GOAL Research Brief

Collaborative Coding in Multi-National Teams: Benefits, Challenges and Experiences Promoting Equitable Research

Zreik, T., El Masri, R., Chaar, S., Ali, R., Meksassi, B., Elias, J., & Lokot, M. (War Child Holland Lebanon, and London School of Hygiene and Tropical Medicine)

Summary

Within research collaborations, especially those between actors in different countries, power dynamics often shape involvement in research. The analysis phase of research has often been framed as requiring expert perspective. This means national or local researchers are often excluded or their role is limited to collecting data and transferring it to others to analyze. In this brief, we describe and reflect on the process of collaborative coding across a multi-national team based in Lebanon and the United Kingdom, as part of a broader approach to co-production. We explore the value and benefit of collaborative coding, as well as the technical and logistical challenges we faced in coding within a team. Over time, collaborative coding became easier, however working in this way is not straight-forward. Our paper contributes a reflexive analysis on the power dynamics and decision-making complexities involved in collaborative coding. It emphasizes the importance of investing in interpersonal relationships over time and prioritizing less-centralized decision- making within research collaborations.

Introduction

Within global health and humanitarian research, data analysis tends to be conducted by those outside of the research setting, including by decision-makers such as senior researchers in higher-income countries, who are not directly involved in data collection. This affects the quality of analysis and limits collaboration (Lokot & Wake, 2021).

Collaborative and team-based approaches to conducting research are becoming more common alongside recognition that including multiple perspectives in research analysis helps to improve trustworthiness and may reduce the top-down hierarchies often present in research collaborations. Scholars argue the process of establishing reliability in qualitative research is not solely scientific, but also social (Sanders & Cuneo, 2010).

In this research note, we reflect on the experience of collaborative qualitative research (and specifically, collaborative coding) within a multi-national research team as part of the 'GOAL' project. 'GOAL' is a three-year research project funded by UK Research and Innovation. Within GOAL, our approach to data analysis was intentionally collaborative as part of a broader strategy in the project to incorporate co-production principles into our work.

Methodology

In GOAL, we conducted semi-structured interviews with key government and non-governmental organization (NGO) actors working in the mental health field in Lebanon, and interviews with Syrian refugees and Lebanese citizens who are mental health service users. Analysis of the transcripts was carried out collaboratively using the blind coding feature offered by software application for analysis of data called Dedoose. At the time of writing this paper, we had jointly coded around 60 transcripts. Each transcript was blind-coded on Dedoose by two research team members. Coding partners were designated based on levels of experience, with a more experienced researcher paired with someone with less research experience. Coding was deductive and inductive and relied on the themes and conceptual framework specified in the research

protocol as well as themes that emerged based on participant accounts.

The collaborative coding process (which we describe in this brief) followed an iterative process, combined with team building and reflexivity exercises. Team members were invited to reflect on their positionality. Team building was also fostered through interactive exercises using 'Mural' website at the start of meetings. The remainder of this brief draws on our own reflections of this joint coding approach.

Findings

Below we outline five key themes from our reflection sessions.

1

Improved quality of analysis and interviews

During multiple meetings, team members stressed the perceived value of collaboratively coding, drawing attention to the reassurance gained by having someone else to work with. Team members reflected on the value of considering multiple perspectives when analyzing qualitative data. One team member added that sharing ideas out loud between two researchers did not only validate results but also 'widens [one's] perspective.' Apart from the collaborative coding improving actual analysis, a few team members also reflected on how the process improved the interviews they were continuing to conduct. One team member commented, 'After the coding process, I started asking more questions'.

2

Inclusion of team members

Team members spoke positively about the perceived benefits of collaboration within a multi-disciplinary team. One team member commented, 'It's an added value and an added experience on the professional

experience.' Comments also mentioned that researchers at the data collection level in this NGO are not usually engaged in analysis, and that being engaged allows for better interviews: 'Often, ROs [research officers] are not usually involved in the analysis phase.

3

Power dynamics and decision-making

The comments from team members also included reflections on power, specifically on how differences in power between team members affected decision- making during the coding process. In the Mural exercise, comments addressed the idea that unequal power dynamics could affect the analysis. One team member described feeling 'a bit awkward due to the power dynamics, and feeling self-conscious and trying to overcompensate for the power differential by not being assertive.' During our reflection sessions, we recognized the differing levels of power held by team members. Those who were newer to coding were more likely to agree quickly with the codes designated by a more experienced team member, avoiding discussion with their partners in the case of a dispute in the coding. Those with more experience felt concerned about how their questions might be perceived: 'I worry about suggesting that someone else's code may not be quite right' because this 'might affect the relationship' or cause another team member to feel that a more experienced researcher was using power in a negative or controlling way.

Software and internet access

Some challenges were identified related to the Dedoose software, but most were technical issues that were described as easily resolved. The challenges related to relying on internet-based tools (Dedoose for coding, Zoom for meetings)
in situations of unstable internet and electricity provision went beyond technical difficulties and were described as even affecting the research and analysis process. One team member mentioned that 'when a meeting that should take 20 minutes takes an hour due to the internet, it makes me not want to make the effort.'

Changes over time

During reflection sessions about the collaboration process, we observed changes in our relationships and ways of working over time. One team member observed, 'Once we have coded together once, it becomes easier to code with the same person in the future, since the relationship has been built more'.
The monthly coding meetings involving all team members were also described as helpful.

Conclusion

Our experience in implementing collaborative coding of qualitative data in a multi-national and multi-disciplinary team has shown us that collaborative analysis is a worthwhile endeavor, despite its difficulties. Collaborative coding can
be helpful for research teams looking to integrate co-production principles into later stages of the research process. Even then, our experience has shown that the process cannot always be perfectly equitable, and may at times require executive decision-making in order to move things forward. In qualitative research, there is not always one 'right' answer, which further complicates the process. With the appropriate investment in time, resources, and capacity, collaborative coding can be a fruitful and valuable approach to qualitative research.

Full paper available at:

Zreik, T., El Masri, R., Chaar, S., Ali, R., Meksassi, B., Elias, J., & Lokot, M. (2022). Collaborative Coding in Multi-National Teams: Benefits, Challenges and Experiences Promoting Equitable Research. International Journal of Qualitative Methods, 21.
https://doi.org/10.1177/16094069221139474

For any queries about this paper and research brief, please contact: Michelle Lokot (michelle.lokot@lshtm.ac.uk)

London School of Hygiene & Tropical Medicine Keppel Street
London WC1E 7HT

lshtm.ac.uk/GOAL

@GcrfGoal