**Peer review correspondence**

**Ms. Title:** Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the **COVID-19 pandemic**

**Corr. Author Name:** Simon Columbus

**Submitted:** Sep 22, 2020

**Editor first decision—Revise & Resubmit**

Dec 14, 2020

Dear Simon Columbus,

Thank you for submitting your work to Collabra: Psychology. I have now received two reviews from individuals who are extraordinarily well qualified to review this paper. I thank them for their service to this journal. As is my standard practice, I read your paper carefully and then I read the reviewer comments. Last, I read the pre-registration on the OSF.

The reviewers raised some concerns but were mostly positive. I had some reservations that I outline below but I suspect most of the concerns are addressable with clarifications, revisions to the text, and potentially some analytic changes. Thus, I will extend to you a revise decision. If you submit a revision, I hope to be able to make a judgment about the next steps without sending the paper back out for review but I reserve that right. The reviewers did an outstanding job and you should address each of their concerns either in the revised text or in the response letter. I will highlight some issues that came up as I read your paper and point out places where my comments dovetail with Reviewer issues. I acknowledge that you might disagree with some (or all) of the points so feel free to pushback against any suggestions you believe will harm your work. Just describe your compelling counterpoints in the letter.

1. I think Reviewer #2 makes strong points about ways to tighten up the theoretical underpinnings of the studies. I also thought you might be able to expand a bit on work linking HH to prisoner dilemmas and other DVs measuring cooperative actions (or the converse).
2. The issue of effect sizes is relevant when thinking about how strongly broad traits should relate to single behaviors. This could be noted in the Introduction a bit more explicitly (and even the Discussion). And conceptually, stockpiling is not just a binary variable as there are degrees of stockpiling. Thus, you might want to note potential limitations with the way the primary DV was measured in these studies.
3. I think the paper would benefit from a paragraph or more describing how the pandemic unfolded in early 2020 in the UK. What had happened up to March 13 and 17? How might that context have impacted this work? These issues could also impact the constraints on generalizability statement (which was great to read, BTW).
4. I did not understand where the .65 OR for the power analysis in Study 1 was obtained. Please clarify. If Study 1 was purely exploratory, it is fine to note this in the text.
5. In line with comments from Reviewers, you might spell out the Prolific platform for readers in a bit more detail so they better understand the pros/cons of this way of obtaining participants.
6. Survey length is an issue but I do think it was a limitation not to measure all six HEXACO domains (see Reviewer #2). I can see other traits being relevant and getting a sense of the overall predictive power of the six domains would be useful. This might be worth noting as a limitation.
7. I think you should describe the responses about perceptions of stockpiling in a bit more detail (e.g., median values and even a histogram). This general comment applies to all variables (see #8).
8. Would it make sense to include a zero-order correlation table for both studies with means and SDs?
9. I have reservations about mediation with cross-sectional data. This paper outlines the concerns and would be worth consulting:

Fairchild, A. J., & McDaniel, H. L. (2017). Best (but oft-forgotten) practices: mediation analysis. The American Journal of Clinical Nutrition, 105(6), 1259-1271.

Changing the language and issuing plenty of caveats might help. Indeed, I would be cautious using anything approximating causal language in Study 1 (e.g., I conducted a causal mediation analysis…on page 7). I respect the debate over when and where in a paper causal terminology is acceptable but I can see a case for keeping things conservative and simple by using constrained language.

1. I think MaxJoint and MaxOwn need more exposition for Study 2.
2. A little more rationale for the instrumental variable approach would be helpful. People might struggle to figure out how to interpret (and even approach the analyses) when the belief mediator was manipulated in Study 2.
3. I wasn’t sure why the OR of .74 was used in Study 2 given the OR of .67 result from Study 1.
4. As with Study 1, a zero-order table with means and SDs would be helpful for Study 2.
5. Can you report the CI for the correlation of -.16 reported on page 14?
6. The use of “significantly smaller” than the Thielmann et al. (2020) estimate might need some exposition on page 15. How was this tested? What were the exact estimates from Zettler et al., and Garbe et al.? I think adding some specific details will sharpen those passages.
7. I do not 100% agree with the conclusion that the current study provides “causal evidence that correcting inaccurate beliefs may not promote prosocial behavior” (p. 15) given the design of these studies. Unless I missed something, the DV was a self-report of intentions. So it might be useful to issue a few caveats about the measures and consider a slightly more cautious interpretation.

In summary, I think this is a promising manuscript and, I hope you will revise it for further consideration at Collabra: Psychology. If you do revise this paper, please ensure that your revised files adhere to our author guidelines, and that the files are fully copyedited/proofed prior to upload. Please also ensure that all copyright permissions have been obtained. This is the last opportunity for major editing, therefore please fully check your file prior to re-submission. If you have any questions or difficulties during this process, please contact the editorial office at editorialoffice@collabra.org.

We hope you can submit your revision within the next six weeks. If you cannot make this deadline, please let us know so we can update the system. I know the pandemic has slowed things down for many people so do not hesitate to ask for extra time if it is needed. Thank you for considering Collabra: Psychology as an outlet for your work. Sincerely,

Brent Donnellan

**Reviewer 1**

**Open response questions**

Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

I review the manuscript “Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic” (ID: 1223204) in which the author links Honesty-Humility to self-reported stockpiling in the past (Study 1) and stockpiling intentions (Study 2). Further, a potential mediation by beliefs about peer behaviour was tested.

I can keep this review quite short as this is very thorough and solid work. The theoretical background is well developed; the whole methodology makes perfect sense and is fully transparent. Preregistration, data, script, and material are open and well documented. Exploratory analyses are explicitly marked. The weaknesses/limitations of the paper are discussed. Overall, I think the manuscript is a great fit for Collabra.

Minor comments:

1. One could discuss the representativeness of the samples used (i.e., samples recruited via panel provider Prolific).
2. The bars in Figure 2 don’t start at 0, while the corresponding CIs do.

In sum, the manuscript was a very good read and I would like to thank the author for such solid work. I am sorry for providing such a short review, but honestly, there is not much to criticize.

**Rating scale questions**

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  |  | ✔ |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  |  | ✔ |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  |  |  | ✔ |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  |  |  | ✔ |  |

**Reviewer 2**

**Open response questions**

Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

In the manuscript „Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic”, the author tests the predictability of Honesty-Humility as a basic trait on the specific antisocial behavior of stockpiling during the COVID-19 pandemic. In addition, the author takes several mediators into account (e.g., beliefs) to account for the underlying psychological processes. In general, I consider this as a very nicely written article that yields an important contribution to the understanding of Honesty-Humility in its predictability of prosocial behavior in the field. Its theoretical background is comprehensive and the methods incorporate open science principles (e.g., preregistered studies, open data and materials). As such, I am confident that the manuscript is suited for publication in Collabra: Psychology. However, I have few theoretical and methodological aspects that I outline in detail below and which is why I recommend to revise and resubmit the manuscript.

Theoretical background

* The reference of Mischkowski, Thielmann, & Glöckner (2019) is not correctly reported. Specifically, Honesty-Humility is positively related to Inequality Aversion (Mischkowski et al., 2019) as measured by the secondary items of the SVO Slider Measure (Murphy, Ackermann, & Handgraaf, 2011). Since this measure operationalizes Inequality Aversion and Joint Gain Maximization (i.e., social welfare) as two endpoints on one continuum, individuals high in Honesty-Humility refrain from increasing social welfare for the sake of establishing equality in outcomes, particularly when they would benefit from an increase in social welfare (i.e., advantageous inequality). Thus, the conclusion that “individuals high in Honesty-Humility may refrain from stockpiling because they are willing to make sacrifices to promote social welfare” needs revision as well as the clause “A particular motivation to do so is to increase social welfare (Mischkowski, Thielmann, & Glöckner, 2019)” (p. 4.).
* Please adapt this also in the following (e.g., on p. 8) “Recent work suggests that Honesty-Humility is associated with both an aversion to inequality and motivation to maximise joint outcomes (Mischkowski et al., 2019).” As outlined, it is one continuum, ranging from perfect Inequality Aversion to prototypical Joint Gain Maximization.

Method

* Please explain why you decided to solely collect some of the HEXACO dimensions (i.e., Honesty-Humility and Emotionality in study 2) instead of measuring all dimensions. Please discuss in the limitation section whether this might have led to demand effects in that participants might have guessed what is investigated when they are mostly questioned about their pro-sociality.
* In study 2, I am wondering whether the item “I wanted to assure the best outcome for everybody” is necessarily understood as being related to the maximization of joint gains. “Best” could also be interpreted to assure a fair (i.e., equal) share. Please state the two other items of the scale. Do they explicitly refer to the aspect of social welfare (vs. inequality)?

Results

* Please explain (similar to footnote 3) why it is useful to test a mediation when the path from x (Honesty-Humility) to the mediator (beliefs) is not significant in the first place.

Discussion

* Rather a comment than an explicit request: I agree with the discussion on the differences in effect sizes between the relation of Honesty-Humility and cooperation behavior in the lab vs. in the field. However, the specific context of stockpiling during COVID-19 made me think about the bandwidth-fidelity dilemma (see also Thielmann, Spadaro, & Balliet, 2020). Even though stockpiling is an example of a coordination problem involving the conflict of individual and collective interests, the very specific context in comparison to an often neutrally framed social dilemma game as conducted in the lab might reduce the correlation to Honesty-Humility.

Minor aspect:

* Please consider uploading screenshots of the studies on OSF for a quick and easy glance at the instructions.

**Rating scale questions**

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  |  |  |  | ✔ |

**Author response**

Jan 12, 2021

Dear Dr. Donnellan,

Thank you for inviting a revision of my manuscript *"* *Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic"* (MS # 1223204). I am grateful for your and the reviewers’ careful reviews and insightful comments.

Your detailed suggestions were very helpful in guiding the revision and I believe they have contributed to a much-improved manuscript. In what follows, I address your comments as well as those from the reviewers one-by-one.

Once again, I am grateful for the constructive feedback. I hope that I have addressed all relevant concerns and that the revised manuscript is suitable for publication in *Collabra: Psychology.* I am look forward to receiving your decision.

Sincerely,

Simon Columbus

*Department of Psychology*

*University of Copenhagen*

Below, I include point-by-point responses to all comments.

**Response to the editor**

*1. I think Reviewer #2 makes strong points about ways to tighten up the theoretical underpinnings of the studies. I also thought you might be able to expand a bit on work linking HH to prisoner dilemmas and other DVs measuring cooperative actions (or the converse).*

Thank you for highlighting these issues. I have responded to the issues raised by Reviewer 2 in more detail below. Regarding the link between Honesty-Humility and various forms of prosocial behaviour, I have significantly expanded the introduction to discuss recent meta-analysie linking Honesty-Humility to behaviour in economic games (Thielmann et al., 2020) and unethical behaviour (Zettler, Thielmann, et al., 2020). (pp. 4–5).

*2. The issue of effect sizes is relevant when thinking about how strongly broad traits should relate to single behaviors. This could be noted in the Introduction a bit more explicitly (and even the Discussion). And conceptually, stockpiling is not just a binary variable as there are degrees of stockpiling. Thus, you might want to note potential limitations with the way the primary DV was measured in these studies.*

I have now added effect sizes from previous studies where relevant, and especially in the expanded introduction. I am also addressing the concern that broad traits may not be linked strongly to specific individual behaviours in the introduction (p. 5).

Regarding the measurement of stockpiling as a binary variable, I would like to push back a little. Although it is true that there are degrees of stockpiling, prosocial behaviour often exhibits a peculiar, bimodal distribution with modes reflecting selfish and fair behaviour. For example, Dictator Game behaviour typically exhibits modes at 0 and 5 (out of ten; Engel, 2011). For his reason I think a dichotomous item is actually quite appropriate to assess individual behaviours, whereas a continuous measure would ask for a more sophisticated modelling approach to account for zero-inflation while providing little additional insight.

*3. I think the paper would benefit from a paragraph or more describing how the pandemic unfolded in early 2020 in the UK. What had happened up to March 13 and 17? How might that context have impacted this work? These issues could also impact the constraints on generalizability statement (which was great to read, BTW).*

Thank you for raising this issue. I have added a paragraph on historical context (p. 7), focusing on media attention and public interest in stockpiling (as evidenced by Google search trends; see SI). This shows that the data were collected at the height of awareness for stockpiling in the UK.

*4. I did not understand where the .65 OR for the power analysis in Study 1 was obtained. Please clarify. If Study 1 was purely exploratory, it is fine to note this in the text.*

I apologise that this point was not clearly explained. I am merely reporting a sensitivity power analysis, i.e., an indication of the size of effect for which the chosen sample size yields 80% power. I have added a sentence to highlight that the sample size was chosen not based on a power analysis (p. 7). (If you prefer, I don’t mind removing the sensitivity power analysis; I know there’s a debate over whether this sort of analysis is useful).

*5. In line with comments from Reviewers, you might spell out the Prolific platform for readers in a bit more detail so they better understand the pros/cons of this way of obtaining participants.*

I have added some additional information about Prolific (p. 7), highlighting both pros (greater diversity than student samples) and cons (not representative).

*6. Survey length is an issue but I do think it was a limitation not to measure all six HEXACO domains (see Reviewer #2). I can see other traits being relevant and getting a sense of the overall predictive power of the six domains would be useful. This might be worth noting as a limitation.*

Thank you for highlighting this issue. I understand that the overall predictive power of broad personality traits can be of interest, although my aim here was really to test specific (mechanistic) predictions about Honesty-Humility. Only including this subscale allowed me to use more items, which also alleviates some concerns about coverage (Garbe et al., 2020, for example used the Brief HEXACO Inventory, which measures each factor with four items and thus covers the trait domain less comprehensively). For readers who are interested in this question, however, I have added further information about the studies by Zettler et al. (2020), which included the full HEXACO-60 in a study run during the same week as the studies presented here. Their results support Honesty-Humility as the strongest (and sole significant, in the combined model) predictor of stockpiling.

*7. I think you should describe the responses about perceptions of stockpiling in a bit more detail (e.g., median values and even a histogram). This general comment applies to all variables (see #8).*

I have now included a new figure which displays the distribution and median for beliefs about stockpiling (p. 15), as well as further information about the other variables (see below).

*8. Would it make sense to include a zero-order correlation table for both studies with means and SDs?*

I have now moved the two zero-order correlation tables for both studies from the supplementary material to the main text, as well as added means and standard deviations (pp. 9, 18).

*9. I have reservations about mediation with cross-sectional data. This paper outlines the concerns and would be worth consulting:*

*Fairchild, A. J., & McDaniel, H. L. (2017). Best (but oft-forgotten) practices: mediation analysis. The American Journal of Clinical Nutrition, 105(6), 1259-1271.*

*Changing the language and issuing plenty of caveats might help. Indeed, I would be cautious using anything approximating causal language in Study 1 (e.g., I conducted a causal mediation analysis…on page 7). I respect the debate over when and where in a paper causal terminology is acceptable but I can see a case for keeping things conservative and simple by using constrained language.*

Thank you for raising this issue—proper causal inference was one of my motivations in conducting this study, so it’s important to me to communicate this right. Regarding Study 1, it is true that I do not use design-based causal mediation analysis. I am, however, using a statistical approach to causal mediation (based on the potential outcomes framework—this particular approach is also referenced in the Fairchild and McDaniel paper, section ‘Assumptions and causal inference’, although the discussion there is somewhat superficial). Nevertheless, I have now removed references to ‘causal mediation analysis’ and ‘causal mediation effect’ in Study 1, simply to avoid confusion.

With the causal mediation approach used in Study 1 (and to analyse mediation by social motives in Study 2) it is possible to make the assumptions needed for a causal interpretation of the results explicit. In particular, sensitivity analyses indicate how much of a violation of these assumption would be necessary to make the causal mediation effect zero. I did not report these sensitivity tests in Study 1because the causal mediation effect was non-significant (it seemed to me more confusing than helpful); of course, I can add these if you would find this useful. I have added a previously omitted sensitivity analysis for the (significant) mediation effect via MaxOwn motives (p. 16).

*10. I think MaxJoint and MaxOwn need more exposition for Study 2.*

I have now added further explanation of these two social motives in the introduction to Study 2 (p. 12).

*11. A little more rationale for the instrumental variable approach would be helpful. People might struggle to figure out how to interpret (and even approach the analyses) when the belief mediator was manipulated in Study 2.*

I have now added a more extensive introduction to the design-based mediation analysis used in Study 2 (p. 14). I hope this clarifies both the statistical approach and the interpretation of the results.

*12. I wasn’t sure why the OR of .74 was used in Study 2 given the OR of .67 result from Study 1.*

I apologise for the confusing presentation of the sample size determination. As for Study 1, I reported a sensitivity power analysis to provide an indication of the effect size which could be reliable detected (i.e., with 80% power). I have now added a line on the power to detect the effect observed in Study 1 (96%) and an explanation that the sample size was chosen to conservatively increase power relative to Study 1.

*13. As with Study 1, a zero-order table with means and SDs would be helpful for Study 2.*

I have now moved the table with zero-order correlations, means, and SDs from the supplementary material to the main text (p. 18).

*14. Can you report the CI for the correlation of -.16 reported on page 14?*

The reported correlation of -.16 is incorrect; this should have been -.09 (as calculated from an odds ratio of .80). I have now corrected this in the text and added a confidence interval (p. 21).

*15. The use of “significantly smaller” than the Thielmann et al. (2020) estimate might need some exposition on page 15. How was this tested? What were the exact estimates from Zettler et al., and Garbe et al.? I think adding some specific details will sharpen those passages.*

I have now changed the language in this section to avoid the mention of significance, to “half the size of the meta-analytic estimate” (p. 21). I have also significantly expanded the discussion of the studies by Zettler et al. and Garbe et al., including estimated correlations and some relevant methodological details (p. 21).

*16. I do not 100% agree with the conclusion that the current study provides “causal evidence that correcting inaccurate beliefs may not promote prosocial behavior” (p. 15) given the design of these studies. Unless I missed something, the DV was a self-report of intentions. So it might be useful to issue a few caveats about the measures and consider a slightly more cautious interpretation.*

Thank you for highlighting this. I do think it would be surprising if changing beliefs failed to affect intentions, but did affect behaviour. I have however adjusted this sentence to read “causal evidence that correcting inaccurate beliefs may not promote intentions to engage in prosocial behaviour” (p. 22).

**Response to reviewer 1**

*I review the manuscript “Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic” (ID: 1223204) in which the author links Honesty-Humility to self-reported stockpiling in the past (Study 1) and stockpiling intentions (Study 2). Further, a potential mediation by beliefs about peer behaviour was tested.*

*I can keep this review quite short as this is very thorough and solid work. The theoretical background is well developed; the whole methodology makes perfect sense and is fully transparent. Preregistration, data, script, and material are open and well documented. Exploratory analyses are explicitly marked. The weaknesses/limitations of the paper are discussed. Overall, I think the manuscript is a great fit for Collabra.*

Thank you for your kind evaluation of this work. I greatly appreciate your positive feedback.

1. *One could discuss the representativeness of the samples used (i.e., samples recruited via panel provider Prolific).*

I have now added a further information about the advantages and drawbacks of using Prolific for online surveys (p. 7).

1. *The bars in Figure 2 don’t start at 0, while the corresponding CIs do.*

Thank you for highlighting this issue. I have now replaced Fig. 2, so this comment no longer applies.

*In sum, the manuscript was a very good read and I would like to thank the author for such solid work. I am sorry for providing such a short review, but honestly, there is not much to criticize.*

Thank you again for your positive evaluation of this manuscript.

**Response to reviewer 2**

*In the manuscript „Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic”, the author tests the predictability of Honesty-Humility as a basic trait on the specific antisocial behavior of stockpiling during the COVID-19 pandemic. In addition, the author takes several mediators into account (e.g., beliefs) to account for the underlying psychological processes. In general, I consider this as a very nicely written article that yields an important contribution to the understanding of Honesty-Humility in its predictability of prosocial behavior in the field. Its theoretical background is comprehensive and the methods incorporate open science principles (e.g., preregistered studies, open data and materials). As such, I am confident that the manuscript is suited for publication in Collabra: Psychology. However, I have few theoretical and methodological aspects that I outline in detail below and which is why I recommend to revise and resubmit the manuscript.*

Thank you for your careful and constructive consideration of this manuscript. I greatly value your input and have made appropriate changes, as described below.

*The reference of Mischkowski, Thielmann, & Glöckner (2019) is not correctly reported. Specifically, Honesty-Humility is positively related to Inequality Aversion (Mischkowski et al., 2019) as measured by the secondary items of the SVO Slider Measure (Murphy, Ackermann, & Handgraaf, 2011). Since this measure operationalizes Inequality Aversion and Joint Gain Maximization (i.e., social welfare) as two endpoints on one continuum, individuals high in Honesty-Humility refrain from increasing social welfare for the sake of establishing equality in outcomes, particularly when they would benefit from an increase in social welfare (i.e., advantageous inequality). Thus, the conclusion that “individuals high in Honesty-Humility may refrain from stockpiling because they are willing to make sacrifices to promote social welfare” needs revision as well as the clause “A particular motivation to do so is to increase social welfare (Mischkowski, Thielmann, & Glöckner, 2019)” (p. 4.).*

Thank you for highlighting this issue. I have now revised this sentence to read “Recent evidence suggests that this is more motivated by avoidance of self-advantageous inequality than by seeking to maximise overall welfare” (p. 5).

*Please adapt this also in the following (e.g., on p. 8) “Recent work suggests that Honesty-Humility is associated with both an aversion to inequality and motivation to maximise joint outcomes (Mischkowski et al., 2019).” As outlined, it is one continuum, ranging from perfect Inequality Aversion to prototypical Joint Gain Maximization.*

I have now expanded this section to more accurately reflect the findings of Mischkowski et al. (2019) (pp. 10-11). My reading of the findings is that Honesty-Humility is associated with joint gain maximisation, but when this stands in conflict with inequality aversion, those higher in HH prefer inequality aversion over joint gain maximisation. Thus the reference to both motivations potentially underlying the link between HH and prosociality. This section now reads: “Recent work suggests that individuals high in Honesty-Humility are willing to bear individual costs to maximise joint outcomes. When maximisation of joint outcomes and inequity aversion stand in conflict, however, Honesty-Humility is weakly associated with a preference for inequity aversion rather than maximisation of joint outcomes, and more so when inequity would be self-advantageous (Mischkowski et al., 2019)” (pp. 10-11).

*Please explain why you decided to solely collect some of the HEXACO dimensions (i.e., Honesty-Humility and Emotionality in study 2) instead of measuring all dimensions. Please discuss in the limitation section whether this might have led to demand effects in that participants might have guessed what is investigated when they are mostly questioned about their pro-sociality.*

See also the response to the editor. I included only Honesty-Humility (and, exploratorily, Emotionality) because I sought to study hypotheses specific to Honesty-Humility. Limiting the number of factors assessed reduced the burden on participants and finances while allowing me to include a longer, more reliable scale format. Other studies have provided more comprehensive evidence on the link between the HEXACO model of personality and stockpiling, and support Honesty-Humility has the strongest or only predictor of stockpiling (esp. Zettler et al., 2020, Study 1).

I acknowledge the general concern over demand effects. I am, however, not sure *where* demands should have had an effect. Given the question about only measuring one or two HEXACO subscales, the most obvious concern is that self-reports of Honesty-Humility could have been inflated. However, mean levels are in line with commonly observed levels (feature-scaled means, Study 1: .62, Study 2: .65; somewhat higher than means in the hexaco.org online sample, Lee and Ashton, 2018: .58, but in line with Thielmann et al., 2020: .62). Another possibility is that perceived experimenter demands affected the link between Honesty-Humility and stockpiling. Again, however, estimates are in line with similar studies that included a full HEXACO questionnaire (Zettler, Schild, et al., 2020). In addition to these empirical objections, recent efforts to measure and bound demand effects show that these are at most small, and likely to be very small (De Quidt et al., 2018). I would thus like to suggest that demand effects are a rather speculative concern, and unlikely to have had a major effect on the results or conclusions of the present study.

*In study 2, I am wondering whether the item “I wanted to assure the best outcome for everybody” is necessarily understood as being related to the maximization of joint gains. “Best” could also be interpreted to assure a fair (i.e., equal) share. Please state the two other items of the scale. Do they explicitly refer to the aspect of social welfare (vs. inequality)?*

Thank you for highlighting this issue. I now report the full text of all items (p. 13). In addition, I have added a paragraph discussing this measure (p. 32). I agree that caution is needed in interpreting results from such an ad hoc scale. Indeed, I cannot exclude the possibility that the items also captured other, related motivations. I thus emphasised this caveat in the discussion.

*Please explain (similar to footnote 3) why it is useful to test a mediation when the path from x (Honesty-Humility) to the mediator (beliefs) is not significant in the first place.*

I now address the rationale for testing for an indirect effect in the absence of a total effect in the discussion (p. 23). Briefly, the power to detect an indirect effect can be larger than that to detect a total effect (Kenny & Judd, 2014), so the former can be detectable even when the total effect is non-significant.

*Rather a comment than an explicit request: I agree with the discussion on the differences in effect sizes between the relation of Honesty-Humility and cooperation behavior in the lab vs. in the field. However, the specific context of stockpiling during COVID-19 made me think about the bandwidth-fidelity dilemma (see also Thielmann, Spadaro, & Balliet, 2020). Even though stockpiling is an example of a coordination problem involving the conflict of individual and collective interests, the very specific context in comparison to an often neutrally framed social dilemma game as conducted in the lab might reduce the correlation to Honesty-Humility.*

Thank you for sharing this interesting thought. I agree that the bandwidth-fidelity dilemma may contribute to low correlations between measures of broad personality traits and specific behaviours. I am not fully convinced, however, that this explains the difference between correlations with specific behaviours in the field and behaviour in economic games—after all, games, too, are quite specific contexts. Without further research investigating prediction in both contexts I worry that any statement on the causes of the divergence would be highly speculative.

*Please consider uploading screenshots of the studies on OSF for a quick and easy glance at the instructions.*

Thank you for this useful suggestion. I have now uploaded screenshots of both studies to the OSF.

**References**

De Quidt, J., Haushofer, J., & Roth, C. (2018). Measuring and bounding experimenter demand. *American Economic Review, 108*(11), 3266-3302.

Engel, C. (2011). Dictator games: A meta study. *Experimental Economics*, *14*(4), 583-610.

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**Editor final decision—Accept**

Jan 26, 2021

Dear Simon Columbus,

I have now had a chance to read over your manuscript "Honesty-Humility, beliefs, and prosocial behaviour: A test on stockpiling during the COVID-19 pandemic", along with the letter describing the changes you made. Thank you for your responsiveness to the concerns that the reviewers and I raised. I am happy to say that your paper is now officially accepted for publication in Collabra: Psychology. Congratulations on this excellent work, I think it will make an important contribution to the literature and I look forward to seeing it published! I hope your experiences with Collabra: Psychology have been positive and that you will continue to consider it as an outlet for your work.

As there are no further reviewer revisions to make, you do not have to complete any tasks at this point. Our managing editor will contact you in case there are any pre-prodution file related questions. You will have an opportunity to check the page proofs before we publish your article. Thank you again for publishing in Collabra: Psychology.

Sincerely,
Brent Donnellan