

Manuscript title: Heterogeneity, not opportunism, is what organizes results from a replication of “Self-interest and fairness: self-serving choices of justice principles”

Invitation to Review date: 06.05.2025

Review submission date: 08.05.2025

Review type: original submission / revision / other

I have reviewed the manuscript “Heterogeneity, not opportunism, is what organizes results from a replication of ‘Self-interest and fairness: self-serving choices of justice principles’”. The authors conducted a replication of Rodriguez-Lara and Moreno-Garrido (2012) to test if participants in a dictator game choose between different principles so that they get the most of them.

I have read through it once and briefly skimmed the original article. In its current version, the manuscript is missing a lot of crucial information. This is preventing me from forming a well-informed opinion of it. For example, the data is not openly available, there is no specific preregistration, and the theory section is missing. Since this is part of the SCORE project, I was very surprised that basic open science practices like open data and preregistration were absent. Especially against the backdrop of the NHB scandal last year, I was shocked to read that the study was fully pre-registered but I wasn’t granted access to the preregistration. I advise the authors to diligently revise the entire manuscript and make all associated materials accessible to allow for rigorous peer review. I listed specific remarks below and hope that they help the authors improve the manuscript. I would be happy to review a revised version. In its current form, I advise against publishing it.

Recommendation: Revise

Sincerely,
Lukas Röseler

Remarks in no specific order

1. The OSF project was not public, which is why I requested access. I was granted access very quickly but then the authors were no longer anonymous. After a few minutes, my access was removed (which I am okay with, but all OSF links should have been accessible from the start). If the authors would like to remain anonymous, I suggest they create a view-only link for the manuscript.
2. The first sentence “An open question” seems to lack a bit of context (although maybe this is just me not being familiar with experimental economics): There are many open questions in the world, which is why I suggest that you add a brief explanation why focusing on this particular one is important for you. I think you should also elaborate more on the Cappelen et al. account so that it is clearer later that it converges with the results.
3. I suggest that you add an example such as a table or figure visualizing the three different principles or conditions to facilitate understanding. Although I think that the replication should not have to be more specific than the original study in explaining the research, I think that it should be easily understandable on its own.
4. On p. 3, you explain that the original authors “run non-parametric tests on giving differences”. Could you briefly elaborate on that? Is it because the pie can only be divided in whole pieces or is it because of the distribution?
5. I am an advocate of “reproduction before replication”. Can you explain why you did not run a reproduction study? Also, you do not mention a power analysis and I would want details on the instructions, preregistration, etc. to be part of the manuscript and not in a private OSF repository (<https://osf.io/z9emg/>). Moreover, I strongly suggest that you register the OSF

repository so that you can provide permanent links to files that cannot be altered after publication.

6. I am not entirely sure about experimental economics but I would have expected you to use the past tense in the results section (e.g., “we run F-tests” does not adhere to APA guidelines and neither do the statistical reports or some of the citations “and Moreno-Garrido, 2012.”).
7. I think that this is a matter of taste: I would have preferred the three conditions not be abbreviated (DB, DW, BL). I see no upside in abbreviating these terms, except in Table 1.
8. Again, this may not be a standard requirement in experimental economics, but I would strongly suggest that you report test statistics in more detail. For example, F tests are missing the degrees of freedom.
9. Some sentences are unnecessarily complicated, for example “given the fact that it is the case”. I suggest that you try to streamline the language. In my experience, LLMs can help with that but in this case, make sure to include an “AI use” disclosure/statement.
10. I tried to run the manuscript through papercheck (<https://scienceverse.github.io/papercheck/>) but no report could be generated.
11. DOIs are missing in the references and the Chen (2023) OSF link also leads to a private project: <https://osf.io/5tk2e/>
12. I like the comparison of results in Table 1. Just a minor note: You did not report decimal spaces for some of the W values, I would expect them to be “.0” but think that it is ambiguous in its current form. Also, a heads-up that in my experience, grey shades are not possible in the copy-edited version at JCRE.
13. I suggest you also create a plot similar to that of the original study (Figure 1).

Methodological Checks that I include in all of my reviews (see also <https://www.opennessinitiative.org/the-initiative/>)

14. Preregistration
 - a. Existence: Not accessible
 - b. Specificity: —
 - c. Inclusion of Analysis Plan (i.e., R-code): —
 - d. Discussion of all deviations: Missing
15. Open Data
 - a. Existence: Not accessible
 - b. Code sheet: Not accessible
 - c. Raw AND Processed data: Not accessible
16. Open Code
 - a. Existence: Not accessible
 - b. Open Source Software: Unknown
 - c. Version control or disclosure of versions: Unknown
 - d. Well-commented: Not accessible
17. Results
 - a. [Statcheck](#) results: No results due to missing degrees of freedom
 - b. Indicators of [QRPs](#): None
18. Open Materials
 - a. Analysis code: Not accessible
 - b. Stimuli or questionnaires: Not accessible
 - c. Open source software: Unknown
19. 21 word solution or anything similar (e.g., file-drawer statement): No

Disclaimers

20. I did not conduct a reproducibility check as I had no access to the data and as JCR is doing such a check upon acceptance.
21. I did not check for deviations from the preregistrations as I had no access to the preregistration.
22. I have been collaborating with one of the OSF project's contributors and possibly authors on the SCORE project (<https://www.cos.io/blog/cos-and-forrt-partner-to-increase-discoverability-and-usability-of-replication-evidence>).
23. Publication of this review: Like all my reviews, I have published this review at <https://osf.io/b3pm5>.

Additional recommendations for replication studies

24. Please list all deviations from the original study so that readers can easily evaluate the replication closeness. Please discuss for each difference whether it should affect the results and possibly evaluate the replication type (e.g., close, conceptual).

PRO Initiative Statements

21. I request that the authors add a statement to the paper confirming whether, for all experiments, they have reported all measures, conditions, data exclusions, and how they determined their sample sizes. The authors should, of course, add any additional text to ensure the statement is accurate. This is the standard reviewer disclosure request endorsed by the Center for Open Science [see <http://osf.io/project/hadz3>]. I include it in every review.
22. I also suggest preregistering all future studies (e.g. on osf.io). Note, on osf.io, one can anonymize the document so blind reviewers can see it.
23. I only ever recommend accepting a paper if I have access to the full survey materials (in absence of exceptional circumstances). I recommend posting them for reviewers and readers if the authors have not already done so.