26 September 2023

Dear Dr Karhulahti,

Thank you for the decision letter and reviews for our revised manuscript #462 entitled "Investigating the barriers and enablers to data sharing behaviours: A qualitative Registered Report".

We thank you and the reviewers for your insightful and quick responses. Given that the previous two reviewers were satisfied with our revision and did not request any further amendments, we focus our response on comments from the third reviewer. Below we have copied the reviewer's comments in full (in italics) and have inserted our response beneath each comment (indented). Note that all page numbers refer to the track changes version of the manuscript.

We hope our revisions and response address all the comments, and we look forward to your response to our revision.

Yours sincerely

Emma Henderson

Editor comments

Dear Emma Henderson and co-authors,

Thank you for all of the careful revisions. The two previous reviewers are largely satisified with the new version. We are also lucky to have a third expert join us for this round, with a few minor suggestions. Please consider the feedback and I am confident that we can proceed with IPA after that.

I have only one small suggestion: on page 7 you list "obtain ethics" as one of the behaviors and describe it as "Submitting an ethics application that includes plans to share data and details of how this will be done." I would encourage reframing this without focusing on the application. As you say, not all studies require formal ethics approval (but all studies require active ethics). Considering and reacting to ethical questions tends to be a continuous process in data sharing (writing this, as someone just contacted me about a years-old dataset).

On p. 7 we have listed behaviours (i.e., emphasising doing x over thinking about x) and therefore prefer to keep in the action of submitting ethics. To address your comment and make your broader point, we have added the following text: "This is not a one-off behaviour; regardless of whether formal ethics approval is required or not, researchers may need to respond to ethical questions throughout the data sharing process."

Looking forward to the final version and, as usual, if you have any questions before that, feel free to contact me.

Sincerely,

Veli-Matti Karhulaht

Reviews

Reviewed by moin syed, 14 Sep 2023 15:29

No amendments requested.

Reviewed by Peter Branney, 18 Sep 2023 10:23

No amendments requested.

Reviewed by Libby Bishop, 24 Sep 2023

This is a registered report for a proposed study of the barriers and enablers of data sharing through a focus on researcher behaviour. Overall, the proposal is clear, well-presented, with broad and in-depth knowledge of the domain demonstrated. As the specific methodology has been addressed by other (more expert) reviewers, these comments focus on the general approach. My points are minor or suggestions – my recommendation is for this research to be supported.

Method

My personal view is somewhat critical of narrowly construed behavioral studies. I tend to see behavior and context/structure deeply inter-connected. That said, the authors defend their approach and are aware of wider causal factors — sharing policies, funder/journal requirements, etc.

I agree with another reviewer that the UK context should be made clear. I am now more familiar with data sharing in both Germany and Switzerland, and the strong effect of the ESRC's adoption of mandatory data sharing dramatically accelerated the practice in the UK.

We agree to reference the UK context (e.g., with respect to the new UKRI mandate to include data availability statements in outputs). However, because we have chosen not to emphasise the UK context to participants (for risk of biasing our findings), we have chosen not to discuss this in the introduction. Our preferred approach is to first conduct the research to understand which (if any) aspects of the UK context influence data sharing behaviours. If aspects relating to privacy, ethics, funding etc are identified as barriers or enablers, we will discuss how these might differ in the UK vs. other contexts. We anticipate that UKRI mandates may be identified by participants; if they are not, this in itself will be informative, and thus form a point for discussion.

To emphasise to the reader that the study is conducted in the UK, we already mentioned the UK in the abstract. On p. 14 we have added the text "in the UK" to the section that immediately precedes the research question: "From this perspective, we are particularly interested in participants from one university in the UK because the insights from this study will be used by the university to develop future interventions to encourage data sharing."

Coding: I agree with another review about coding. I always find collaboration in coding to be superior. This is not about inter-rater reliability, just multiple views into the data. If there is something very specific about expertise of the co-authors that makes this inadvisable, perhaps this could be (diplomatically?) clarified.

In our first revision we responded to reviewer Moin Syed's point that the coding should not be conducted by a single person. On p. 25 we outline our revised collaborative approach that includes the fourth author coding \sim 5 interviews (described on p. 25, lines 547-550), and all authors being involved throughout the process: "Stages 1 - 4 below will be carried out independently by the first author (ELH), who is familiar with COM-B and the TDF, and the fourth author (EKF), whose familiarity with the models is limited to this study, and who therefore brings a different perspective to the analysis. Throughout the process, coding will be discussed with all authors for the purpose of developing a richer understanding of the data. The final coding template will be agreed by all authors."

Sample

Why only those with sharing experience? The authors explain that the total sample will be a max of 20, stratified by career stage, etc. Two people without data sharing experience will be included. This is small, but I believe that more is known about those who do not share at all, whereas the specific barriers in those who have shared (or tried to) might yield more informative results. I would not object to more non-sharers, but I think the proposed sample is adequately defended.

We are pleased that you agree with our proposed sample. We agree with your comments, and note that two non-sharers is our declared minimum, so the final sample may include another.

Like another reviewer, I question the narrowing of the sample to one university. I believe the justification is to enable specific recommendations for this institution. That does make sense, but for the field more generally, a broader sample would be better. In fact, I suspect that the findings from a more general sample would likely still be relevant to the home institution.

As described on p. 14, the results of this research will be used by our university. We are resourced to conduct the research at our university only, and we therefore need to keep the sample as is. We will handle the university context in a similar way to how we plan to handle the UK context - if our results suggest that any influences relate to aspects that are unique to our university, we will highlight this in the discussion section.

Interview schedule

I appreciate this is probably a guide and not to be used verbatim, however, some of the questions (table 2, Psych Capability, Knowledge) are very, very long. I think reading a list and asking if anything is missing is not likely to yield a useful response.

Other than the list, all questions are one sentence long, apart from questions 1, 17, and 26 that are two sentences. Some questions have sub-questions (and may therefore appear longer in the table) but are divided using the text "[follow up]" or "[prompt if necessary]".

We agree that the list is long. Based on feedback from our pilot, we added this sentence to encourage interviewees to listen carefully to the list: "While I'm talking, think about whether there is anything missing from my list". We would like to keep the list as is because it is important for the questions that follow. Given that the interviews are conducted online, we can copy and paste the list into the chat should an interviewee require more time to reflect on the list.

Future use of data

I agree with the idea of pseudonymizing the data (and indeed this seems to be the plan, 20:475). To my knowledge, no longitudinal study has been done, and a chance to look at changes in behavior over time would definitely be a contribution. This could be mentioned in the consent form as a possibility, and see if participants would agree to be contacted later (with no obligation to participate of course).

Future contact with participants is covered in section 10 of the <u>consent form</u>: "I agree for my personal contact details to be stored by the research team who may wish to invite me to participate in follow-up studies to this project or in future studies being conducted at the University of Surrey."

Other comments

I was especially pleased to see on 5:68 that data that are not public/open but available through other access criteria are included. This acknowledges legitimate restrictions on some data.

Additional references that might be useful

Akdeniz, Esra, Kerrin Borschewski, Johannes Breuer, and Yevhen Voronin. 2023. "Sharing social media data: The role of past experiences, attitudes, norms, and perceived behavioral control." Frontiers in Big Data 5 (16 January 2023): 971974. doi: https://doi.org/10.3389/fdata.2022.971974.

This study does focus only on social media data; however, it uses a behavioral approach and might be helpful for the authors.

With a colleague, I did a study on data sharing behaviours across domains. Here is the project report.

https://repository.jisc.ac.uk/5662/1/KE_report-incentives-for-sharing-researchdata.pdf
This is explicitly the "practical version" intended for different stakeholder groups. It might be helpful if the authors are looking for how to translate their more research output into actionable recommendations.

Thank you very much for the references. The KE report was valuable in planning our study and we have already cited it. The report will no doubt be useful in translating our research too.