



Jhanghiz Syahrivar <jhanghiz@president.ac.id>

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## SAGE Open - Decision on Manuscript ID SO-20-1347.R2

3 messages

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**SAGE Open** <onbehalf@manuscriptcentral.com>  
Reply-To: sageopen@sagepub.com  
To: jhanghiz@president.ac.id

Wed, Mar 31, 2021 at 5:46 PM

31-Mar-2021

Dear Mr. Syahrivar:

It is a pleasure to accept your manuscript entitled "COVID-19 Induced Hoarding Intention among the Educated Segment in Indonesia" in its current form for publication in SAGE Open.

Thank you for your fine contribution. On behalf of the Editors of SAGE Open, we look forward to your continued contributions to the Journal.

Sincerely,  
SAGE Open Editorial Office

Code Ocean Trial: SAGE Open is running a trial with Code Ocean (<https://codeocean.com/>). Authors can upload the code associated to their published article so that readers can view and execute it. The platform, which is based on Docker, hosts the code and data in the necessary computational environment and allows users to re-run the analysis in the cloud and reproduce the results, bypassing the need to install the software. A link to the code, data and computational environment will be included in the journal article enabling readers to seamlessly access and reproduce the code or rerun it against their own inputs. Please visit <https://uk.sagepub.com/en-gb/eur/research-data-sharing-policies#Code%20Ocean%20Trial> for more information and instructions for how to utilize this service for your article. If you wish to use this service, please upload your code as soon as possible after receiving this letter, to ensure the code can be linked to your article during the production process.

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**Jhanghiz Syahrivar** <jhanghiz@president.ac.id>  
To: sageopen@sagepub.com

Mon, Apr 5, 2021 at 5:59 PM

Dear Sage Open Editorial Office,

Thank you for the good news. May we know what the next step is?

Best Regards,

**Jhanghiz Syahrivar**  
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**SageOpen** <SageOpen@sagepub.com>  
To: Jhanghiz Syahrivar <jhanghiz@president.ac.id>

Wed, Apr 7, 2021 at 3:21 AM

Hi Dr. Syahrivar,

Thank you for your email. I will be doing some final checks on your manuscript shortly. Once these are done and I have sent them to Production, you will receive an email regarding the steps to pay the fee. Production will also begin working on your manuscript and will provide proofs for your approval in the next month or so.

If you have any questions or concerns, please feel free to let me know.

Thank you,

Christa

Christa Walker

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**From:** Jhanghiz Syahrivar <[jhanghiz@president.ac.id](mailto:jhanghiz@president.ac.id)>

**Sent:** Monday, April 5, 2021 6:59 AM

**To:** SageOpen <[SageOpen@sagepub.com](mailto:SageOpen@sagepub.com)>

**Subject:** Re: SAGE Open - Decision on Manuscript ID SO-20-1347.R2

[ EXTERNAL ]

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Jhanghiz Syahrivar <jhanghiz@president.ac.id>

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## SAGE Open - Decision on Manuscript ID SO-20-1347

2 messages

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**SAGE Open** <onbehalf@manuscriptcentral.com>

Wed, Jun 24, 2020 at 3:03 AM

Reply-To: sageopen@sagepub.com

To: jhanghiz@president.ac.id

23-Jun-2020

Dear Mr. Syahrivar:

Manuscript ID SO-20-1347 entitled "Pandemic-Induced Hoarding Behavior amid the COVID-19 Outbreak in Indonesia" which you submitted to SAGE Open, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter.

The reviewer(s) suggest some revisions to your manuscript before it can be considered for publication. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into <https://mc.manuscriptcentral.com/sageopen> and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

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You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. If you choose to highlight or track changes in your document please upload both a clean version and a version that highlights the changes.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Center.

When submitting your revised manuscript, you will be able to respond to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

**IMPORTANT:** Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to SAGE Open, your revised manuscript should be uploaded as soon as possible. Please try to submit the requested revisions within 90 days of receiving this decision. If that is not possible please contact the editorial office and we can work out an alternate deadline for you.

Once again, thank you for submitting your manuscript to SAGE Open and I look forward to receiving your revision.

Sincerely,  
SAGE Open Editorial Office

## Reviewer(s)' Comments to Author:

Reviewer: 1

## Comments to the Author

I have read this manuscript with great interest, and I would also like to thank the authors for making data available so promptly upon my request. This is a potentially valuable contribution, providing interesting data on causes of hoarding during the COVID pandemic. However, I have some rather major concerns about the theoretical framework, analyses, and presentation of results that would need to be addressed before publication.

## Major issues:

In general, the proposed structural model seems to be lacking some overarching theoretical or empirical justification (i.e., why was this set of variables selected?). Perhaps this could be justified better. However, in many ways, the research as presented in this paper is often over-theorised. By that I mean that largely descriptive and exploratory analyses are couched in unnecessarily theory-related terms. The first example is the central outcome variable. In simple terms, it is a multi-item measure of intentions to increase purchases of basic goods in response to the COVID pandemic. However, the authors introduce this ad hoc measure of context-specific behavioural intentions as a proposed psychological construct (p. 2, l. 42-50). This seems, plainly, unnecessary. Why not simply state that these items measure intentions to increase purchases of basic goods in response to the COVID pandemic?

There also seems to be some confusion about the content of the proposed construct. Items 1-3 and 5 clearly measure behavioural intentions, while item 4 measures a motivational factor underlying these intentions. Indeed, exploratory factor analysis suggests a two-factor solution (with item 5 also loading on the second factor). While the two-factor solution is mentioned already in the introduction (p. 2, l. 46-50), it is not clear whether these two distinct factors were hypothesised a priori (I suspect not - this should be made clear). Certainly, the interpretation that the two-factor solution support PIHB as a higher-order construct (p. 11, l. 40-41) is not supported by the analyses, nor is it theoretically sensible. Personally, I would suggest to simply use a measure of behavioural intentions made up of the items loading on that factor (does item five not load on this factor at all? This is not clear, as is how the number of factors was determined). This seems to me the most straightforward solution to measuring the key variable of interest.

After obtaining the two-factor solution, the authors then regress the behavioural intentions factor on the motivational factor. While it may be interesting to report the correlation between these two factors, a regression of one on the other (which implies a causal relationship) is not justified after obtaining both factors through EFA. (However, it may be pointed out that the results dovetail with Columbus, 2020, in which self-interested motives were similarly positively associated with self-reported stockpiling).

It is not clear how the items for the attitude measure were developed. These choices should be motivated explicitly. Moreover, it is not clear what these items specifically measure. To me, these items appear to pick up on a mix of knowledge (2, 6), perceived threat (1, 7), and policy preferences (there also already exists significant other work on these questions related to COVID, e.g. Garbe et al., 2020; Zettler et al., 2020). (This is less of a concern with the knowledge and locus of control items, which also appear face valid, although for these as well there could be more detail on scale development).

Relatedly, I am unconvinced by the justification for hypothesis 3. It is sensible that people who perceive COVID as more threatening may engage in more hoarding behaviour. However, it is far less clear why preferences for restrictive policies should have such a causal effect---and a SEM always implies a causal relationship. (Indeed, there are good reasons to believe that restrictive policy preferences might be negatively correlated with hoarding: The same personality trait that is negatively associated with hoarding in Columbus, 2020, is positively associated with preferences for restrictive policies in Zettler et al., 2020). In justifying hypothesis 3, the authors clearly focus on the threat aspect of attitudes. They do so by drawing on Terror Management Theory (TMT). I have two objections to this. First, there are major reasons to doubt that TMT is empirically supported; a recent multi-lab replication project did not support key theoretical predictions (Klein et al., 2020; see also Haaf et al., 2020). Second, even if TMT was empirically supported, to my knowledge, the theory does not predict hoarding behaviour (indeed, although the cited Greenberg et al., 1986, paper refers to purchases, it does so only in a quote). Overall, I do not understand why hoarding should be thought of as a form of symbolic worldview defense (as in TMT) when it is, in fact, a sensible reaction to anticipated actual material shortages (more on this below).

The justification of hypothesis 4 also has major flaws. In particular, the cited literature does not support the proposed link between knowledge and hoarding. Jiang et al. (2012) is a paper about physicians' decision-making; Mkunda et al. (2019) a paper about sardine purchases (and additionally published in what looks like a predatory journal). There may

well be a theoretical framework or prior empirical evidence that supports this link, but none of that is provided.

Helsloot and Ruitenbergh (2004) are cited in support of the claim that panic buying is seen as irrational (p. 1, l. 58-59). In fact, the cited paper asserts the opposite: "behaviour in such situations is in fact very meaningful and far from irrational – from the viewpoint of the people affected." Quarantelli (1993) similarly argues explicitly against the characterisation of behaviour during disasters (not specifically purchasing behaviour) as irrational. Relatedly, Helsloot and Ruitenbergh (2004) are later misrepresented (p. 2, l. 48-49) when it is claimed that they "argued that the term 'panic' was often misattributed to what could be rational and altruistic acts during social crises" in order to support a distinction between anticipatory purchase and antisocial behaviour. Helsloot and Ruitenbergh (2004, p. 102) refer to people's perceptions of their own behaviour, not outside ascriptions. Besides, it is not clear to me how the case described by Helsloot and Ruitenbergh (2004)---saving a baby from a fire---translates to (anti-)social purchasing behaviour. Thus, I do not see any support for the claim that panic buying is widely seen as irrational.

Indeed, the significant economic literature on bank runs---which are in many ways structurally similar to 'panic' buying---shows that such behaviour is rational given sufficient beliefs that other people engage in panic buying. Paloyo (2020) explicitly connects this literature to panic buying during the COVID pandemic and provides relevant references. I should be clear that I am not necessarily asking the authors to include references to this literature. Rather, if they want to frame their study around the claim that panic buying is widely seen as irrational, that should be supported in some way. Media reports painting this picture may be sufficient. However, it seems to me that the authors mostly make this claim to justify their unusual sample of university professors. Here, I want to be clear that I do not think such a justification is necessary. Of course, it is up to the authors to decide how to frame this issue.

The presentation of results is often not clear. Tables should be made more concise; much of the information can probably be shifted to supplementary material. For example, it is not necessary to present item-level statistics in the main text. I would also suggest to cut back on discussing individual item-level means. Without benchmarks, it is not clear how to interpret items assessed on a Likert-type scale. Besides, many of these findings (e.g., willingness to go a hospital) seem tangential to the central aims of the paper. Finally, I would cut the trimmed model presented on p. 13. The paper tested a clear set of hypotheses instantiated in the more complex model. These hypotheses are assessed through the regression paths. Improved model fit on a model that excludes some regression paths does not inform these hypotheses.

I did try to replicate the central analysis presented in the paper using the supplied data. For these analyses, I used R with packages psych (EFA) and lavaan (SEM). First, I replicated the exploratory factor analysis on all variables. Unfortunately, the authors do not report how they determined the number of factors; both a screeplot and an eigenvalue cutoff of 1 suggested a three-factor solution. With three factors, there were clear HLOC and hoarding factors as well as a knowledge/attitude factor, although many of the attitude items loaded very weakly on all factors. With four factors, the four dimensions are mostly distinguished; however, I could not replicate the loadings reported in the paper. When I considered only the hoarding items, model comparison did not support a two-factor solution, though the two-factor model did show better fit than the one-factor model. However, again, I obtained different loadings from the ones reported.

Finally, I attempted to replicate the SEM model (Fig. 7). From the figure, it was not clear to me whether some items were omitted or simply not displayed (e.g., item ASI5). I thus fitted two models, one according to Fig. 7 and one including all items in Table 3. In both models, I found the reported association between knowledge and attitudes (though, again, I am unsure that this is a causal relationship, and think this more likely reflects similar items, as suggested by the three-factor solution). I also observed a (borderline significant) positive association between locus of control and hoarding. Overall, I am not sure why the results I have obtained differ so significantly from the ones reported; this may be an issue of using different software or because some modelling decisions were not reported in the paper. I have attached my code below.

#### Minor issues:

Throughout, assertions are misattributed to references that do not speak to the point, or, in some cases, even make the opposite assertion. I have highlighted a few of these, but all references should be checked for fit to the claims they are supporting. Relatedly, I got the impression that the authors are relying on open access and other publicly available papers. I understand that barriers to access to papers are a major problem, and that this can be a significant challenge for authors who face these barriers. However, I would like to strongly encourage the authors to find ways to access the most relevant literature rather than to rely on what is available.

p. 1: The introduction is excessively long. In particular, the first two paragraphs do not provide meaningful context (p. 1, l. 36-51). Given that the COVID pandemic is a rapidly developing situation, it might be more helpful to provide a (brief) overview of the timeline in Indonesia leading up to the point of data collection. It would be particularly useful to know

whether there were (media) reports of stockpiling in Indonesia around the time of data collection.

p. 2: Sheu and Kuo (2020) are cited to have introduced "Disaster-Induced Hoarding Behavior"; in fact, they refer to "Disaster-Induced Speculative Hoarding". Since their focus is specifically on retailers, I also do not see how this is relevant to the present research.

p. 9, l. 46: The authors mention "random interviews"; please provide additional details.

#### References:

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- Zettler, I., Schild, C., Lilleholt, L., & Böhm, R. (2020). Individual differences in accepting personal restrictions to fight the COVID-19 pandemic: Results from a Danish adult sample. Retrieved from <https://psyarxiv.com/pkm2a/>

Reviewer: 2

#### Comments to the Author

Overall this paper shows promise, but the writing style needs to be a little more concise, and the figure labelling needs work. A clearer outline of the methods is needed, while "Table 1. Respondent Profile" does not need to be in the main text, and can go in the appendix. Line 35-36 needs to be rephrased "The same thing was stated by Jiang et al...." Colour labelling on Figures 2 - 5 - need to be made clearer. Please state exactly what 1 - 5 means, so it is easier to read at a glance.

Overall this paper is good, but needs some work before final publication.

Reviewer: 3

#### Comments to the Author

I was very interested to read about this panic buying research, which found that people's knowledge influences their attitudes and developed a new instrument.

Overall, the authors appear to be open about their limitations, in that they only studied professors. (Perhaps the title should say, Professors' or Educated so that the context is clear from the outset.)

Even though the results may not have come out the way the authors expected, I think it's a fine study. There were some concerns that I think could be resolved through editing and clarifying:

There were no citations for the hypothesis that panic buying is for the uneducated. If that is not actually something someone has proposed, you could just say you studied a convenience sample of professors and later say that at least you know that it also occurs somewhat in professors?

The labeling of the scales is very confusing. To help the reader, the items in the tables should be numbered like they are in the SEMs and you should not shorten the names in the SEM (e.g., don't change CATD into ATD). The PCA table should have a row that spells out each title and then you can put initials for the individual numbered items.

It seemed like you studied Panic Buying and that is in the title and abstract as the central theme, but then it did not really influence behavior or was not influenced by attitudes and knowledge? Please be explicit about what happened with this variable. It was hard to tell in the first SEM which values go with which lines and then it disappears in the second one, suggesting that it is not related.

In the discussion and elsewhere you have to use directional language to state the hypotheses and which ones were verified or not, do not just refer to the numbers because then people can't tell without going back which ones were accurate and which were not and why.

Looking at the frequency tables, most of them show responses evenly distributed over all items (e.g., if there is a mean of 3.5 it's because 20% of the people gave each answer, not because everyone had a middling to high response).

You concluded that people had a higher external locus of control, but that is not obvious from the histogram. #1 groups with 3 and 4 in your SEM but only the God ones seem screwed away from the bottom responses.

Was HLOC and PIHB significantly related? The abstract says they were but then you dropped them with the non significant results from the second model...Is it .23?

I think the discussion has to more explicitly link to the results saying openly which things did not pan out as expected and why you think that is.

What is the rationale behind saying that the educated people engaged in panic buying? The ratings again were all over the board and generally not clumped at 4 and 5 except for the first item, which is not in the PCA list and I assume does not reflect actual excess buying. There is no reason to suggest from those item that this is "panic" buying in the pejorative sense but can be rational stocking up for a future shortage or inability to get to the store. This should be very clearly resolved for the paper to be useful to readers. The abstract and title cannot imply that there is some panic buying and relationship with other variables if there is not strong evidence for that fact.

The word "stockpiling" seems particularly to have a negative connotation that people would avoid admitting to. (Was this in Indonesian? Does the word for that in the native country have the same connotation?)

How do you interpret the fact that you had two factors but then later you had one that combined items from across them? Why does the SEM have your three sub factor items and not the four that were in the overall PCA?

Those preprints are not peer reviewed yet right? I think you should separate in the text descriptions of things that are and are not already officially published through peer review...

I believe there are already studies of hoarding and locus of control, which should be reported here, e.g., Frost et al, 1995

Overall, I think this is an interesting topic and a good idea to introduce a scale. The paper should be more explicit about the utility of the scale given the results. I would like to see how you adapted the existing three study items for this scale and discuss whether theirs are better for this task given the results.

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 **R-Code.R**  
2K

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**Jhanghiz Syahrivar** <jhanghiz@president.ac.id>

Wed, Jun 24, 2020 at 3:37 AM

To: Chairy Chairy <chairy@president.ac.id>, Genoveva Genoveva <genoveva@president.ac.id>, Siska Purnama Manurung <siskapurnama@president.ac.id>

[Quoted text hidden]

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 **R-Code.R**  
2K