

Response to comments

Manuscript Number: SDATA-24-04321A

Manuscript Title: Data Anonymization for Open Science: A Case Study

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In what follows, editor and reviewer comments are in blue italics, our response is in black.

Please respond to all comments from the Editor, Editorial Board Member, or Reviewers in a single 'response to comments' file submitted with your next revision.

Editor comments:

** There needs to be some means for users/readers to access the input data as needed. If these are sensitive and contain personal data then the requirement is to provide some secure method of access, e.g. via application. Looking at the source data paper (<https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-021-10326-6#availability-of-data-and-materials>), these are noted to be available 'on reasonable request'. Please add details to the paper on how users can obtain these, what information etc, needs to be provided, and a guarantee that requests will be honoured to allow access to the input data as needed. This should be stated in the Data Availability Statement along with a citation of the original paper so that readers will know that the raw input data corresponds to the data in <https://doi.org/10.1186/s12889-021-10326-6>.*

These details have been added.

**Please also outline the contents of the figshare repository in the data availability section, so readers will know what the files contain, what the column headings mean..etc*

Done

**Please cite the original datasets / figures from other papers as mentioned in the text. This will help readers better connect the 'base-tables' and 'base-figures' as they are reading the manuscript. This will help clarify what 'the original paper' consistently though the work*

Done

**Please relabel the discussion section as 'Discussion' as this is the formal heading for our Article Type*

Done

Reviewer #1 (Remarks to the Author):

The authors have addressed some of my main concerns (e.g. the new risk section helps to show that the three cases are comparable). However, I would like to point out some remarks. First, regarding the literature review, I was expecting a section with study on the key works related to anonymization and similar applications—not a ten-page review, as the authors mention, but rather a dedicated section, as is standard in scientific papers (in the current version the authors have addressed this point by adding a new section). Furthermore, as a potential reader, I still find that some of the issues I raised have not been fully addressed. For example, there are still some references to past studies, which is reasonable, but leaves me uncertain about the significance of the contribution (e.g., my question about adding a quality analysis). Finally, I don't think that "a more detailed analysis is out of scope for this paper", on the contrary, such an analysis would help to better understand the conclusions and results presented. I hope these observations are helpful to the authors as they continue to improve the manuscript.

Thank-you for your helpful comments.

To address your concerns, we have done two things. First, the prior work section has been expanded in order to clarify the contribution to this paper. Second, we have added some additional general quality statistics in the form of univariate comparisons between the three anonymization methods and the original data.

We find that this has improved the paper and hope that it satisfies your concerns.