

## Forum Notes

# Challenges in Virtual Data Collection: Some Practical Suggestions

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Article Info:

Forum held on 27 March 2021

## INTRODUCTION

This paper lays out some practical suggestions for qualitative data collection at a time when a global pandemic has impacted the way qualitative research is being carried out and how qualitative data is collected. Social research is an endeavour that sees the process and actions of empirical investigations into human phenomenon. In this endeavour, qualitative research paradigm and its corresponding methodology and methods are used as conceptual frames so that practical decisions about fieldwork, data collection and data analysis can be formed (Ritchie & Lewis, 2003b).

At the heart of social research is the principle of constructivism that sees the qualitative researcher apply critical interpretivist perspectives to the way research decisions are made. In practical terms, social research is built upon complex researcher-participant connections that has traditionally been based on face-to-face communications through interviews and dialogues. The nature of the deadly pandemic has meant that arranging for face-to-face communications has been prohibitive. As the pandemic shows little sign of abating, qualitative researchers confront a conundrum for how they should carry on under such circumstances with the obvious alternative being to collect data through virtual methods. Yet, virtual methods of data collection often means that intermediaries such as devices and internet-based platforms are involved, thereby creating a barrier that potentially comes between the researcher-participant's co-constructivist process of knowledge sharing. Thus with this barrier, much concern has been raised as to the authenticity of data that is collected vis-à-vis virtual methods. From here, two questions that will be addressed are:

- 1) To what extent can virtual data be considered legitimate qualitative data?
- 2) How should qualitative researchers address the challenges of collecting qualitative data in virtual ways, going forward?

Both authors of this paper were in the midst of their own qualitative research projects when the pandemic occurred. The first author was working with a group of then-8-year-olds in a primary school in Malaysia looking into alternative literacy pedagogies. -The second author was working with a large team of researchers to examine how a group of primary and secondary Chinese schoolteachers experienced learning to appreciate contemporary Malaysian Chinese (Mahua) literature. For the rest of this paper, insights and suggestions from the first author's research will be referred to as Project 1 while Project 2 will denote insights and suggestions from the second author.

It is important to note that this paper is built upon the authors' presentations and discussions that emerged from Qualitative Research Association Malaysia's (QRAM) E-Forum session which was held online on 27<sup>th</sup> March 2021.

**Project 1**

**Background of the study**

Project 1 in this paper is a research initiative that is driven by alternative perspectives about literacy pedagogies in Malaysian schools. Particularly, this project wanted to understand whether and how there can be alternative literacy pedagogies for children in rural schools who may not have access to mainstream ways that are supportive of reading practice. At the time of data collection before the onset of school lockdowns, the researchers in this project were carrying out the Reading and Meaning-making workshop (RMMW) with 10 children in a rural school in Malaysia. By the end of the workshop, the researchers had planned to carry out one to one interview with the children. However, before the interviews could be arranged, the country went into lockdown which impacted all schools. Without access to the schools and to the children, the researchers could not garner the required qualitative data.

**Addressing the conundrum**

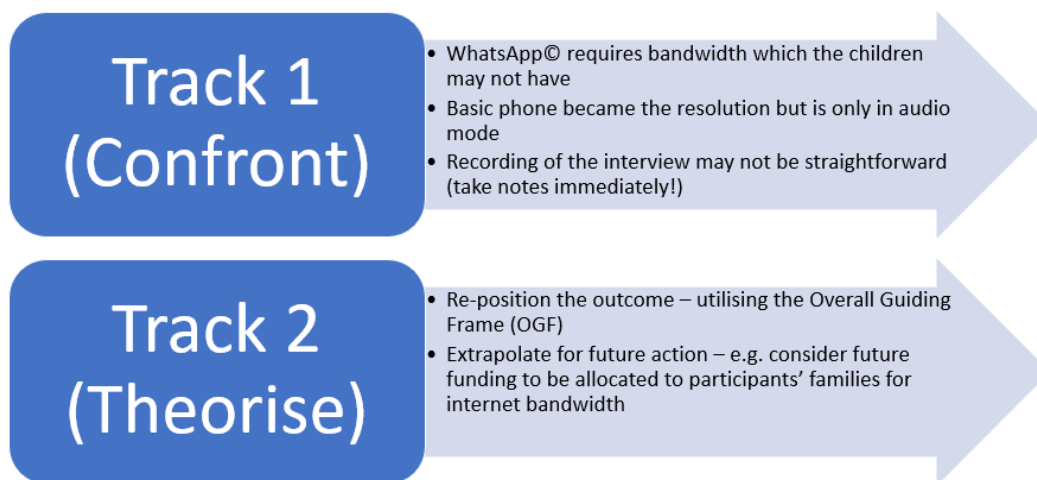
The question that is raised at this juncture is whether and how feasible is it to carry out interviews through the virtual platform with children as young as 9 years old.

The research team went ahead to arrange with the schoolteacher to explore how this can be done. The parents of eight of the children agreed to cooperate with the researchers to allow their children to be interviewed using the handphone. The following paragraphs describe the researchers’ experience of conducting two interviews using the handphone.

We initially intended for the interviews to be carried out via the set-up of a discussion ‘room’ via WhatsApp© application on the phone. However, during the actual data collection phase, it was uncovered that the children’s device and internet bandwidth connection were unable to support the call. Thus, the issue of context inequality was raised. As we were unable to use the WhatsApp function, the interview was carried out via the mobile phone call, which only allowed for the audio platform. Because of that, a recording could not be done.

It is important to note that the nature of qualitative research requires the researchers to provide enough flexibility to adjust the data collection methods to fit the circumstances. However, by ‘fitting’ the circumstances, we produced analytic memos to capture the phone interview and take immediate notes of the interviews.

Here, we consider this idea of double tracking for qualitative data collection. As in Figure 1, ‘Track 1’ of the process refers to how we confront the challenge. With that, we went on to theorise, i.e. ‘Track 2’, the data collection context by re-positioning the outcome of the project using the Overall Guiding Frame (OGF) (Chong, 2019) in order to extrapolate for future action e.g. to consider future funding being allocated for participants’ families potential use of internet bandwidth.



**Figure 1:** Double-tracking for qualitative data collection

### Considering the nature of qualitative research

As the project continues, it will be important for the researchers to anchor their data collection process in the following fundamental characteristics of qualitative research:

1. Qualitative researchers are ‘bricoleurs’ (Denzin & Lincoln, 1994)
2. Qualitative research is concerned about social phenomenon which is often fluid (Ritchie & Lewis, 2003a)
3. Qualitative research is participatory in nature which means that the participant is as important a partner as is the researcher
4. Qualitative research is potentially emancipatory
5. Qualitative research is useful to address issues of marginalization
6. The qualitative research process is co-constructivist (Crotty, 1998)



**Figure 2:** Fundamentals of Qualitative Research

When considering the above caveats for qualitative research in a post pandemic era therefore, the legitimacy of data collected via virtual means will depend on how researchers confront and theorise their data collection process such that Tracks 1 and 2 will be able to justify why and how the method was appropriated for the context.

### Project 2

#### Background of the study

Project 2 is an evaluation study of an online teacher professional development course on Malaysia Chinese (马华, Mahua) Literature. Chinese language is a compulsory subject in the Malaysian Chinese vernacular primary school and an elective subject in the National Government Secondary School. Appreciation and understanding of literary work in Chinese is a crucial part of the curriculum. The Ministry of Education does not limit the source of the Chinese literary work from any particular region of the world. However as the Mahua literature work gains momentum in the last few decades, more and more Mahua literature are selected into the Chinese Language textbooks. The cultural context of the literature work is local and it is thought that this would bring more meaning to the students. There were however, some nuances from teachers themselves as there is insufficient documented Literary Critique on Mahua Literature compared to that from China mainland or

Taiwan. This according to teachers is needed so that they can better lead the students in critique and subsequently appreciate the beauty of the language and the hidden message into the literature. Responding to this request, in 2020, the Chinese Department, Faculty of Arts and Social Sciences of University Malaya, partnering with the Malaysian Chinese Writers Association decided to conduct a course to promote this teaching and learning of Mahua Literature. The objective of the training is to enhance the appreciation level of the contemporary Mahua literature among Chinese school teachers, both primary and secondary.

However, the Covid-19 Pandemic in 2020 and the subsequent Movement Control Order (MCO) in Malaysia kicked in and the project has to be repackaged to online program. This turned out to be a huge success as unprecedentedly, 450 teachers registered and underwent the 10 weeks course. Each Friday night from 8 pm to 10.30 pm, these participants from all over the country diligently attended the course, raised questions and subsequently involved in discussion in the chatbox as well as Facebook account that has been set up by participants. The discussion during the course and in Facebook is vibrant.

In view of the initial 'experimental' nature of this online teacher training project, the organiser decided to embark on a concurrent evaluation study to see its feasibility and possibility of expansion or continuity of such course. A research team was set up in collaboration with SEGi university Faculty of Education, Languages and Psychology where the author works. The Stufflebeam Context, Input, Process and Product (CIPP) Evaluation Model is adopted for this endeavour. The aim of the evaluation study is to assess the impact of the online teacher training course towards the teaching of Mahua Literature in schools and the challenges faced.

## **METHOD**

Similar to Project 1, Project 2 was not originally planned as an online study although it is researching on an online project. The researchers have planned for face-to-face interviews and classroom observations. However, along the way as the Movement Control (MCO) and Conditional Movement Control (CMCO) continues, researchers had to switch to virtual interview and have at the moment postponed the classroom observation indefinitely. The study adopted a mixed method study approach having both quantitative as well as a qualitative component. It is envisaged that mixed method provides a better understanding of research problems than either approach alone (Creswell & Plano Clark, 2011). Greene (2007) described mixed method research design as inviting us to "participate in dialogue about multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished" (p.20). Thus, through this study, questionnaires were sent out to all the 450 participants of the teacher professional development course, document analysis was carried out on the course materials, interviews were also conducted onto teachers and officers in the Ministry of Education. This paper is only concerned with the interview part of the study.

### **Planning and executing the online interviews**

Interview was designed as a crucial part of the study to uncover the experiences of the teachers during their own online learning provided by the Chinese Department University Malaya partnering with the Malaysian Chinese Writers Association. Interview also explored the challenges and problems faced by the teacher in undergoing online teacher professional development course as well as conducting online teaching based on the learning from the online professional course. Interviewees were also asked on their views on the future prospect of online learning and teaching.

The researchers randomly selected and subsequently contacted participants from different zones of peninsular and East Malaysia to be interviewed. The researchers made initial calls through phone to establish contact and to request consent from the participants. In the phone call, researcher explained about the intention of the interview. From the very outset of the study, the researchers attended the online course as passive observer-participants and this proved to be useful as researchers could easily relate to the course content and the flow of the course during the telephone conversation. This created a kind of warmth and welcome ambience. Thus, it is not surprising that all of the participants were very supportive and enthusiastic. After exploring the different platform of either Zoom, google meet, Microsoft teams, a collective decision was made with the interviewees that the interview will be conducted through Zoom platform. Zoom platform is also a common platform used by teachers in attending course and teaching as well.

Each interview lasted between 45 minutes to an hour. With probing and prompting, the participants shared their thoughts on the topic and provided in-depth insights on the issue of online learning and online teaching. Many real-life anecdotal cases were shared. For each interview, two researchers were present for triangulation purpose

and to facilitate subsequent discussions on data collection as well as data analysis. After obtaining consent from participants, all interviews section were recorded.

### **Sharing of online interview experiences**

#### **The use of Zoom platform**

The experiences of online interviews were mostly positive, the researchers did not face many difficulties in both technical aspects using Zoom digital platform as well as adhering to the protocol of interviews. This could partly be due to both researchers conducting the interviews have been teaching and doing supervision online with their postgraduate students for more than 8 months since the start of the lockdown due to Covid-19 pandemic. Zoom was one of the platforms used by researchers. At the same time, the interviewees were also familiar with Zoom for they also have used Zoom in their teaching. This technical familiarity took away the extent of technical glitches that might have happened if both parties are novice in using Zoom. It can be envisaged that technical glitches could be a hindrance if the digital platform used were not familiar to them.

#### **Observing body language**

In any interview, interviewer needs to be sensitive towards suggestive body language from the interviewee. Body language is recorded as part of researcher's note during and after interview. From body language interviewer can detect the mood and adjust the semi-structured or open interview questions as well as decide when to end the interview. In an online interview, the view of researcher (interviewer) and participant (interviewee) are limited by the capability the video recording feature of the digital platform (in the case of this research, the Zoom platform). Most of the time, both researcher and participant can only see the face and part of the shoulder of each other through the screen. The researcher has to be cognizant of this limitation and act accordingly.

#### **Distance is not a hindrance anymore**

The researcher was rather thrilled that the online interview meant that there is no expenses incurred and time was saved from traveling. Distance is no more hindrance and the researchers can in fact choose interviewees from different parts of the country.

#### **Time management**

Time management during interview is important especially during online interview as interviewer could not detect the whole-body language of the interviewee. The researchers are cognizant of time and kept the interview within 45 minutes, the longest it went to was an hour which is rather too long. When time is too long, discussion loses its focus too.

#### **Connectivity**

The main challenge faced during online interview is connectivity, in two of the interviews, connectivity was fluctuating throughout the interview. Finally in one of the interviews, the interview has to be aborted after several tries, the interviewee instead provided her answers through emails. This took away a lot of the 'spontaneity' and 'interactiveness' of a real-time interview.

#### **Ethical considerations**

Recording the interviews raised ethical issues as the identity of the interviewee would be exposed if anyone has access of the video recording through zoom. Permission needs to be recorded from the participants and steps taken to ensure safety of the recording so as not to reveal the identity of the interviewee.

### **ANALYSING FACEBOOK DATA**

The online discussion in the participants' face-book was vibrant during the course. There was a large follower of close to 2000 people. Often after one participant posted a comment, there are many responses recorded. Most of the postings are related to their thoughts and reflections of the literary work discussed in the immediate lessons they just attended. Not many postings discussed about how they will teach Mahua literature in school. Analysing feedback from face-book is a challenge as through just a few postings from each of the participants, researchers could not obtain in-depth understanding of the thoughts behind the postings. The spontaneity of an interview is not present in just examining the face-book postings.

Although it seems to be convenient to use web poses such as Facebook postings, the ethical issue of using web poses raised challenges of consent, privacy and anonymity. There are currently still insufficient and inconsistent guidelines available, new ethical guidelines particularly in relation to informed consent need to be further explored (Sugiura, Wiles & Pope, 2016)

## Lessons learnt

### **Are the virtual data collected thus far from the online interview legitimate?**

The preparation for interview was carried out in accordance to the protocol of physical face-to-face interview. Probing conducted during online interview is as rigorous as in physical interview. In actual fact, with the participants right in-front of the researchers although it is through computer screen, it is as if both interviewer and interviewee are present together in a physical interview. If the interviewer practices good interview skills, virtual interview can be as good as physical interview. This is of course due to the advent of technology where virtual interview is as much a real-time interview as a physical interview with full view of each other. Availability of devices and connectivity has also facilitated the online interview conducted in Project 2.

The setting of the interview is a challenge in virtual interview. In physical interview, interviewer can select a place away from distractions, non-threatening and comfortable. However, there is limitation in a virtual interview, interviewer can suggest to the interviewee, but it is largely up to the interviewee to decide on the 'place' of interview, which also depend on where the computer and connectivity. Thus, often there are distractions of background noise during virtual interview.

Data from open source such as Facebook is a potential data source for analysis, however there is a limitation of the level of depth of data obtained from social media. Thus, it is imperative that researcher consider the indepthness of the data as this will affect the authenticity and validity of the data analysis.

### **How should qualitative researchers address the challenges of collecting qualitative data in virtual ways, going forward?**

Specifically in conducting virtual interview, on top of adhering to interview protocols, researcher need to consider the following issues: familiarity with the digital platform, connectivity, time management, background noises and ethical issues.

Researchers must be cognizant that virtual data collection is just a matter of a different platform to collect data, the use of this platform must still fulfil the rigour of research, adherence to the philosophy of research as well as the ethics of conducting research is still pertinent. Issues of validity and reliability is still of utmost important in conducting virtual data collection. In online qualitative research, trustworthiness, transferability of research must also be taken care of.

At the same time, ethical issues must be explored. In Facebook, participants' engagement is visible and traceable, through group discussion, network is being formed and it becomes visible not only to one another as well to the public. The question then is does the researcher has the right to use this data in his or her study. This is an ethical issue that needs some answers. Baym (2013) reiterated that analysis of social media data must be closely scrutinized to examine how they may be skewed or how far they over-reach. Baym (2013) suggested looking at the totality of inquiries, the discursive horizon the conversation construct. This would mean the 'Facebook' data obtained in Project 2 cannot be analysed just based on each posting, but an overall analysis is necessary.

### **The way forward**

Virtual data collection for qualitative research is an expanding field with a lot of potentials, there are many exciting and novel techniques for collecting qualitative data in the social and health sciences including gathering blog data, story completion method (Braun, Clark and Gray, 2017). Virtual interview is just one of the methods to be used. However, ethical issues need to be explored.

## REFERENCE

- Baym, N.K. (2013). *Data not seen: The uses and shortcomings of social media metrics*. First Monday, Volume 18, Number 10 – 7 Oct 2012.  
[https://firstmonday.org/ojs/index.php/fm/article/download/4873/3752doi:10.5210/fm.v18i10.4873.](https://firstmonday.org/ojs/index.php/fm/article/download/4873/3752doi:10.5210/fm.v18i10.4873))
- Braun, V., Clarke, V., & Gray, D. (2017). *Collecting Qualitative Data: A Practical Guide to Textual, Media and Virtual Techniques*. Cambridge University Press
- Chong, S. L. (2019). Making critical connections: How to apply the Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) in qualitative data analysis. *The Qualitative Report*, 24(2), 298-306.
- Creswell, J.W., Plano Clark, V.L. (2011). *Designing and conducting Mixed methods research*. 2nd edition. USA: SAGE Publications

- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*: Sage Publications Ltd.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. London: Sage Publications.
- Greene, J.C. (2007). *Mixed methods in social inquiry*. San Francisco: Jossey-Bass.
- Ritchie, J., & Lewis, J. (2003a). *Qualitative research practice: A guide for social science students and researchers*. London: Sage Publications Ltd.
- Ritchie, J., & Lewis, J. (Eds.). (2003b). *Qualitative Research Practice: A Guide for Social Science Students and Researchers* London: Sage.
- Sugiura, L., Wiles, R., Pope, C. (2016). *Ethical challenges in online research: Public/private perceptions*. July 6, 2016 Research Article <https://doi.org/10.1177/1747016116650720>