan and McEachen (2022:9) argue the ‘potential for using videoconference interviews in qualitative research is expanding’ and was before the pandemic through technological advances which the pandemic itself then accelerated. It is important therefore that we regularly examine this qualitative data collection method and reflect upon it and the actions we take as qualitative researchers.

During the COVID-19 pandemic, lockdown measures created a new set of challenges for everyone, including social care practitioners and academic researchers. Qualitative researchers faced particular interruptions in traditional data collection methods. In the early reflective discussions, researchers have begun to consider the advantages and disadvantages of remote data collection methods (Seff et al., 2021; Smyrnakis et al., 2021; Khalil et al., 2021; Maulana, 2023). Sheather et al., (2022) consider we could have done more to revisit the suitability of ethical guidance, whilst Grantz et al., (2020) emphasised that in addition to access considerations, the ability to use or not use technology can limit participation highlighting that this might affect certain groups. In addition, the considerations which have always dominated qualitative research methods have been emphasised, namely the importance of establishing trust between the researcher and the participant; the ability to establish a rapport with people; the inclusion of the appropriate participants relevant to the context studied to avoid further marginalisation of vulnerable groups; a need to validate research findings, and consider research impact (Singh et al., 2021; Khalil et al., 2021). Virtual qualitative research offers a safe, cost-effective and convenient way to gain different perspectives and in so doing to understand how people construct meaning about their daily working practices; in our instance about the ability to construct that
understanding about providing care and support to people experiencing violence during unprecedented situations.

Understanding practitioners’ experiences during COVID-19 became the focus of many health and social care research studies (Hanna et al., 2021; Taylor et al., 2021; McGlinchey et al., 2021). During this emergency period, practitioners adopted changes to deliver their services because they had no alternatives but to do so, although they did not know if these would be successful. Numerous studies took place, amongst them our own and a study by Richardson et al. (2021) who adopted remote research techniques to find out how the criminal justice system responded to domestic abuse during COVID-19. Richardson et al. (2021) undertook rapid qualitative research methods where data collection and data analysis were completed simultaneously. McGlinchey et al. (2021) adopted a qualitative interpretative research approach while exploring the lived experience of healthcare professionals during the lockdown in Northern Ireland.

In this paper, we reflect on our experience while focusing on the methodological, technical and personal challenges of remote data collection. We respond to key questions about methods and ethical enquiries and provide our responses to those with worked examples. We aim to contribute to and build a body of knowledge about how to develop ethical, virtual qualitative studies that are carefully designed, planned, standardised and coordinated. Through critical reflection on our work with practitioners and the existing literature, we propose there are lessons which can be learned that will contribute to the planning and design of virtual, digital research and enable research commissioners to recognise methodologically and ethically strong, virtual, qualitative research.

**Study design**

The study which forms the basis of this paper, was a qualitative study with one frontline domestic violence and abuse organisation in England. In the study, we examined the experience of practitioners seeking to meet the needs of families where domestic violence and abuse were a feature during the COVID-19 period. Our findings (discussed in a separate paper) included innovative and adopted measures and changes in practice. Qualitative methodology from a constructive ontological position
and an interpretivist epistemological position was adopted for the study. The subjective experiences of frontline domestic violence practitioners formed the main source of knowledge to enable us to form an understanding of how COVID-19 impacted service delivery. We adopted this method because it is a proven and useful method for exploring sensitive topics and understanding personal experiences (Silvero et al., 2022). Like the studies discussed above, we had no choice but to employ alternative virtual data collection methods due to the health policy restrictions in place across the UK. Setting up an online interview during the pandemic required planning, coordinating with the participants and testing the interview platform (Maddox, 2021) which we adopted for this study. We developed semi-structured interview questions with added prompts to engage participants in dialogue. The MS Teams platform was used to conduct the interviews as this online platform was user-friendly and newly ‘familiar’ to the research team. Research participants were given option of telephone interviews in case, they were not familiar with MS Teams, but just one person was interviewed by telephone as they struggled to access MS Teams.

Participants were referred to as practitioners as they were professionals from a frontline organisation. Non-probability purposive sampling was applied for participant recruitment. We wanted to gather responses from practitioners across a range of the organisation’s services, practitioners with different lengths of service and experiences of working with families, hence the inclusion criteria for the sampling were based on practitioners working in domestic violence organisations and aged over 18. Overall, 21 female professionals participated in this study, the majority (52%) with an age range between 41 and 50, the highest being in 61 to 70 while the lowest being in 18-30. Professional roles varied from victim support worker, violence prevention worker, and service managers to CEO of the organisation. The wide range of practitioner’s work experience allowed the research team to explore both the personal and institutional impact of working during COVID-19.

A reflexive discussion of method

Boland et al. (2022) in their rapid review identified five key areas they suggested should be addressed in online data collection methods. In undertaking a reflexive account of our study, we, therefore, subjected our research methods and methodology to their analytical framework to see, firstly if it was
something which we could apply, secondly if it was appropriate to what we found and thirdly if it summarised all of our reflexive findings on our methodology and methods.

The adoption of their framework (p. 4) was useful in enabling us to reflexively consider and now showcase how we overcame some of the issues with online qualitative research. The table below shows 5 key elements from Boland et al. (2022) and a summary of what we did in each of the proposed areas, so the reader has some sense of, and connection to, the method used or the approach taken. In the final column, we show how we consider this paper contributes to advancing analytical learning by enabling others to understand why we reflexively consider it worked and thereby highlighting the key elements critical for others to employ. The intention is to move virtual, qualitative methodologies forward in the utilisation of digital, virtual methods. In the table I below, we go on to discuss each of those steps in more detail.

Table I: Key issues of online qualitative research

Planning

Practitioners were drawn from an umbrella organisation of services in the Midlands of England with whom some of the researchers had worked for over five years on a variety of projects. This trusted relationship with gatekeepers helped us to access practitioners from the organisation; it meant the organisation was willing and able to support the research and enable us to gain access to staff and willing to allow staff time for online interviews. The gatekeepers’ role in gaining and maintaining access to participants in social research is well documented (Lamprianou, 2022; Wilson, 2020; Sing and Wassenaar, 2016) and their involvement in enabling access to practitioners during COVID-19 became essential (Richardson et al., 2021). The senior managers who acted as gatekeepers in this study, were actively involved in several stages of the research process, consulting with us and feeding back on the development of the interview schedule, sharing the information sheet and consent form with potential participants, undertaking virtual introductions with the research team, maintaining confidentiality and finally disseminating the findings alongside the research team. The pre-existing relationships were also
critical to help build rapport between participants and researchers (Richardson et al., 2021; Boland et al., 2022) who were aware we were trusted within the organisation with whom we had been working, that we had a track record of working on prior projects and delivered relationships and research which the organisation considered trustworthy. At a time of considerable social upheaval and stress, we acknowledge that the importance of that trust in building rapport should not be underestimated, but we consider it a future learning point for digital qualitative methods because rapport in a virtual space needs to be valued, if imagined and understood differently, even when the stressors are not so enormous.

**Ethics:**

The fundamental ethical principles remain the same for online qualitative research as face-to-face where a participant’s safety is the centre of attention. In our work ethical principles were maintained throughout the research process to respect the rights of participants, confidentiality and safeguarding the identity of participants. Ethical approval of this study was gained from the University of _ Faculty of _ and _ Ethics Committee. A new ethics application form was introduced in 2020 to comply with the government guidance of social distancing and safeguarding participants in the online environment was the key focus (University of _, 2020).

The changes to the ethics form that the university instituted during this period and their required considerations sought to ensure researchers devised systems for safeguarding digital data and protecting the anonymity of participants. Following this approach therefore we operated initially through the participating organisation’s gatekeepers, sending them the information sheet and consent form by email so that they could share it with potential participants on our behalf to help inform the decision to take part. Participation was voluntary and practitioners and the gatekeepers also shared on our behalf a schedule of pre-fixed dates when we as researchers were available; those who chose to do so could then simply go on to the schedule and sign up to one of those dates if they decided to take part. This meant that we had to be very responsive as a research team as some participants signed up with quite short notice, so we had to show our commitment to being available as we had outlined and keep an eye on the schedule. In this way, we could ensure that the online data collection offered the flexible scheduling which best suited working with practitioners and their busy schedules (Irani, 2019), especially during
such pressured times. This approach also benefitted the research team; once they signed up, we had the name of the person we would be interviewing and which email address we would send an MS Teams link to. The participant signed up with their work email and used their work computer equipment to engage with us.

Each participant had the opportunity to request to withdraw their data before the start of data analysis. General Data Protection Rules (The UK Government, 2018) were followed by informing practitioners about the reason for data collection, access to those data and data processing. Informed consent is one of the ethical principles and internationally recognised requirements that became more relevant during the pandemic; each participant could be considered vulnerable by being geographically isolated from the rest. Newman et al. (2021) argued that the expectation of digitally signed consent might also put extra pressure on participants as many of them may not have electronic signatures and digitally signed consent also has the possibility of creating an increase in online data. To make the signed consent process less complicated, we did not ask for the electronic signatures from the participants and accepted signing using word fonts. Signed consent forms were received before the start of the interview stage by email and informed consent was rechecked at the start of the online interview on MS Teams with the researcher ensuring the participant knew what the purpose of the research was and was familiar with the information sheet. Newman et al. (2021) endorsed the recording of verbal consent during the data collection stage as an alternate method of signed consent.

Absolute confidentiality is difficult to achieve in online qualitative research even though one-to-one interviews using online platforms may feel completely confidential and secure for the participants. Because of the nature of online MS Teams video interview practitioners were identifiable to the research team members and this issue was made clear on the information sheet. We refrained from providing any deceptive assurance of confidentiality. Practitioners had options of audio interview using MS Teams or telephone interview in case they preferred over MS Teams video interview. Practitioners were also notified before the start of recording in case they like to switch off the video camera and the research team reiterated the right to stop the interview if feel distressed or withdraw at any point during the interview.
Qualitative researchers often face ethical dilemmas (Taquette and Borges da Matta Souza, 2022) with challenging interview topics and sharing personal experience may cause emotional distress during the interview stage (Silverio et al., 2022). Subtle ethical (Pasco Leahy 2022) dilemma during an interview creates further challenges when interviewer and interviewee are geographically distanced and only can see or hear each other. Nonverbal signs of discomfort may be more difficult to pick up on online audio interviews, but this is possible when participants are using video (Irani, 2019). Recognising nonverbal cues during video conferencing requires an increased level of attention than face-to-face discussion (Bullock et al., 2022), experienced research team members were able to identify and respond to any discontent or uneasiness. Practitioners we interviewed were also experienced in discussing domestic violence as part of their job and therefore had many skills and resources to draw on. Nonetheless, we ensured that information about support and links to reach that support were shared in case practitioners felt discomfort while answering the interview questions.

Online data management and storage were not new to the research team however extra measures were taken while recording and saving digital data. Boland et al (2022) raised a potential problem of participant disengagement due to fear of data leaks in an online environment. Even though we did not have any disengagement issues, we stored each digital data such as interview transcripts and videos on a password-protected shared folder on a cloud server that only the research team could access. Online data storage safety was a new feature of the ethics application, we adhered to the rule by using a code for each participant combining words and letters to safeguard the practitioner’s identity on the server.

Technical Issues, Rapport and Equity

Online data collection during the pandemic was advocated by researchers around the world (Gray et al, 2020; Tremblay et al., 2021; Khalil et al., 2021; Howlett, 2022; Khan, and MacEachen, 2022) because of the flexible nature and ‘socialised form of interaction’ (Joinson, 2005 cited in Lobe et al., 2020) that it offered. The online approach we adopted is defined as the Elicited Method according to Salmons
In this method, researchers use the online platform as a medium through which they can interact with participants using questions or prompts in interviews (Salmons, 2022). The MS Teams platform is considered as a medium that facilitates data collection because of the platform’s user-friendly video conferencing tool. Salmons (2022, p.47) pointed out that ‘Researchers sometimes choose ICT as a medium for interviews or observations because online communications allow for significant reduction or elimination of constraints that would make in-person data collection impractical’. In our study, the virtual interview was the best option for individual data collection due to social isolation measures. This method was also convenient for participants as they were already working from home and due to COVID-19, were familiar with the platform as many used it to deliver support sessions and other interventions.

The semi-structured questionnaire was sent to the practitioners before the interview so that they were familiar with the questions. Participants preferred knowing the questions before attending their interview and Gray et al., (2020) have claimed that this practice can improve the interviewee experience. Our semi-structured questionnaire was divided into two-part Section A and Section B for collecting subject-specific knowledge and demographic data. Participants had the option to complete the demographic details themselves and send these back to the research team by email, but no participant opted for this, which evidenced their preference for the online interview method for sharing information.

There were sixteen semi-structured questions with further prompts attached and nine demographic questions using mainly closed questions. Because our participants were being asked to discuss a critical issue such as domestic abuse which is not easy to talk about, our interviews were structured to make the participants comfortable, in line with one of the key elements of successful face-to-face interview techniques. To overcome the challenge of the interviewer and interviewee being separated by physical distance, we added two questions on organisational information and their role to start the conversation with ease. We also allowed extra time to make practitioners feel comfortable online at the start of the interview before asking specific questions on the topic. In line with Boland et al. (2022) from their rapid review we found that allowing additional preparation time for participants in online qualitative data collection was the best practice.
MS Teams meeting links were created for interview purposes by the research team according to the agreed schedule and shared with the participants. According to Maddox (2021), interview lengths with professionals should not be too long given their busy schedules. For us, interview times varied between 30 to 60 minutes with an average time of 48 minutes. Practitioners with more experience were able to finish quickly but shared detailed responses, whereas new employees took more time to respond. At the start of each interview, the researcher explained the options of audio and video recording. Research information was discussed, and consent was rechecked after pressing the record button. Prompts we used in the interviews were equally important as questions (Leech, 2002) and helped the practitioners to respond to the main question. One such example is a question on changes in working patterns with families. Participants could take some time to answer this question as they pondered on it and that might not lead to them clearly defining the change in working pattern that they were suggesting had occurred due to the pandemic. The researcher would therefore then use one of the predefined prompts such as ‘How is it different or the same?’, ‘Is it the location/format that is different?’, ‘Or is the intervention different?’

MS Teams creates one integrated file of audio and video along with a data transcript. All the files were downloaded and saved with a code name to a password-protected folder in university-owned cloud storage. This rigour was necessary to maintain confidentiality and anonymity. In our new normal environment, the usage of digital tools increased rapidly and as a result productivity associated with these technologies also improved. MS Teams transcription facility is one such element whose development coincided with our interviews. At the beginning of early March 2021, no live transcription was available on MS Teams, however, MS Teams recording had an embedded webvtt (Web Video Text Tracks) file that was available to download. Each line of this file consisted of two-second data transcription, making over 90 pages of transcription for a 50-minute interview. The post-interview phase therefore consisted of checking and correcting automatic transcripts which took approximately 1 hour per 1-hour interview. This represents a large time saving over manual transcription, which would have taken 5 to 6 hours for each hour of a face-to-face interview. At the end of March 2021, MS Teams introduced live transcription facilities in Team meetings (Chabra, 2021) in response to increased
demand from varied industries. This feature was easy to use and offered written records of audio files. Another added benefit was each text was captured by the speaker’s name and in real-time, hence the transcription standard became very high. The introduction of auto transcription and availability meant we were able to produce comprehensive transcripts of every interview. In total, we collected approximately 25 hours (or 200,000 words) of data. The transcription cleaning and data analysis were divided between the researchers and allocated the same interview the researcher did. Familiarity with the interview helped with quicker cleaning. Each transcription was coded and analysed following Braun and Clark’s (2006) thematic analysis method. Qualitative researchers like us may have overlooked the benefits of digital data collection platforms such as MS Teams or Zoom before the COVID-19 pandemic, but the improved individual digital competencies and availability of new technologies helped to incorporate the new practices of collecting qualitative data.

**A Reflexive Analysis**

Four main elements made this online qualitative study successful, and we want to draw them below from our analysis of why we consider they are important for future virtual, digital studies. The four critical elements are - flexibility, feasibility, resilience, and digital competency.

**Flexibility**

The pandemic provided an opportunity for researchers to find innovative practices and increase their flexibility in approaching participants and data collection. In this study, we utilised the benefits of online working and found this saved us time in terms of the physical interview set-up and travel. With the help of the participating organisation, the research team scheduled interviews within a very short period. Further, by adopting video interviews, we met participants on a one-to-one basis in an online, virtual world that offered flexibility for the researchers and participants. Practitioners were based in their homes during the lockdown which meant they were able to accommodate a research team interview schedule
because they were not out undertaking lengthy travel to and from meetings with clients. Flexibility worked for both the research team and participants.

Occasionally multiple interviews were scheduled in one day. This process was effective and supported rapid data collection during this crisis time however the pressure of accommodating available time of practitioners created extra pressure for the research team. Following the suggestions of Silverio et al., (2022) of appropriate scheduling of data collection, we recommend qualitative online interview schedule is planned carefully because although researchers can accommodate more interviews in a day because of online arrangement flexibility, they need the space and time to move emotionally from one interview to the next where the subject matter is quite difficult. This will result in increasing time demands to allow enough subsequent time for the cleaning of the interview transcripts which researchers may have more of because it is easier to complete a larger number of interviews within a short period.

Feasibility

During the time of pandemic and social isolation measures, online data collection platforms such as MS Teams, Zoom, Skype and Google Meet offered timely opportunities for qualitative data collection which would not otherwise have been feasible. Online interviews were time and cost-efficient (Gray et al., 2020) and could reach diverse participants (Boland et al., 2022). Qualitative research with practitioners required flexibility to fit around their busy schedules and online platforms offered that convenience (Richardson et al., 2021) hence the virtual qualitative study was the most suitable approach for us. Even though research participants were distanced geographically, digital video platforms allowed the researcher to overcome difficulties in capturing emotional cues and body language (Irani, 2019). Video conferencing facilities also enabled the researchers to respond to non-verbal clues (Boland et al., 2022) and this is similar to traditional face-to-face interviews.

Some other challenges were however unavoidable. Interruptions might be similar or different from those commonly, previously experienced, but during online interviews participants occasionally needed to respond to answer a doorbell, collect a delivery, or respond to an interruption by house pets.
or home-schooled children. During the interviews, these became almost part of the process and researchers learned to pause the interviews to avoid non-ethical data capture. Experienced researchers were able to collect the perspectives of practitioners fully in our case, but for future reference, a research team should be aware of such nuances while designing online qualitative data collection, especially interviews.

Online data collection using MS Teams might also disclose a participant’s private home environment to the research team (Boland et al., 2022) and this could result in ethical issues and/or potential disengagement. Gray et al. (2020) suggested making this point to participants and encouraging them to choose a space which allows them to maintain their privacy and confidentiality. In our study this issue did not occur, perhaps because participants were professionals, and already working with service users living with domestic abuse, hence managing confidentiality of the conversation was paramount to them. They did discuss with us during the research interviews the potential for ‘blurred boundaries’ between office and home, particularly emotional boundaries, whilst working from home, however, all of them used a quiet, private, reasonably non-descript space as an office space from where they took part in the online interview. Therefore, we would suggest that the equity between researcher and participant in this study again contributed to the success of the study with the participant’s role as practitioner and their professional awareness of the confidential nature of data benefiting our online data collection.

We also found that overwhelmingly practitioners appeared comfortable in the online space and confident in sharing their experiences. Collecting data this way may also have influenced the interviewers’ abilities to establish an interpersonal connection with the participants and to pick up important non-verbal behaviour (McGlinchey et al., 2021). In the one instance where the participant did not make logging onto the MS Teams call and the interview was conducted by telephone, this might indicate they were less confident in the digital space. In this study period, the time-constraints were such that we were not able to re-schedule for when they were able to connect via MS Teams, but this may be learning for future digital research and considerations of feasibility.

Resilience
Some risks and concerns of non-engagement are usually connected with online qualitative research; however, our experience was different due to the participant group we worked with. Researchers and practitioners were both working from home during the study and this similarity helped to establish rapport (Richardson et al., 2021; Cornejo et al., 2023). Practitioners shared their challenges of working with service users who were in general said to be less confident in using cameras which could hinder connections and easy communication. At the same time, the researchers were delivering online lectures and other virtual, professional interactions and negotiating those changes with students and others. These parallel experiences may have helped to reduce power differences in the virtual interview setting. And at a difficult time where isolation and anxiety prevailed in everyone’s life (Surmiak et al., 2022), the interview provided an opportunity for connection.

Practitioners demonstrated their resilient nature and adapted practice while working during the pandemic. The research team were also impacted by the social distancing rules maintained in the UK higher education sectors which meant academics had to work from home during January 2021 to May 21 and they too experienced isolation (Knight et al., 2021). In both sectors solutions were found. The domestic violence organisation established a ‘buddy service’ to enable informal collegiate support and allow colleagues with similar experiences to share and care for each other. For the researchers frequent MS Teams meetings and ad hoc calls enabled them to stay connected with each other during this period and helped resolve data collection and analysis challenges or issues.

**Digital competency**

The COVID-19 pandemic tested digital competency in general by requiring many people to switch to a digital space. Although working from home was not a new practice in the UK, lockdown measures intensified the integration of digital technologies worldwide. Digital skills had been requirements for many jobs, however, the necessity to work in this way multiplied immeasurably during the pandemic due to the enforced, accelerated digital transformation. The transformation from the traditional process such as face-to-face meetings to virtual meetings using MS Teams or Zoom was rapid. Although these virtual meeting platforms were available before the pandemic, remote working accelerated their adaptation and implementation (Soto-Acosta, 2020). Alongside this, the digital proficiency of
researchers who facilitate the interviews is vital (Boland et al., 2022). As a research team, we did not have time to evaluate our digital competency level before adopting the new technology but found this rapid transformation unlocked the potential of online interviews using the available digital platforms. This sudden change in our adaptability and willingness to work in a ‘digital manner’ was a product of the pandemic and one replicated by other researchers worldwide (Nagel, 2020).

For us, when undertaking the review of digital access and the competencies of research participants for this paper, we reflected on the evident access to digital devices such as a laptop or tablet that all our participants had and, in general, their being reasonably well-informed about the MS Teams application. During this time digital platforms such as MS Teams and Zoom became part of a work culture because they provided an easy interface for meeting and exchange. Therefore, as practitioners, our participants were already familiar with the technological challenges and were thinking about digital safety, because their service had previously offered face-to-face services to their service users and adopted digital methods as an alternative during the pandemic. The research team’s familiarity with the virtual platform as Irani (2019) suggests undoubtedly aided and increased the comfort level of participants.

The digital competency of participants in our study contributed to the timely completion of the online interviews, but we also found it facilitated building ease and rapport created an equity of experience and eased the physical distance between us.

**Limitations:**

The original study was rapid and sought to explore Domestic Abuse practitioners’ points of view during COVID-19. However, we did not engage practitioners from more than one organisation in the UK and a study with more organisations may have resulted in different responses. The appropriateness of the MS Teams platform for international research, especially where digital poverty prevails, along with internet access difficulties cannot be assessed from this study. The useability of the MS Teams platform for other qualitative data collection methods such as focus groups was not explored.
Conclusion:

In this paper, we reflexively considered our qualitative data collection practice and highlighted methodological changes made in each phase of the virtual research project. We emphasised components that worked and how the researchers solved the challenges of online data collection and analysis. In the new normal and changed work and research environment, online qualitative research will become more popular because it is flexible and accessible. The steps we took in each stage of the research life cycle can be adopted while working with practitioners from any field. Workspaces have moved from office settings to home settings resulting in the rapid expansion of video-conferencing platforms. The reflexive learning from this paper offers an approach that can be utilised to recognise methodologically and ethically strong, virtual, qualitative research.

We conclude there is value in adopting virtual, qualitative research methods while working with practitioners in the future. We have shown during the time of crisis how digital, qualitative research methodologies were enhanced by considering four key factors: digital competency, feasibility, flexibility and resilience. These factors can, going forward, be utilised by research commissioners and research teams to review and better understand the digital competency of research team members and their resilience to overcome digital obstacles and reflect on potential concerns, such as digital poverty. Utilising these four factors can aid an understanding of how a qualitative study may be made more flexible and feasible using rigorous digital methods which may ensure ease and timeliness of engagement for practitioners and researchers, who can draw on and possibly further enhance their own digital competency and resiliency in the process.

Acknowledgements

We would like to thank xxx for contributing to the data collection phase. We would also like to thank xxx for their support in this study.

References


Responses to Reviewer(s)' Comments to Author: "Negotiating with technology: advancing the virtual in qualitative research methods".

<table>
<thead>
<tr>
<th>Reviewer 1 comments</th>
<th>Response from authors</th>
<th>Action taken</th>
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<tbody>
<tr>
<td>Well written paper with a sound process applied. I would like to see you consider Lupton's work to position remote research more thoroughly in current research as a minor revision request.</td>
<td>Thanks for the comments. Please see below our responses.</td>
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</tr>
<tr>
<td>Originality: Somewhat, but it is written well enough that it is of sufficient interest to continue.</td>
<td>We thank the reviewer for acknowledging the originality of the paper.</td>
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<tr>
<td>Relationship to Literature: redisnoc spahreP Lupton's crowd sourced doc here: Lupton, D. (editor) (2020) Doing fieldwork in a pandemic (crowd-sourced document).</td>
<td>We thank the reviewer for this literature suggestion. This document supports and strengthens the work we have covered and therefore added two sentences on page 4, line 6; page 10, line 2 as highlighted.</td>
<td>Page 4: Setting up an online interview during the pandemic required planning, coordinating with the participants and testing the interview platform (Maddox, 2021) which we adopted for this study. Page 10: According to Maddox (2021), interview lengths with professionals should not be too long given their busy schedules.</td>
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<td>Methodology: Yes</td>
<td>We thank the reviewer for confirming the methodology component addressed in the paper.</td>
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<td>Results: Yes, perhaps nothing particularly novel, but interesting enough.</td>
<td>We thank the reviewer for their comment.</td>
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<td>Practicality and/or Research implications: Yes</td>
<td>We thank the reviewer for accepting the practicality.</td>
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<td>Quality of Communication: Good</td>
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<td>Reviewer 2 comments</td>
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<td>More balance is needed.</td>
<td>Please see our responses below.</td>
<td></td>
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<tr>
<td>Originality: This is an interesting, original and timely paper which is a valuable contribution to the work of qualitative studies going forward. The title is appropriate for the subject of the publication. The paper is a necessary step forward in response to COVID-19. The paper contains new and significant information adequate to justify publication. The paper clearly outlines four critical elements: flexibility, feasibility, resilience, and digital competency that are fundamental for future virtual, digital studies. The findings are clearly supported by the dataset with reference to the relevant literature.</td>
<td>We are delighted to see our contribution acknowledged and would like to thank the reviewer.</td>
<td></td>
</tr>
<tr>
<td>Relationship to Literature: The author consults some good sources and considers the advantages and disadvantages of the 'virtual'. However, the literature is lacking, particularly in relation to vulnerable groups, which is the chosen population - it would be good if this could be lengthened. Sources are somewhat out of date.</td>
<td>We have accepted the suggestion of adding some sources from 2023 publications.</td>
<td>Two citations were added from 2023 publications on pages 2 (Maulana, 2023) and 14 (Cornejo et al., 2023).</td>
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</table>
(largely 2020 and 2021) and it would be appropriate to consult literature from 2023 also.

| Methodology: This is a lengthy section and could be condensed/better structured by reducing duplication between sections, for example when justifying the adoption of virtual interviews as a data collection tool for performing semi-structured interviews. | Our paper is a reflection of methodical practice hence we tried to be very specific in explaining key issues related to each stage. | Following the reviewer’s comment, we have deleted duplications in the ‘Study design’ and ‘Technical Issues, Rapport and Equality’ sections. |

The methods employed are appropriate and are well considered - referring to a recent paper by Silvero et al., 2022 as justification for the method based on the sensitive topics explored. What is more, the author makes reference to other well-designed research studies when building an argument for the design of the study.

| We thank the reviewer for acknowledging this strength of our paper. | Given the acknowledgement, we have made no changes. |

Ethics are reasonably considered and draw upon relevant literature, discussing the challenges that exist as a result of geographical distance. More detail is needed as to whether a distress protocol was designed and what this included. This is fundamental in a study of this sensitive nature and more detail is needed as to the cues which may indicate discomfort. Were participants given the

| Thanks for acknowledging the relevant literature related to ethics. Distress protocol was adopted in this study according to ethical principles. All the participants received the participation information sheet which clarified their rights to withdraw during the interview, and/or before the data analysis stage and was given a specific time. A support organisation name |

The ethics subsection on page 6 made it clear that ethics approval was gained and ‘ethical principles were maintained throughout the research process to respect the rights of participants, confidentiality and safeguarding the identity of participants’

Further action was taken following the reviewer’s comment on taking a break. Please see the last sentence on page 7 as highlighted.
chance to take a break during the study if they became distressed? and link were also added to the participant information sheet in case participants feel distressed due to participation. Please see page 8, line 9 where we clarified the support for participants.

Results: Unfortunately the paper fails to draw any conclusions relating to the studied population 'vulnerable groups' and makes the generalisation that the stages of the research cycle can be adopted widely working with practitioners from any field - this is quite a large claim based on the study of one vulnerable population.

We have reviewed the content and would like to note that our paper is a reflexive piece on researchers using digital technology and the research cycle. We did note that we do refer to ‘The appropriateness of the MS Teams platform for international research, especially where digital poverty prevails, along with internet access difficulties cannot be assessed from this study.’ And have therefore sought to reflect that researchers in some other situations may have additional or different challenges.

We have not sought to draw conclusions regarding vulnerable populations as our paper addresses the use of digital methods with a professional practitioner group. We have therefore revisited the language used to describe this and the way we have summarised this and made some changes to clarify. Please see the highlighted sections in the conclusion.
Conclusions do not adequately tie together the results of the study and require further input - need to reiterate the emphasised components. The structure needs some further work - I suggest a new paragraph when discussing future research.

Sections of the Conclusion were re-written to address reviewer comments – see highlighted.

Practicality and/or Research implications: The author approaches implications for future research towards the end of the conclusion, offering some important insight making some relevant recommendations for future research studies. The author anticipates that there will be an increase in qualitative studies conducted online and provides some useful insights as to the different elements that should be taken into consideration when conducting such studies.

Thanks for your comments on the research implications.

Quality of Communication: There is repetition on page 10 where the author states that they allowed extra time to make practitioners feel comfortable (line 2 and line 13). Inconsistencies in the use of language - alternates from using 'MS Teams' and 'Teams' and also the use of Covid 19 (sometimes Covid 19 and sometimes)

Agree with the repetition on page 10 – line 2 and line 13 (first submission)

Accepted the suggestions of being consistent with the use of words such as MS Teams and COVID-19.

On the revised version the line 2 corresponds to page 9, line 22 which we kept as before. We restructured the 6th line on page 9, therefore ‘extra time’ repetition is deleted.

Changes are highlighted for MS Teams and COVID-19.
capitalised - my preference is to use COVID-19.

Missing space on page 2 (Smyrnakis et al. 2021; Khalil et al. 2021). Punctuation could be improved, e.g. missing comma Page 7

'Because of the nature of online MS Team video interviews practitioners were identifiable'. Page 2 (Seff et al. 2021) - missing comma between author and date. Misplaced comma page 16 'it is probable'. Sentence structure needs improving, e.g. in the conclusion there are additional words added 'home settings and resulting'.

Overall the paper adequately expresses its case to the reader and suits the expected knowledge of the journal's readership.

Thanks for pointing out the punctuation error which we checked and corrected accordingly.

The conclusion section is restructured and highlighted following reviewer’s suggestion.

Thanks so much for your encouraging comments. We truly appreciate it.