SOCIAL RESEARCH ASSOCIATION

SOCIAL RESEARCH PRACTICE // ISSUE 10 WINTER 2020/21

Advantages and disadvantages of reciprocal peer-to-peer interviewing

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Trigger warning

Sudden Infant Death Syndrome, although general discussion rather than a specific case.

Acknowledgements

This research was supported by Engaging Science Wellcome grant 204786/Z/16/Z.

Abstract

The advantages and disadvantages of reciprocal peer-to-peer interviewing as a data collection approach are presented in this paper. Reciprocal peer-to-peer interviewing is a research technique where participants interview each other rather than a member of a research team. Reciprocal peer-to-peer interviewing was undertaken in a small qualitative study between healthcare practitioners to reflect on whether, and how, their breastfeeding experiences had influenced their professional practice. Four pairs of healthcare practitioners were recruited from an online Parenting Science Gang group. They interviewed each other via online teleconferencing which also recorded the interviews. The interviews were analysed by volunteers from the same sub-group. Benefits of the technique included: ease of building rapport and finding common ground; open discussion of difficult topics; and freeing up research organiser time. Disadvantages were: difficulties clarifying unclear interview content; an inability to redirect the interview if it goes off-topic; and unawareness of technology failure. Social researchers are advised to weigh up the benefits of the technique against the risks, and possibly adapt the method.

Introduction

Parenting Science Gang (PSG), a largely Facebook-based, parent-led citizen science project funded by Wellcome was set up in 2017 for parents to pose research questions, design research studies in conjunction with established academics and act as volunteer analysts (Collins et al, 2020; PSG, 2019). A PSG 'Breastfeeding and Healthcare Experiences' sub-group (PSG BF HCE) was convened by the core-funded PSG team to address the group members' perception of a lack of breastfeeding knowledge amongst healthcare practitioners, an issue confirmed by the World Breastfeeding Trends Initiative (WBTI, 2016) and in the academic literature (see for example (Radzyminski and Callister, 2015).

There were 430 members across the UK in the PSG BF HCE sub-group which included healthcare practitioners, breastfeeding mothers who felt they had received subpar advice from a healthcare practitioner, as well as generally science-literate breastfeeding mothers. The group designed a small qualitative study to investigate healthcare practitioners' own experiences of breastfeeding and whether this influenced their professional practice. This paper presents the advantages and disadvantages of using the method of reciprocal peer-to-peer semi-structured interviews as recommended by Porter et al (2009).

Methods

Reciprocal peer-to-peer interviews involve research participants being interviewed by each other, rather than by a researcher. This method was used because of a desire to involve PSG members in the research process. In this study, it also allowed volunteers of the PSG HCE group to experience being interviewer **and** interviewee, and enabled research participants to freely share experiences as healthcare professionals and mothers. Eight healthcare practitioners were recruited from the Parenting Science Gang sub-group to reflect on their healthcare practice prior to having breastfed children, and any change they noticed afterwards. The range of healthcare practitioners included in the study is in Table 1.

Table 1: Peer-to-peer interview pairs

Healthcare Practitioner	Pseudonym	Interviewed	Healthcare practitioner	Pseudonym
A&E nurse	Jo		Urgent care nurse	Lisa
Paediatric nurse	Martha		Midwife	Sarah
Paediatrician	Erica		Health visitor	Hannah
Dentist	Patricia		General practitioner	Julie

Each pair was matched based on similarity of their healthcare experiences: Jo and Lisa had nursing experience; Martha and Sarah had neonatal experience; Erica and Hannah had paediatric experience; and Patricia and Julie both had experience in NHS dental and medical practice. They interviewed each other one at a time rather than taking turns for each question. They used an interview guide developed by the PSG group. Each participant had been sent an interview guide by email by the core PSG member, RB[5]. The topics included in the interview guide were: introductions, career in the healthcare sector, breastfeeding experiences, the extent to which healthcare training prepared participants for breastfeeding; and whether/how breastfeeding had influenced their professional practice. Participants mostly discussed the topics of breastfeeding, healthcare practice and infant parenting. Each interview lasted between 20 and 45 minutes with each dyad spending between 45 and 90 minutes total in conversation.

Peer participants were healthcare practitioners, and had received some research methods and communication training as part of their healthcare practitioner training. They did not know each other prior to the interview, although may have 'met' each other online in the PSG groups. All participants were interested in healthcare, breastfeeding, Facebook and citizen science, as evidenced by their membership of the PSG group.

[5] RB refers to co-author Rebecca Brueton.

The project received ethical approval from the University of York, which collaborated on the wider PSG project. To maintain the anonymity of participants from the analysts, RB, the core member of the PSG team, arranged the interviews and their transcription and provided anonymised transcripts to the analysts who were members of the PSG sub-group. Interviews were conducted remotely over the internet using teleconferencing software and recorded using the same program. The use of technology enabled interviews to overcome the barrier of physical distance between participants. RB 'called' the paired participants over the teleconferencing software; established that both participants were ready to start their interview; and left the two participants to interview each other. A researcher did not listen in or participate in the interview.

Recorded interviews were transcribed by an agency which signed a confidentiality and anonymity agreement. The transcripts were shared electronically with three volunteer analysts from the PSG BF HE sub-group: TC[6], a lactation consultant and formerly a nurse; GH[7], a breastfeeding peer support coordinator; and SPG[8], an early career social scientist (although not in healthcare). RB, the core PSG member, acted as a fourth analyst. After receipt of the transcripts, the volunteer analysts were trained by Y-SC[9] on conducting qualitative analysis using Braun and Clarke's (2006) approach to thematic analysis – or what stories were shared across the interviews – by identifying 'codes'. Codes are single words or short phrases applied to a longer stretch of text (or images if doing visual analysis) to capture the essence of the data (Saldaña, 2013).

The four analysts coded the same first transcript independently, and discussed it to develop a draft coding scheme, or code book (Saldaña, 2013), to guide coding the other transcripts. The codes, with examples of each code, were logged on to a Google spreadsheet accessible by the four analysts. Two analysts, SPG and GH, applied the coding scheme independently of each other to all eight interviews. One analyst, SPG, integrated and refined the codes applied to all eight transcripts, and conducted a secondary stage of analysis to ensure codes were being applied consistently across the interviews. Codes were then grouped into themes, discussed and agreed by all analysts, with Y-SC's guidance throughout the process (see Table 2).

Table 2: Project responsibilities

Designing interviews	Ethical approval	Arranging interviews	Transcribing interviews	Analysis training	Developing code book	Full coding	Themes	First draft	Final paper
PSG group	RB University of York	RB	Professional transcriber	Y-SC	SPG RB GH TC	SPG GH	SPG RB GH TC Y-SC	SPG	SPG RB GH TC Y-SC

Data analysis was conducted manually: printing out the interviews, marking them up with codes, entering codes and excerpts into the Google spreadsheet, printing out the spreadsheet, cutting it up and rearranging it so that codes with similarities were grouped together under themes. For example, individual mentions of baby sleep (or lack of) and bed-sharing (where the infant and mother sleep in the same bed) were grouped together to form a theme on infant sleep.

[6] TC refers to co-author Tessa Clark.

[7] GH refers to co-author Gemma Hamilton.

[8] SPG refers to co-author Sophie Payne-Gifford.

[9] Y-SC refers to co-author Yan-Shin Chang.

As this paper seeks to discuss the advantages and disadvantages of reciprocal peer-to-peer interviewing, analysis of the interview data is not discussed further in this paper. However, it was through the process of analysing the interview transcripts that advantages and disadvantages of the technique became apparent. Benefits of peer-to-peer interviewing included: rapport and common ground; open discussion of difficult topics; and freeing up research organiser time. Disadvantages included: difficulties clarifying unclear interview content; difficulty redirecting the interview; and unawareness of technology failure.

Advantages

Rapport and common ground

The method of reciprocal peer-to-peer interviewing was suggested as a way for participants to be comfortable and forthcoming, or, in other words, to make it easy to develop rapport, a key skill a social researcher needs. Where rapport ends and common ground begins is difficult to ascertain as the latter breeds the former. In the following excerpt, Lisa, the Urgent Care nurse, recounted a brief spell of training and working as a health visitor,[10] which she hadn't enjoyed. Jo, the A&E nurse, verbally confirmed she understood Lisa's experience:

> **Lisa**: '...[T]hen I had a sort of blip in between [nursing jobs] where I went to do my health visitor training. (Laughter). Yeah. Thinking that would be good because it wasn't shift work and I could like get to see babies and talk about breastfeeding.'
>
> **Jo**: 'Yay!'
>
> **Lisa**: 'But I, but, actually, I ended up really hating it, so I did that for (laughter) five months and then I took my Urgent Care job which is the same: no nights and just long days. So, yeah. The same. Much better...'
>
> **Jo**: 'That does sound really similar because I had a leaflet through years ago about being a health visitor, I think after my first, and I was like, Ooh, I could be a health visitor and just talk to "crunchy" mums like me about breastfeeding and it would be awesome and then I thought, No, because I might be really judgemental about people that are completely different to me.' (Laughs)"
>
> **Lisa**: 'Yeah. Anyway. Shall we get on to your interview start?'
>
> **Jo**: 'Yeah.'
>
> [A&E nurse and Urgent Care nurse, quoted with permission]

The above interaction, recounting a difficult period in Lisa's healthcare career, occurred about three to five minutes in, based on the transcribers' time signatures. In it, we can see Jo recounting when she briefly considered working as health visitor, and concluding that she would not enjoy it because it would **not** involve discussing breastfeeding which Lisa confirmed was the case.

This exchange occurred before the more formal interview started. The other interviews showed rapport and common ground developing early and did not suggest uncomfortable silences or short, terse responses. The text of the transcripts shows long, flowing answers from all participants with none indicating a reluctance to answer. One of the participants, feeding back on the interview process, commented that they found this style of interviewing 'easy' and a relief not to have to explain breastfeeding culture or healthcare employment norms to the other person. She had also previously participated in traditional researcher-led interviews which she described as 'jolty'.

[10]Health visitors specialise in 'well child' assessment of infants (and children up to five years). They are usually based in the community and at community centres and are involved in baby weigh-ins and advising on infant feeding.

Open discussion of difficult topics

The 'baby sleep' theme mentioned above is an example of participants discussing a topic they might not have otherwise discussed as comfortably without establishing rapport and common ground. The fact that baby sleep schedules do not meet modern expectations is not the difficult topic: it is bed-sharing that may be difficult for interviewees to discuss.

Bed-sharing is not formally recommended by the NHS because there is a link to Sudden Infant Death Syndrome (NHS, 2018) although the risk has recently been downgraded by the National Institute for Health and Care Excellence (NICE, 2014). However, the statistics and recommendations on bed-sharing gloss over the difficulty of staying awake in the middle of the night while breastfeeding, and ignore the high prevalence of parents who report sleeping with their infants (Blair and Ball, 2004) as well as including infant deaths when sleeping occurred on a sofa or an armchair. UNICEF and breastfeeding advocacy groups such as La Leche League provide guidelines for breastfeeding families on how to safely bed-share (LLL GB, 2017; UNICEF, 2019).

With this background, when the focus of the interviews was about breastfeeding, four of the eight participants discussed bed-sharing. Jo and Lisa discussed bed-sharing, and the fact that they had hidden this from their non-breastfeeding healthcare colleagues. Although comfortable in their decision to bed-share, they worried that it would undermine their credibility as healthcare practitioners because their colleagues might think, 'She's not a safe health visitor, she can't see people because she co-sleeps' [interview excerpt, Jo, A&E nurse, quoted with permission].

Patricia, a dentist, discussed with Julie, a GP, accidentally falling asleep while breastfeeding and later choosing to purposefully bed-share as a solution:

> **Patricia**: '[At] about seven months, after I'd been back to work for about a month – the exhaustion, the sheer exhaustion.…I reached breaking point and brought [my daughter] into bed with me, because I'd fallen asleep nursing her far too many times, sitting up, and I was worried about suffocating her. And I researched co-sleeping, and I've never looked back. And then, with my son, I think it was about day four, and I just thought, Oh, frigg this, I need sleep.'
>
> **Julie**: 'That sounds very, very similar to my experiences, first and second child…[A]s a breastfeeding mum, I – I sort of feel that, bed-sharing really is the only thing that's survived [sic] me from severe exhaustion, both times through. So, [in a] way I think I feel I would discuss more with patients now, having been a breastfeeding mum, about safe sleeping and the UNICEF guidelines that came out last year.'
>
> [Dentist in conversation with GP, quoted with permission]

It is possible they would not have discussed this topic with an interviewer who was not a healthcare practitioner with similar parenting experiences and who they did not trust.

Freeing up research organiser time

As mentioned in methods above, the core member of the PSG team 'called' the two paired participants in a teleconferencing call: put themselves on mute; and left the participants to talk. In other words, a researcher did not participate in the interview. This freed up the research organiser to do other tasks. However, freeing up research organiser time is also a risk, as discussed in the next section.

Disadvantages

The approach of keeping the analysts separate from the participants and the research organiser resulted in some disadvantages with using reciprocal peer-to-peer interviews.

Difficulties in clarifying interview content

In a standard interview with a researcher and interviewee, the researcher may spend most of their time actively listening to the interviewee, but they will find an opportunity to clarify what they do not understand. However, as the interview pairs were healthcare practitioners, they understood the healthcare context, policy and guidelines, and talked in a way that was understandable to each other. This resulted in some conversations that might not be easily understood by someone who does not share the same healthcare background, particularly analyst SPG. In the following excerpt, Martha, a paediatric nurse, recounts breaking hospital policy. Martha did not specify which policy, and Sarah, a midwife, did not need this clarified as she was familiar with treatment protocols in neonatal units:

> **Martha**: '...I struggled, I struggled a bit with um … the emotional side, a bit, and seeing [babies] under lights, and, oh, and when the baby's screaming and the mum's sitting in the bed crying, and I'm like, woah… I would, you know, I, I broke, I broke policies quite a few times... you know I'd scoop the baby up and put it on mum's chest and then put the billi blanket on top of the baby, and then be like, "You just have a cuddle." (laughs) You know, you can put him back in five minutes. Because, it feels like the place is very anti-breastfeeding. A breastfed baby can't lie there for three hours, between feeds, it's just not going to happen. It's ridiculous.'
>
> **Sarah**: (laughs)
>
> Martha: 'Like the policies in the unit, and this was a new unit as well, it was a transitional care unit, they just really didn't seem to work. So, I really struggled…'
>
> **Sarah**: 'I think I would have too.'
>
> [Paediatric nurse in conversation with midwife, quoted with permission]

Martha made it clear that she had broken hospital policy because it was not compatible with breastfeeding. But if you are not a healthcare practitioner, it is not clear what policy she broke. What's more, Sarah, the midwife, did not ask a follow-up question to clarify what policy had been broken, suggesting she understood the situation to which Martha referred.

Due to the interdisciplinary nature of the team of analysts, SPG was able to ask TC, a healthcare practitioner, to explain what policy this excerpt referred to. It refers to the neonatal treatment protocol for babies developing jaundice shortly after birth. The treatment is to put the jaundiced baby under UV lights to break down the birubilin in their blood and to pick them up only every three hours to feed them, even if the baby cries before the three hours is over. A 'billi blanket' gives a lower dose of UV light but can be used on a baby being held by a care-giver. So Martha told Sarah she found it too upsetting to watch babies and mothers cry, and that developing a bond and nursing regularly to establish breastfeeding was also beneficial for a baby **in addition to** UV treatment. This is also an example of a difficult topic that the interviewee might not have discussed with an interviewer who was not a sympathetic, breastfeeding-supportive researcher.

There are a number of ways to mitigate not being able to immediately clarify the interview content: the first is to train participants in interview technique and briefing them to be aware of jargon and technical terms. However, peers interviewing peers might not be aware that they are discussing insider knowledge. Secondly, having healthcare professionals as advisers in the data analysis process ensures that support is available to clarify terms/topics for analysts who are not healthcare professionals. Thirdly, 'fact-checking' with participants after interviews can also clarify interview content.

Redirecting the interview

More serious than not being able to clarify a point, is that the peer interviewer might not redirect the interview if it goes off-topic which can happen in a semi-structured interview. Indeed, Jo and Lisa, above, did go off on a tangent about using the correct names for genitals, including reference to octogenarian actress Betty White's infamous quote about male and female genitalia. They also discussed a humorous incident trying to explain to French authorities what breast pump equipment is for.

Luckily, these were the only examples of interviewees going substantially off-topic. Although the other interviewees did discuss infant behaviour, this was roughly related to being a healthcare practitioner treating breastfeeding mothers, as this topic often came up.

Unawareness of technology failure

A section of one audio recording failed but this was not noticed at the time. It was evident to the analysts only when they received the transcript of 11 pages instead of 20/30. If one of the project team had been listening in on the peer-to-peer interview, they would have taken notes on the content of the conversation. This can happen if an interviewee consents to the interview but declines audio recording (Payne-Gifford, 2016). Of course, having one of the research team on the call, might defeat the purpose of the method.

Lessons for social researchers

Although the above discussion identified some limitations of this approach to interviewing, it is still a useful technique when interviewees might be uncomfortable with, or suspicious of, researchers. Even though the interview is recorded, not having a person perceived as an authority figure present might be a benefit to research with teenagers or prisoners or wherever the presence of the interviewer might inhibit the interaction. Peer-to-peer interviewing might also be beneficial if you do not want age, socio-economic status or gender influencing the interview dynamic.

Reciprocal peer-to-peer interviewing might also be useful for research with those who do not engage well with research or who are otherwise sceptical of scientists, for example, people opposed to vaccination programmes. Parents opposed to vaccination might be more willing to discuss their decisions or their worries about the science of vaccination with a sympathetic parent rather than a researcher whose beliefs they have not identified. Of course, this raises the issue about the interviewer being **too** close to the interviewee. Apart from not clarifying interview content, interviewers who identify and resonate with interviewees' views and experiences may find it more difficult to ask challenging questions. In the example of vaccination, if peer interviewers agree with not having their children vaccinated, it may be difficult to challenge their decisions as being against Public Health England's advice and putting their child at risk in the longer term.

This risk, of being too close to the interviewee, can be managed by using peer-to-peer interviewing in conjunction with multiple stages of data collection or other methods. Anonymised interview data could inform subsequent interviews not led by peers as well as focus group discussions. Focus group discussions, which can be facilitated by peers and/or researchers, could be compared with findings from reciprocal peer-to-peer interviews to identify similarities and differences in findings. Peer-to-peer interviewing can also be used in conjunction with surveys to complement and enrich quantitative survey data.

Conclusions

Advantages and disadvantages of reciprocal peer-to-peer interviewing have been highlighted and illustrated from a citizen science project in this paper. Benefits of reciprocal peer-to-peer interviewing included developing rapport through common ground, discussing difficult topics, and freeing up researcher time. Disadvantages of reciprocal peer-to-peer interviewing included difficulty in clarifying vague interview content, an inability to redirect the interview if it goes off-topic, and not being able to reconstruct an interview if the recording fails. It might be possible to reduce the risks of this approach by having a researcher participate discretely in the interview, either by listening in/taking notes on a conference call and occasionally interjecting or by sitting in on face-to-face interviews. However, this may negate the benefits of the method.

Social researchers are advised to train peer interviewers, mitigate against the risks outlined above and make the most of the benefits from the approach. Project analysts, if not interviewers themselves, should ensure interview content can be understood by all readers of the subsequent report regardless of their backgrounds by reading through the transcripts thoroughly and seeking clarification from participants. 'Respondent checking' following analysis can also be used to ensure that interpretations by analysts reflect participants' experiences.

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