

Reflecting on the use of Google Docs for online interviews: Innovation in qualitative data collection

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Abstract

Google Docs is a widely used online word processing software. Despite its broad popularity in business and education, Google Docs is under-utilised as a tool to facilitate qualitative interviews within research. In this article, we reflect on our experiences as two PhDs using Google Docs to conduct synchronous, online, written interviews. We present two case studies, which, to our knowledge, are the first to utilise Google Docs to conduct web-based written interviews. In doing so, we (a) outline the development and implementation of the methodology, (b) highlight the key themes we identified when considering the benefits and challenges of conducting interviews using this technology and (c) discuss possible future uses of the methodology. We argue that synchronous web-based written interviews via Google Docs offer unprecedented opportunities for qualitative research.

Keywords

Google Docs, innovation, online interviews, qualitative research methods, reflections

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Using online technologies for qualitative data collection has become commonplace within academia (e.g. Baltar and Brunet, 2012). To date, many studies have utilised online technologies, from observational studies of web-based forums (Baker 2013) to web-based surveys (Ramsey et al., 2016), and focus groups and interviews (Cater, 2011; Deakin and Wakefield, 2013).

Building on this literature, we introduce an innovative online qualitative methodology, which demonstrates how an online word processor, such as Google Docs can facilitate online interviews. Google Docs is a widely used, freely available online word processing software that has broad popularity in business and education, but it is not, to our knowledge, commonly used in qualitative data collection. We document our experience in developing and implementing an online interview methodology using Google Docs. The experiences stem from the empirical work of the authors. The first study to use the novel method was conducted by Opara et al. (2020) (Case Study 1) in a study of the workplace experiences of British African, Asian and (Black) Caribbean ethnic professional women. Case study 2 further evidenced the utility of the methodology, through its use within online facilitated classroom interviews with adolescents in Denmark about their perceptions of ambition and success (Spangsdorf et al., under review).

We present a short review on the advantages and disadvantages of online and web-based tools in qualitative empirical investigation more broadly. We follow this with an introduction and our rationale for using Google Docs, two case studies, and an integrated reflection of the process of conducting our two studies. The discussion highlights the themes stemming from our reflections of using Google Docs, outlining the strengths and weaknesses of the approach. The article ends with recommendations and attention points for using Google Docs in future qualitative research. Taken together, we suggest that semi-structured, web-based written interviews are a practical alternative to traditional face-to-face or telephone interviews, and are particularly useful when there are constraints in finances, time or geographical location. This method can be used both synchronously as well as asynchronously, and can provide an insight into the thinking process of participants.

Online qualitative research: Advantages and disadvantages

Over the past 20 years, the use of online and web-based tools in qualitative data collection has gained significant ground. Research has been primarily focused on online tools such as email, web-based forums, chat rooms, blogs, instant message or chat, Skype, social media platforms such as Facebook and conferencing software functions (e.g. Davis et al., 2004; Hawkins, 2018; Iacono et al., 2016). It is important to make the distinction between the analysis of text and discourse that occurs ‘naturally’ online, from data that is harvested in online forums or from social media sites – and the creation of text and discourse online for the purpose of analysis (e.g. interviews), which is the case when using Google Docs for written interviews.

These methodologies present a range of advantages and disadvantages for qualitative research, in relation to practical considerations, anonymity and data

security, engagement and rapport, and synchronicity. We will look at each of these in turn.

Practical considerations

There are a number of practical advantages of using online or web-based tools such as reduction of travel expenses and time spent (Walker, 2013a), and the speed of data collection is often quicker than traditional methods (Walker, 2013b). It also facilitates access to 'hard to reach' groups and individuals due to geography (Madge and O'Connor, 2002), for cultural reasons (Al-Saggaf and Williamson, 2004) or due to the sensitivity of the subject (Davis et al., 2004), Google Docs can be used both synchronously and asynchronously, and, as Google Docs interviews are transcribed verbatim, there are significant cost, time and travel savings.

Despite these advantages, one of the greatest challenges when conducting qualitative interviews is the transcription of data, which is a time-consuming and costly task, although recent innovations in transcription software, do make automated transcripts easier than they have ever been (e.g. Stream). Online interviews using FaceTime, Skype or other conferencing software are interactive and similar to face-to-face interviews. However, they require the use of audio or video recording, which then has to be transcribed. A limitation to these tools is the risk of poor recording quality, the loss of important information, and, in the case of Skype, the cost of recording software. This limitation can be alleviated by the use of chat rooms, discussion forums, messenger applications or email exchange (Walker, 2013a, 2013b), which allow for immediate transcription, as they are written by the participant in real time. However, these tools often suffer from other limitations, such as lack of synchronicity (messenger and email) which may limit attempts to engage in organic, in-depth dialogue; or difficulties related to obtaining consent and data security (forums, chat rooms; Salmons, 2012; 2017).

Anonymity and data security

Two of the key challenges in online interviewing are anonymity (Bolderston, 2012) and data security (King and Horrocks, 2010). In face-to-face interviews, participants are not anonymous, and this can pose as a problem for participants who wish to remain anonymous for cultural reasons (Al-Saggaf and Williamson, 2004) or due to the sensitive nature of the research topic (Davis et al., 2004). Online interviewing offers the option of greater anonymity. Chat rooms, discussion fora and social media sites such as Twitter and Facebook allow for some anonymity or at least the possibility of creating false profiles to disguise true identity. It is never recommended that the researcher is anonymous when using online or web-based interview tools as it can be in conflict with ethical behaviour and the issue of deception (Creswell, 2013). But the participants have the option of remaining completely anonymous. Online interviewing, for the most part, offers the option of anonymity that may facilitate confidentiality through the added element of physical distance. An interview, offline or online, is a social event that carries the risk of bias (e.g. due to race, gender and social class; Perera, 2021). Yet, as both the interviewer

and the interviewee are behind a computer screen during online interviewing, this risk of bias is reduced, allowing for better confidentiality between the interviewer and interviewee. This is especially the case with online tools where the two parties cannot see or hear each other (Shah, 2004). This distancing effect is often referred to as ‘pseudonymity’ (Wilson et al., 1998).

In relation to confidentiality and anonymity, online interviewing includes the risk of data security as online fora (e.g. social media platforms, chat rooms and email providers) archive data and often make the data accessible to service providers, systems administrators and search engines (King and Horrocks, 2010). The interviewer thus needs to carefully consider which online tools to use to best safeguard participants’ data.

Engagement and rapport

While distance may facilitate confidentiality, it may come at the cost of establishing rapport between the interviewer and the participant. Proximity allows for non-verbal information which is seen as instrumental rapport building and the quality of the interview (Clarke and Milne, 2001). Web-based tools such as Facebook, chat rooms, messenger, blogs and online tools such as email require the participant to write their answers leaving out non-verbal cues. However, previous studies on chat interviews (Meijer et al., 2021) and chat counselling (Lopez et al., 2019) did not find any differences in the quality of interview information provided.

To alleviate the lack of non-verbal information we recommend that the interviewer develops rapport with participants by spending more time online getting to know the participants before the start of the interview (Evans et al., 2010) or using emojis to express positive attitudes, boost group rapport or clarify message intention (Thompson and Filik, 2016).

Synchronicity

When choosing to conduct online interviews as a data collecting method, another decision is whether or not the interview should be synchronous or asynchronous. Asynchronous interviews, whereby the interviewer sends questions in advance, and the interviewee answers them in their own time, allow the participants plenty of time to reflect upon answers, but there is a risk that the dialogue will become stalled (Walker, 2013a, 2013b). Interviews that occur in real time, such that both the interviewer and interviewee are online at the same time, are synchronous (Chen and Hinton, 1999). Synchronicity has the advantage of facilitating rapport building and trust. It also helps mitigate the need for participants to have a high level of technical skill, as the interviewer can assist the process in a more direct manner. Synchronicity also facilitates spontaneous answers and discourages participants discussing their answers and thoughts with others, which reduces the risk of influence (Chen and Hinton, 1999). Tools such as FaceTime, Skype and other conferencing systems are synchronous in nature, but they require programs to be downloaded or an individual profile which not all participants may have or wish to have.

Online and web-based tools (e.g. email, chat rooms, discussion forums and social media platforms) tend to be more asynchronous in nature, but they do allow for synchronous conversation if the parties agree on a set time to engage in the interview (Salmons, 2012).

The use of Google Docs

The strengths and limitations of online and web-based tools are vast and wide ranging. Yet, we believe that the use of Google Docs as a data collection method has many of the advantages of other online methodologies, while helping to address some of the disadvantages. We suggest that Google Docs provides the interviewer with a combination of advantages relative to other options.

First, it allows interviewers to conduct online interviews in written form, which removes the need for transcription. While other online tools provide similar options (e.g. chat rooms), these tend not to present the text in a complete document, but rather in numerous posts that have to be copied into a document and processed. Second, as Google Docs can be used synchronously, it can be used as an alternative to face-to-face interviews (individual or group) reducing time for travel and allowing for the possibility of reaching groups that are difficult to access either geographically or culturally (Al-Saggaf and Williamson, 2004). Furthermore, when using Google Docs synchronously interviewer and interviewee do not see or hear each other, which provides a sphere of pseudo-anonymity (Wilson et al., 1998). This is important when trying to reach minoritized groups or participants who would be required to talk about sensitive subjects (Davis et al., 2004). Third, Google Docs allows the interviewer to see what the other person is writing as the writing takes place. Finally, Google Docs is relatively accessible, as it does not require download of programs or creating profiles, it is easier to obtain consent, and it is similar to other well-known word processing systems making it more familiar to many people.

For these reasons, we see Google Docs as a viable online interview method as it maximises the advantages. We present two case studies that outline how the methodology has been implemented, and explore the advantages (and disadvantages) in greater depth.

Case Study I

Google Docs, as an online interview method, was first used as a way to better understand the workplace experiences of professional women of African, Asian and Caribbean (AAC) ethnicities (Opara et al., 2020). The study took place in the UK, with the aim to 'give voice' to the organisational experiences of British AAC professional women, which have, hitherto, been almost absent within organisational scholarship. Conducting interviews with an underrepresented population has its difficulties. The voices of AAC professional women have been 'hidden' or 'absent', predominantly due to systemic racism and an unwillingness to represent their lived organisational experiences, but also because of the difficult nature of accessing these particular groups in a UK context. The sensitive nature of the stories that AAC professional women may want to tell, adds an extra element of difficulty and inherent restriction.

We first considered conducting face-to-face interviews. However, this had a number of disadvantages, including (a) the practicality of accessing the sample – the travel and time required to meet participants face-to-face was limited and (b) the need for confidentiality given the sensitive nature of the interviews which focused on gender and race discrimination.

We felt that the relative privacy of Google Docs would reduce any concerns that participants may have felt that their interviewer was able to judge them based on their race, gender or on the basis of their thoughts and feelings.

Thus, a qualitative exploratory methodological design via Google Docs was chosen, which allowed for the gathering of accounts through real-time web-based written interviews.

Process

Participants were sent email invitations to participate in the study. They then elected a suitable day and time when they could access the Google document at the same time as the interviewer. During each 1-to-1 interview both the interviewer and the interviewee had access to the Google document. The interviews were synchronous, that is, both interviewee and the interviewer engaged with the document at the same time, in real time. This allowed for a good level of interaction between the interviewer and interviewees, which facilitated the building of rapport. To encourage rapport, the interviewer pasted an introductory paragraph into the Google document to welcome the interviewees, and then asked them how they were doing and if they had understood the interview process.

The interviewer followed a semi-structured interview outline, asking about workplace experiences, issues of identity and health and well-being. The interviewer typed each question into the Google document, and the interviewee responded in turn by typing in her answer. The interviewer was able to probe or add further questions, similar to a face-to-face interview. Probing occurred once the interviewer could visibly see that the interviewee had stopped typing. The cue for this was by the interviewee typing 'END' at the end of a sentence, or once they had finished answering a question. Each interview session lasted about 1½ hours.

Reflections from the methodological conception, development and use of Google Docs

In practice, Google Docs was a useful methodology in this study, having many advantages, although there were some disadvantages. One advantage was the ease of use. The Google Docs methodology reduced the challenge of participants needing to be familiar with the interface, as it is extremely intuitive. For example, for one participant, who was unfamiliar with Google Docs, I was able to 'walk' her through the interface, explaining that I am able to see everything she is typing. I also explained that Google Docs will save all iterations of this document, so she was able to delete and re-write her thoughts if she felt she needed to. After this explanation, the participant managed to engage with Google Docs with little difficulty. Adding to this, Google Docs has instructional cues

embedded in the software, this enables users to click on ‘help’ and be provided with a number of suggestions.

Considering the subject and the confidential nature of the interviews – workplace experiences, relative to treatment and discriminatory practices and behaviours – issues of confidentiality were key. It was likely that participants would recall instances of discrimination or unfair treatment due to AAC women facing high rates of discrimination (Feagin and Elias, 2012; Kenny and Briner, 2013; Tariq and Syed, 2018). It was possible that participants may have felt unwilling to come forward or open up due to the personal or emotional nature of the interview. Indeed, the interview questions often provoked reactions of frustration or upset (e.g. ‘Please describe your experiences at work [...]’ ‘Can you describe the opportunities (or lack) that you have been given for promotion and progression?’). Participants were also asked to consider their answers in the context of their ethnic and gender identities, making gender and race salient.

As with traditional interview approaches, identity categories have the ability to influence the relationship formed between interview participants and interviewer, and subsequently the type of data produced (Jowett et al., 2011). This has particular relevance to Case Study 1, where issues of identity and stereotyping are core to the interview. Thus, use of Google Docs highlighted the role of ‘privacy’ and ‘anonymity’ within interviews. This method helped interviewees to answer the questions in an honest and open way, as the perceived distance and heightened sense of anonymity allowed for a greater sense of privacy. Indeed, not having to be in the participants’ physical space nor needing to hear their voices, was a distinct advantage, as context, appearance and voice proxies’ race, gender and often class. This allowed participants to open up, without worrying about possible backlash to the responses that they have given.

Google Docs interviews limit the ability to convey mood and emotion. This is a disadvantage as it may lower levels of engagement and rapport or prohibit the interviewer’s ability to present oneself as a trustworthy person. While being open about oneself as a researcher is important in any qualitative research, it is perhaps even more so when using Google Docs where the researcher is invisible. Thus, interviewer invisibility can be a benefit as well as a challenge. This meant that the interviewer took extra lengths to build rapport in the first instance, by having more informal conversations (via the Google Docs platform) and trying to find common ground to discuss about before proceeding. Thus, it is advisable that the interviewer allocates an extra 10 or 15 minutes at the beginning of the interview – to allow for ‘general’ conversation with the interview participant, this ensures that the ability to rapport is not neglected and remains a crucial element of the interview process.

This rapport is especially important when discussing sensitive topics such as race and gender. The interviewer did this by revealing their gender and race/ethnic identity to the women ahead of time. In turn, participants made mention of an increased ability to reveal their authentic experiences due to the diminished sense of possible judgement from the interviewer (Qu and Dumay, 2011).

One consideration when utilising Google Docs, is that it relies on participants having a level of technological competence. This means that this method is perfectly suited to the sample of professionals within this study. While online methods have the risk of

technological problems (Jowett et al., 2011), we faced no issues within this particular study. It is possible that we did not face issues due to the simple interface of Google Docs being very similar to common software packages such as Microsoft Word. In this way, this ease of use is a clear advantage, although we recognise that this ease may not generalise to other samples. For example, for samples of older people or in those contexts where access to the internet or digital literacy may be limited, it is likely that technological issues may be more prevalent.

Case Study 1 demonstrates that Google Docs is a practical tool to use when conducting interviews with a sample that is difficult to research. Moreover, the method allows for a level of anonymity that is useful when the subject matter is sensitive or personal, while still allowing for sufficient rapport to be built between interviewer and interviewee.

Case Study 2

The second case study describes a study where we explored how perceptions of success and ambition are perceived by adolescents (Spangsdorf et al., *under review*). We designed the study to lay the foundation for a thematic analysis exploring gendered notions of ambition. As little research about this topic has been conducted among adolescents, we decided that qualitative data collection was needed in the form of interviews.

We built on the Google Docs method originally outlined by Opara et al. (2020) to reduce time and costs for transcription. In qualitative research, individual interviewing is very time-consuming and can greatly limit the number of people being interviewed. However, we needed to interview a large group of young students and by using the Google Docs method, we were able to conduct multiple individual interviews simultaneously, without resorting to the use of group interviews, which typically do not provide a lot of detailed information from each participant. Another reason for choosing the Google Docs method is the transcription of data occurs as the interview takes place. Finally, we also carefully evaluated the technological ability of our adolescent sample and concluded that they would feel comfortable communicating online as they were already using the online tools as part of their school work.

Participants

The participants were 30 Danish high-school students. Age range was between 14 and 18 years with an average age of 15.8 years; 46.7% were girls and 53.3% were boys.

Process

Students were given a group introduction to the study where they received an information sheet and consent form. Students giving consent provided an email address to which they received a link to a Google Document at the beginning of their interview. This was done to facilitate the synchronous nature of the interview, and avoid students preparing answers in advance or talking to others about the questions beforehand. Each student only had access to their own Google Doc. The interviews were conducted as a semi-structured interview.

Each Google Docs contained 16 pre-written questions: demographic questions (age, gender and school level) and 13 open-ended questions about ambition and perception of success. As the students could read all the pre-written questions when opening the document, they were able to start with the questions they felt were most relevant. However, most students completed the questions chronologically and only switched between questions a few times. All students completed all the questions.

The students were divided into four groups of approximately 7–8 students. Within each of the four sessions, students sat in a classroom with their own laptop writing their answers to the questions in their own Google Docs. The researcher was in the room with the students to help with any technical issues. The researcher had access to each of the Google Docs simultaneously on her own screen and could see all the Google Docs in process, and switch between them as necessary. As the students wrote and paused at different speeds, it was possible for the researcher to read what had been written and, similar to a traditional face-to-face interview, add further questions to each interview. Students knew to look for further questions being added.

The process of conducting the interviews simultaneously was based on online interviews using emails or chat rooms in which the interviewer has interaction with multiple participants answering questions or commenting at the same time (Shepard, 2003). Having pre-written the questions in the Google Docs meant that the interviewer was able to pay attention to what the participants were writing. Each Google Docs was given a unique title (e.g. Participant A) so that the documents would not be confused with one another. Google Docs also has a special feature where the cursor in each document can become a small drawing of an animal (e.g. fox, badger) which makes it easier to recognise different participants. Each interview session lasted about 1½ hours.

Reflections from the methodological expansion of Google Docs

The data collection process was an efficient one. Due to the written nature of Google Docs, we spent only 6–8 hours on carrying out the interviews, which resulted in 30 individual transcribed interviews. In comparison, we estimate that it would have taken approximately 200 hours if we had recorded face-to-face interviews and then had to transcribe them.

Apart from saving time and costs, our study revealed a number of other strengths when using Google Docs. We used Google Docs in an attempt to reduce the risk of peer and social desirability. The research topic for this study was ambition and perception of success. While ambition is not a sensitive topic per se, it is a topic that is subject to strong social norms and social desirability (Sools et al., 2007). At the same time, the students are of the age where they strongly orient themselves towards others, especially peers, and are very observant of social norms and expectations (Myers and Twenge, 2013). Using traditional face-to-face or group interviews therefore carries the risk that participants will not answer honestly, or may deliberately choose not to express views that might oppose popular opinion. As the participants could not see each other's Google Docs, their answers therefore remained private. Indeed, research demonstrates that people tend to

answer more honestly when writing online instead of being face-to-face with an interviewer (Hancock et al., 2004).

In our experience, the students were extremely honest about their thoughts. For example, one student wrote about her diagnosis of anxiety (*Success to me is when I can walk into the classroom without feeling anxious and that nobody can see that I suffer from anxiety*), and another student wrote about feeling lonely (*I don't have any friends at the moment and I just lost my job. It affects me. I used to feel ok, but now I struggle with my motivation because I feel lonely*). Although, this could also be the case with other online or web-based channels, Google Docs has the advantage that it allows for real-time interaction between interviewer and interviewee simulating an in-person interview by being completely synchronous.

Google Docs also allows the interviewer to have an insight into the thinking process of the interviewee as you can see what they are writing, deleting and rephrasing in real time. For example, one student initially wrote that success was about being rich and having expensive things, but deleted his answers right away and instead wrote that success was about being happy in life. This feature is highly similar to face-to-face interviews where the interviewer is able to obtain information about emotional state when the interviewee cuts off sentences, rephrases words or hesitates. We did not foresee this feature and therefore had not prepared how to collect this information systematically. These cognitive shifts in writing were thus only observed and noted more broadly.

We also learned that the written methodology is not necessarily suited to everyone. Some participants may not feel comfortable with written communication. Indeed, students with dyslexia or those who had difficulties expressing themselves in the language of the interview (e.g. non-native speakers) expressed some doubts about participation. Only two students declined participation due to these reasons.

Another possible downside of the method is that it tends not to capture direct emotional and non-verbal information in the same way that video or audio interviews may do. However, some emotion was conveyed in the form of emojis – small digital images designed to convey emotions. In particular, students used emojis to convey sarcasm, irony and jokes, for example, *'What can motivate you at school? If I knew, I would have done it already (winking face emoji)*'. This kind of communication simulates the kind of communication the students have with each other messaging each other over the phone or on social media (Li and Yang, 2018).

Our greatest challenge concerned issues of anonymity and access. Google Docs is not anonymous as it requires an email from each participant. However, as we used Google Docs as an alternative to traditional face-to-face interviews and group interviews, there was no difference in the approach to anonymity. In our study, no personal information was written in the Google Docs and once the interviews were carried out the data was transferred to a Word document and all the Google Docs were deleted including the email addresses. When it comes to access, Google Docs has the greatest advantage compared to other online methods in that the document can be accessed via a link. The students were not required to create a profile, have an account or download any kind of software in order to use the Google doc. The link was sent to the student's email directly from Google Docs.

Finally, as the researcher accessed each Google Docs simultaneously with each of the students, it allowed the researcher and student to see what the other person was writing as they were writing. This synchronicity allowed the researcher the option of quickly responding to the students with follow-up questions (e.g. *Can you give an example of a situation in which you felt you were successful?*), and the students could see immediately where the researcher was interested in more information. Initially, we were curious as to how the approach could be used with 7–8 interviewees simultaneously. However, this did not pose a problem as some students reflected while others wrote and thus questions were asked in real time. This approach comes very close to a face-to-face interview in terms of dialogue, something that is not possible using asynchronous tools such as emails.

Our Case Study 2 showed that Google Docs is an effective tool when conducting multiple individual interviews simultaneously, provides an insight into the thinking process of the interviewee and creates a space of intimacy in which the interviewee feels comfortable sharing personal thoughts and experiences.

Integrated methodological lessons

These two case studies provide an introduction to an innovative approach to online qualitative interviews and provide practical suggestions for those considering the use of Google Docs. In this section, we discuss the key ways in which Google Docs differs from other online tools when it comes to data security, synchronicity and insight into the thinking process of interviewees. We also consider the key aspects that set apart written Google Docs interviews from traditional interview methods, including time saving, geographical distance and anonymity in sensitive topics. Here, we offer suggestions to assist other researchers in conducting qualitative web-based interviews via Google Docs, and enable them to fully consider the challenges and benefits that the use of Google Docs could present.

Synchronicity and flexibility

Google Docs can be used both synchronously and asynchronously. In both case studies we conducted the interviews synchronously, which required the scheduling of interviews ahead of time, similar to traditional arrangements for face-to-face interviews. A challenge posed by online interviewing is that the researcher often has less control over the conversation compared to traditional face-to-face interviews. Several studies have found that online participants are often more easily distracted by simultaneously checking emails or browsing the internet (Chen and Hinton 1999; Volda et al., 2004). This distraction is still a potential challenge when using Google Docs; however, this was not our experience. In Case Study 1, the participants were highly motivated and because the interviews were conducted synchronously, it reduced the issue of distractions as focus was directed towards the interview. In Case Study 2, we reduced this challenge by simulating a group interview, with participants in the same room throughout the interview. This, together with the classroom context, encouraged participants to focus and still allowed for multiple interviews to be carried out simultaneously.

However, if there are external barriers to time arrangements, Google Docs allows interviews to be carried out asynchronously, with the interview being carried out over a longer period of time and the interviewer and interviewee returning to the Google Docs over multiple time points. This provides flexible scheduling as the interviews can be adapted to suit each participant concerning time and place. On the negative side, there may be a higher risk of drop-out due to loss of motivation, it may be more difficult to have an actual conversation, and it may be difficult for the researcher to know when the interview is done.

Thinking process

Writing is a real-time process, as writing and thinking happens simultaneously. This is true whether Google Docs is used synchronously or asynchronously. Despite sharing many of the same advantages and disadvantages as other written channels (email, chat rooms), Google Docs is unique in one aspect: live writing. Google Docs allows for both the interviewer and the interviewee to see what the other person is writing as they are writing. This gives the possibility of gaining an insight into the interviewee's thinking process when writing. In our experiences, the pace and rhythm of typing provides information about the interviewee's cognitive and emotional states in the form of hesitation, speed of writing, pauses, cursor highlights, corrective steps and the emergence of ideas that may be changed in the writing process (Hale, 2008; Lee et al., 2016). This not only gives us insight into the thoughts of the interviewee but also their thinking process. This information can be noted and used in the thematic analysis similar to using non-verbal cues in face-to-face interviews. For both case studies, we did not anticipate this feature and, thus, did not collect these data systematically. We did, however, make broad observations of this process and recommend that future studies investigate this feature in more detail to explore how it can be utilised in online interviews.

Data security

Google Docs, like email, Facebook and Skype, is not anonymous. But if these tools are used as an alternative to traditional face-to-face interviews, there is no practical difference in anonymity. It is possible to allow participants anonymity by not obtaining personal information. In both studies, no personal information was written in the Google Docs. Once the interviews were carried out, the data were transferred to a Word Document and all the Google Docs were deleted including the email addresses, ensuring anonymity. However, until this procedure has been carried out, the participants are not anonymous, which may deter some participants. In the two case studies, we did not experience any concerns about data security with our sample groups or topics, but topics involving more vulnerable groups or groups that are subjected to persecution or stigma may be less willing to participate when using Google Docs.

When using online interview tools, there is also a risk concerning broader data security especially with sensitive or personal information (Jowett et al., 2011). Some platforms, such as Facebook and chat rooms, store information, even after one's profile is deleted

(Picchi, 2018). That information can be misused, leaked or hacked. Google Docs stores the data as long as the Google Document exists and for 30 days after it is deleted (Parker, 2018). But if the data are copied to a secure platform and the Google Docs deleted right after the interview, the risk of data breach is reduced.

The fact that participants are not anonymous and that an email address is required for a Google Docs interview is advantageous when obtaining consent. Online interview tools where participants are 100% anonymous typically pose a problem for consent. This is especially that case when complying with the requirements of the EU General Data Protection Regulation (EU GDPR, 2019) that stipulate that consent must be specific, unambiguous, informed of rights including right to retract consent and that the researcher must be able to prove that consent was given according to the above requirements which underlines the importance of obtaining clearly written consent forms.

Most studies on online qualitative research acknowledge the need for consent, but to our knowledge no studies have specifically examined how this can be done with the stricter requirements of the GDPR (Horrell et al., 2015; Jowett et al., 2011). Consent either needs to be included within the writing (e.g. within the thread in the chatroom), which is not always possible or realistic, or it must be obtained separately by paper or email, or be audio/video recorded. The researcher must also ensure that participants understand to what they are consenting, which might become lost in an online conversation using only comment features.

Instead, it is recommended to obtain written consent through email prior to the interview, which can pose some difficulty if the participant wants to remain anonymous (Eysenback and Till, 2001). Obtaining an email address for gaining consent can be done at the same time as obtaining an email address for sending a link to Google Docs. Consent forms can be emailed to the participants, having them sign it and return it via email.

Sensitive topics and anonymity

Because both the interviewer and the interviewee were in different locations (Case Study 1) or behind computer screens (Case Study 2), issues of bias between interviewer and participant are reduced, allowing for increased anonymity and confidentiality between the parties. However, this raises the challenge of building rapport with participants (Evans et al., 2010). In Case Study 1, we chose to conduct the interview from separate physical locations resulting in a greater sense of privacy. In Case Study 2, we chose to be in the room with the students when conducting the interviews giving it a feel of being a part of a group. This approach helped create a trusted and relaxed atmosphere. This suggests that it is possible to build rapport, create trust and reduce bias between interviewer and interviewee when using Google Docs.

Across both case studies, we demonstrated that research participants were more able to honestly share their thoughts. In Case Study 1, participants mentioned the seeming invisibility of the interviewer and how that contributed to a greater sense of privacy. In Case Study 2, although ambition is not a sensitive topic it does carry strong social norms that can deter participants from expressing their real thoughts. East et al. (2008) found that participants may fear appearing as 'socially deviants' in sensitive topics if they subscribe

to other views than dictated by social norms. This can be overcome by using a web-based interview method and especially Google Docs as it has the added advantage that no one other than the researcher can see what the participant writes.

Studies that collect information about sensitive topics such as sexual exposure, stigmatised diseases or abusive or discriminatory treatment may be biased if participants give distorted accounts to avoid embarrassment or safeguard their privacy. These types of studies may benefit from the use of a platform such as the Google Docs to provide a greater degree of anonymity and thus yield more truthful answers to sensitive questions. As Case Study 1 required participants to provide sensitive information around discriminatory treatment, the online written Google Docs interviews enabled participants to present a comprehensive picture of discriminatory treatment and the implications that this type of treatment had on their well-being.

Time saving and sample group

As Google Docs interviews are transcribed verbatim immediately while being conducted, there are significant cost and time savings with the added option of conducting multiple interviews simultaneously. For many researchers, in particular PhDs and early career researchers, time and money are common barriers to conducting interviews, especially if more than a few interviews are needed.

Traditional group interviews have a number of limitations, including (a) participants might influence each other's answers (Smithson, 2000), (b) more introverted participants may feel uncomfortable expressing their views in a group (Jones, 2014) and (c) the interviewer risks influencing participants unintentionally via non-verbal cues such as body language (Jones, 2014). Google Docs avoids these disadvantages. From our experience, a maximum of 6–8 participants for a simultaneous interview is advised to allow the researcher to keep track of all of the interview documents at any given time.

Care should be taken with particular samples. Participants should feel comfortable using the Internet and communicating online. Using Google Docs with sample groups such as young or elderly people, people not familiar with the internet, or people who are illiterate has to be considered carefully. The youngest participants in Case Study 2 were 14 years old. Our advice is not to use Google Docs for children under the age of 12–13 as they may not be sufficiently skilled at putting their thoughts into writing. Participants must feel comfortable with written communication. Interviewing sample groups such as people with dyslexia or people who have difficulties expressing themselves in the language of the interview may be better using other online tools or in-person interviews.

Conclusion

In this article, we have described the development of an innovative methodology with which to conduct online qualitative interviews: Google Docs. We have outlined some of the features of the Google Docs and have reflected on the process through two case studies. It is particularly useful when time, financial or geographical constraints create

barriers to empirical investigation. Moreover, Google Docs offers other advantages over other web-based technologies including insight into the thinking process of interview participants and the flexibility to be used completely synchronously as well as asynchronously. The methodology also demonstrated that the method can be used in different ways. It can be adapted to groups as well as individual interviews, and it works at a distance as well as face-to-face. This flexibility means that Google Docs can be considered a viable alternative to the traditional face-to-face and telephone interviews.

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Joint authorship: the first two authors contributed equally to this paper.

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