

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	COVID-19-related attitudes, risk perceptions, preventive behaviours and economic impact in Sub-Saharan African countries: Implementing a longitudinal phone-based survey protocol in rural Senegalese households
AUTHORS	Seror, Valerie; Maradan, Gwenaëlle; Ba, EH; Cortaredona, Sebastien; Berenger, Cyril; L'Haridon, O; Sokhna, C

VERSION 1 – REVIEW

REVIEWER	Tom Mueller Utah State University, Sociology, Social Work, and Anthropology
REVIEW RETURNED	01-Mar-2021

GENERAL COMMENTS	<p>Summary: This is a study in rural Senegal documenting the impacts, risk perceptions, and attitudes surrounding COVID-19. Given the lack of high-quality data on impacts not only with Senegal, but particularly within rural Senegal, this study fills a needed gap in our understanding. The protocol is well-written and clear, and the majority of study decisions of well-justified. There are a few points I believe could be clarified, but in general I am excited to see the data this study creates. In particular, I think the study needs to spend more time discussing issues of non-response and survey administration design, as well as possibly restructure/expand the paper to make the exact hypotheses they plan to test, and how they will test them, clearer. I also have some minor comments below.</p> <p>Major Point 1: I found the description of study design and sampling decisions clear. However, it surprised me that an expected attrition rate was presented and not an expected non-response rate. Due to this, it wasn't clear to me if the initial sample will be sampled until 600 is reached – or if 600 will be selected and sampled without replacement. The figure makes me think it is the latter – but I think this needs to be clarified. Further, some discussion of how the contact approach (15 calls seems like far more than I am used to seeing) would be appreciated. I believe we should know what the researchers expected contact, and response rate were when designing the study—if possible.</p> <p>Major Issue 2: There were hypotheses peppered in throughout, but I was missing a clear discussion of the expected direction of analysis. I think adding a section clarifying this would be helpful. For example, is the primary purpose of this study descriptive? Or are we testing some kind of relationship as the primary goal? I was confused by the hypotheses towards the end because I missed the point where the researchers said they were collecting data on collective actions and the village level. This kind of thing could be clarified by adding a section on 'Hypotheses to be tested and how', where things are very clearly stated and a proposed model is presented.</p>
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	<p>Minor Comments:</p> <p>I think this was a clever usage of the Poisson regression to determine Niakhar wasn't an outlier.</p> <p>I think we need more information on defining rurality. The authors say it was determined 'depending on their infrastructure and equipment.' This needs some elaboration.</p> <p>I thought it was a good description of the linguistic challenges in survey design and administration.</p> <p>In the framing, I would encourage the authors to seriously think if this is a study on SSA or Senegal. The data is entirely on Senegal and I would be surprised if we could generalize all findings from Senegal to the rest of SSA. I don't think the study loses power if the authors more approximately focus their study on the context the data are coming from.</p> <p>The use of 14 callbacks seems aggressive based on my knowledge, I think it would be helpful to include citations for this approach since it is beyond what I am familiar with.</p> <p>I think some degree of clarification and justification for the standard employment categories is needed.</p> <p>I would re-state your scales as Likert-type, not Likert since they aren't about agreement.</p> <p>I would like some more detail about the way the research team is collecting data on collective action implemented by local authorities.</p>
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REVIEWER	Steven Iorfa University of Nigeria, Psychology
REVIEW RETURNED	08-Mar-2021

GENERAL COMMENTS	The protocol is well laid out. However, the literature reviewed is not exhaustive. One would expect that since it is a study protocol, the literature review on studies conducted in SSA should be rich. A comparison of what has been found in other SSA countries and what is expected in Senegal. I request the authors to review more literature on covid-19 attitudes, risk perceptions and preventive/precautionary behaviours in SSA countries; Nigeria, Ethiopia, Ghana, etc.
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VERSION 1 – AUTHOR RESPONSE

MAJOR COMMENTS

1. It surprised me that an expected attrition rate was presented and not an expected non-response rate. Due to this, it wasn't clear to me if the initial sample will be sampled until 600 is reached – or if 600 will be selected and sampled without replacement. The figure makes me think it is the latter – but I think this needs to be clarified.

To make this point clearer, we added the following sentence:

“Taking into account the design of previous surveys conducted in the same area 24, we assumed a response rate of 90% for the first wave of data collection and an attrition rate of 15% over the data

collection period, resulting in an estimated 500 surveyed households by the end of the third wave (scheduled for mid-2021).”

In addition, we added a note to Figure 2 as follows:

“500 surveyed households were expected to participate by the end of the third wave of data collection (scheduled for mid-2021), given a 90% response rate for the first wave and a 15% attrition rate at each subsequent wave.”

2. Further, some discussion of how the contact approach (15 calls seems like far more than I am used to seeing) would be appreciated. I believe we should know what the researchers expected contact, and response rate were when designing the study—if possible.

To make this point clearer, we modified the first sentence and added another one, as follows:

“To achieve higher response rates, 15 calls (1 initial and 14 callbacks) are planned during the several weeks of data collection, at different times of the day and on different days, before discarding a non-responsive telephone number. While 12 to 15 calls and 6 to 10 calls are generally recommended for landline and mobile CATI surveys respectively 25, we opted for a maximum of 15 calls given the frequency of poor telephone connections in the area”

3. There were hypotheses peppered in throughout, but I was missing a clear discussion of the expected direction of analysis. I think adding a section clarifying this would be helpful. For example, is the primary purpose of this study descriptive? Or are we testing some kind of relationship as the primary goal? I think adding a section clarifying this would be helpful. This kind of thing could be clarified by adding a section on ‘Hypotheses to be tested and how’, where things are very clearly stated and a proposed model is presented.

Following your suggestion, we added a sub-section at the end of the Methods and analysis section, where we present the various relationships that we would like to assess as the study’s primary goal. More specifically, we moved the paragraph on assessing potential reciprocal relationships between collective and private preventive measures from the Ethics and dissemination section to this new sub-section, and added two new paragraphs: i) on risk perceptions and their evolution over time, and ii) on the potential economic impact of COVID-19 pandemic on the everyday life in households.

4. I missed the point where the researchers said they were collecting data on collective actions at the village level.

This part of the manuscript had been expanded to improve clarity, as follows:

“To do this, the interviewers who conduct the phone surveys have also been in charge of conducting face-to-face interviews in each village, with the village chief, the healthpost nurses, the community health workers (Badjanou Gokh), and representatives from both the town hall and the subprefecture, local associations involved in the fight against Covid-19 spread (e.g., former military personnel, student and youth associations), and non-governmental organizations (e.g., local branches of the Red Cross). At the regional level, interviews have also been conducted on a regular basis with representatives of the healthcare districts. The preventive measures identified mainly consist in the distribution of leaflets, antiseptic soap and face masks, as well as the installation of hand washing facilities in schools, markets, village entrances, households, churches and mosques.”

MINOR COMMENTS:

1. I think this was a clever usage of the Poisson regression to determine Niakhar wasn’t an outlier. Thank you.

2. I think we need more information on defining rurality. The authors say it was determined ‘depending on their infrastructure and equipment.’ This needs some elaboration. We have added the following sentence:

“More specifically, unlike rural villages, the three semi-urbanised villages have health facilities, a weekly market, daily buses to the Senegal’s capital Dakar, and several shops.”

3. I thought it was a good description of the linguistic challenges in survey design and administration. Thank you.

4. In the framing, I would encourage the authors to seriously think if this is a study on SSA or Senegal. The data is entirely on Senegal and I would be surprised if we could generalize all findings from Senegal to the rest of SSA. I don’t think the study loses power if the authors more approximately focus their study on the context the data are coming from.

In the Article Summary section, the last bullet point refers to the issue of generalizability of the study’s results. In line with your suggestion, we added the following last sentence to the manuscript to strengthen this issue of generalizability:

“In the unprecedented context of the COVID-19 pandemic, the generalizability of the study’s results needs to be explored.”

5. The use of 14 callbacks seems aggressive based on my knowledge, I think it would be helpful to include citations for this approach since it is beyond what I am familiar with.

Please, see our response to major comment #2 above.

6. I think some degree of clarification and justification for the standard employment categories is needed.

The following sentence had been added:

“While these categories are consistent with those adopted in some Northern countries, they will be grouped into broader categories if necessary (such as Employed, Seeking employment, and Other, inactive (Students, Pensioners)), and then considered in relation to educational level 26”

7. I would re-state your scales as Likert-type, not Likert since they aren’t about agreement.

Thank you for your suggestion. This has been done

8. I would like some more detail about the way the research team is collecting data on collective action implemented by local authorities.

Please, see our response to major comment #4 above.

In response to the comments made by Reviewer 2:

The literature reviewed is not exhaustive. One would expect that since it is a study protocol, the literature review on studies conducted in SSA should be rich. A comparison of what has been found in other SSA countries and what is expected in Senegal. I request the authors to review more literature on covid-19 attitudes, risk perceptions and preventive/precautionary behaviours in SSA countries; Nigeria, Ethiopia, Ghana, etc.

We have added references to three extra papers in the Introduction section. Please, note that these papers were unavailable when we first submitted our manuscript. As regards the comparison with other SSA countries, this issue of generalizability of the study’s results is raised in the last bullet point of the Article Summary section, and the following last sentence had been added to the manuscript to strengthen this issue:

“In the unprecedented context of the COVID-19 pandemic, the generalizability of the study’s results needs to be explored.”

VERSION 2 – REVIEW

REVIEWER	Tom Mueller Utah State University, Sociology, Social Work, and Anthropology
REVIEW RETURNED	23-Apr-2021

GENERAL COMMENTS	The authors have addressed all of my concerns and this study will be a valuable contribution.
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REVIEWER	Steven Iorfa University of Nigeria, Psychology
REVIEW RETURNED	12-May-2021

GENERAL COMMENTS	<p>Congratulations to the authors. They have tried in addressing most of my concerns. Only a few remain; I recommend that you access this study via the DOI https://doi.org/10.3389/fpsyg.2020.566773, review it and add to the section on "Few COVID-19 data are available from an individual perspective" so that you can have a balance of perspectives. Secondly, there are rumors that the Indian strain of the virus has surfaced in SSA, especially Nigeria. Would you like to add a few lines about how this adds to the significance of your study? Respond to all these ASAP and I'd be willing to read the review and accept your manuscript as soon as it gets back, so that we don't delay it further. Best wishes.</p>
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VERSION 2 – AUTHOR RESPONSE

In response to Reviewer 1's comment:

Thank you very much for your positive feedback on our manuscript.

In response to Reviewer 2's suggestions:

1) I recommend that you access this study via the DOI <https://doi.org/10.3389/fpsyg.2020.566773>, review it and add to the section on "Few COVID-19 data are available from an individual perspective" so that you can have a balance of perspectives.

Thank you for bringing our attention to this nice paper. We now reference it in the Introduction section, and have added the following sentence: "Another Nigerian study involving assessing perceived risks pointed out that despite good knowledge of COVID-19, implementing preventive behaviours would not be likely if the virus was not considered a risk (online survey in April 2020) 17".

2) There are rumors that the Indian strain of the virus has surfaced in SSA, especially Nigeria. Would you like to add a few lines about how this adds to the significance of your study?

In line with your suggestion, we added the following sentence in the sub-section Attitudes: "Assessing knowledge of COVID-19 variants and their perceived risks in comparison with the risks of the original strain is planned for subsequent waves of data collection".

VERSION 3 – REVIEW

REVIEWER	Steven Iorfa University of Nigeria, Psychology
REVIEW RETURNED	21-Jun-2021

GENERAL COMMENTS	Congratulations.
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