

Reply to PCIRR Stage 2 decision letter reviews #947: **Norton et al. (2007) replication and extensions**

We would like to thank the editor and the reviewers for their useful suggestions and below we provide a detailed response to each item. We also provide a summary table of changes. Please note that the editor's and reviewers' comments are in bold with our reply underneath in normal script.

A track-changes comparison of the previous submission and the revised submission can be found on: <https://draftable.com/compare/HGBSYtGIYzCL> (<https://osf.io/hnkd8>)

A track-changes manuscript is provided with the file:
PCIRR-S2-RNR-Norton-et-al-2007-rep-ext-main-manuscript-trackchanges.docx
(<https://osf.io/zxjsu>)

Summary of changes

Below we provide a table with a summary of the main changes to the manuscript and our response to the editor and reviewers:

Section	Actions taken in the current manuscript
General	R2: All minor corrections requested by the reviewer have been implemented.
Methods	R1: Statements regarding handling of missing data, and deviations from pre-registration, have been added to the manuscript (page 29).
Discussion	R1: Further consideration of significant post-hoc comparison has been provided (page 36). R2: Paragraph regarding implications of findings has been removed.
Supplementary materials	R2: R code has been updated to address issues with medmod package installation.

Note. Ed = Editor, R1/R2 = Reviewer 1/2

[We note that we are not familiar with the titles and ranks of the reviewers, and looking for that information proves tricky. To try and err on the side of caution, we refer to all reviewers with the rank Dr./Prof. . We apologize for any possible misalignments and are happy to amend that in future correspondence.]

Reply to Editor: Dr./Prof. Yuki Yamada

We asked the two peer reviewers who worked on Stage 1 to review this manuscript again. As a result, both reviewers are positive about the content reported in Stage 2. Please consider the points raised by the reviewers and make revisions to the manuscript. We look forward to receiving your revised manuscript.

Thank you for handling our manuscript and for the invitation to revise and resubmit.

Reply to Reviewer #1: Dr./Prof. Zoltan Kekecs

This is a Stage 2 registered report. After the extensive review of the Stage 1 manuscript, there is little to add here. The report seems to be very well written, and the study conducted according to the protocol. This study is a gemstone of the reforms in our field, highlighting the best practices related to study registration, transparent reporting, and reproducibility via data and material sharing. The discussion is fair and extensive, not overreaching.

Thank you for the positive and supportive opening note and the constructive feedback.

Here are a few minor points that I think might improve the manuscript:

.1. - It would be great to see a deviation report: a section describing the deviation from the preregistered protocol. If there were not deviations and the protocol was followed exactly, that should be written in the deviation report.

Thank you for this suggestion.

There were no major analysis deviations. In our analysis code, we identified one minor change to the analysis of H4-2 and made some minor changes to the original analysis code to optimize reporting and plotting.

We added a statement to the “Data analysis strategy” section:

Deviation from the Stage 1 pre-registration plan

We report no major deviations from the preregistered protocols for the data collection and analysis. During analysis after data collection, we identified and corrected an oversight in

the code for H4-2, and also optimized the code for better reproducibility, reporting, and plotting. The updated code and associated outputs are provided on the OSF.

We also added a file called “Norton-et-al-2007-real-data-analysis-v3-G-diff-from-Stage1.txt” that details the changed lined between the Stage 1 code and the Stage 2 code.

.2. - A note about missing data (or the lack thereof) would be useful.

Thank you for this suggestion. We added a statement outlining our approach to handling missing data in the “Data analysis strategy” section:

Missing data

One participant did not answer one question. We retained their response for analysis. All other participants answered all questions.”

.3. - “We conducted additional analyses and again found no indication for variations in liking depending on the number of traits presented.” –

It would be good to present some more nuance here. I agree with the authors that the results do not support the less is more effect in a linear fashion, but they found a pairwise difference (4 traits more liked than 8) which was in the expected direction at least. I think it is worth an honorary mention, even though the results overall still don’t support the previous findings.

Thank you for the feedback. We agree.

We added details to the Discussion section:

“Whilst additional analyses did not find support for variations in liking based on the number of traits presented, we note that a pairwise comparison revealed greater liking towards a target with four known traits, compared to one with eight known traits. This finding aligns with the expected direction of the “less is more” effect, though it is unclear why this effect emerged for this contrast only. Overall, our results do not consistently replicate previous findings from Norton et al. (2007). Instead, in line with prior research (Ullrich et al., 2013), our results challenge the “less is more” effect and suggest no support for the impact of knowledge on liking.”

Reply to Reviewer #2: Dr./Prof. Philipp Schoenegger

As far as I can tell, the Stage 2 report does not deviate from the registered procedure (2C, 2D). The tracked-changes manuscript also shows that no earlier section of the paper was changed (2B). As the data were collected as planned, I think that they are perfectly able to test the hypotheses as preregistered (2A), with all major conclusions being supported by the evidence (2E).

Thank you for the positive and supportive opening note and the constructive feedback.

.1. I have also downloaded the data and code from OSF and run it on my machine. I don't primarily work in R, so apologies if this is mistaken, but I think the code as it stands now doesn't properly install the medmod package from Github. However, after adding a few lines of code doing just that, the replication package runs perfectly otherwise. I then went ahead and did a spot check of a number of results from the paper: All results that I checked properly reproduced!

Thank you very much for taking your time to try and reproduce our results and we are happy to learn that it was working well.

We amended the analysis code to address this issue by checking if medmod is installed, and if not, then installing it from Github:

```
if (!require("medmod", quietly = TRUE)) {  
  if (!requireNamespace("pak", quietly = TRUE)) {  
    install.packages("pak")  
  }  
  pak::pkg_install(("raviselker/medmod"))  
  library("medmod")  
}
```

We always also provide both the code and the Rmarkdown knitted output in the form of an .html file that shows the code next to the output, and includes the citations and the versions of all used packages at the end of the file.

The new files were updated on the OSF.

.2. I don't have any additional concerns about the paper, except perhaps in the discussion section, where the following paragraph seems to make quite far-reaching conclusions that are not directly supported by the data (in fact they could not be, given the claims that are being made). I understand this is typically done in discussion sections but I'd suggest cutting this

paragraph altogether, the paper would be stronger without it: “Correcting biases such as the person positivity bias and false consensus effect may be difficult, particularly if they are unconscious. However, provided that these biases do influence our attitudes and behaviors towards others, simply having an awareness of them may be helpful in avoiding the resulting cognitive dissonance and consequent avoidance behavior during early stages of impression formation. To this extent, knowledge of these biases may help foster more meaningful connections between dissimilar individuals, facilitating opportunities to bridge divides between social groups.”

Thank you for the feedback. We agree. and removed this paragraph.

Other than that, I want to congratulate the authors on a strong replication attempt, and I’m happy to accept the paper after a small set of minor revisions found below:

Thank you, we are very grateful for your thoughtful suggestions and feedback!

.3. (Very) Minor points:

In Table one, it should be ‘Signal - X’ and not ‘Signal- X’.

The ‘Holm method’ is named after a person (Sture Holm), so the ‘H’ should be capitalised.

The name Zöe is spelled both Zöe and Zoe at different parts of the paper.

In the CRediT table, Ashleigh’s last name is not present while it is present for all other authors.

“We found no indication of order effects, and reported” should be “and report”

It should be “PhD students at the University of Kent”, not “at University of Kent”

“Consequently, our findings challenged” should be “challenge”

“supported previous research suggesting” should be “support”

“extending on their research” doesn’t quite work, it should be either “extending their research” or “building on their research”

“(n = 153; $\chi(1) = 305.9$, $p < .001$, $h = .67$ 95% CI [0.57, 0.76]).” Is missing a comma prior to “95%”

“Since we found no support for the effect on perceived similarity, we therefore concluded no support for dissimilarity cascades in impression formation” is a bit ungrammatical, it could be rephrased as either “we therefore concluded ‘no support’” or something like “we therefore concluded that there was no support”.

At several places throughout the paper, you use “Norton et al ‘s” when it should be “Norton et al’s”.

“lower levels of liking(Study 2).” has a space missing prior to (Study 2).

“Interestingly, an identical effect was found for liking, whereby liking increased between traits one and five, but plateaued from the fifth trait onwards” This is one of the few (or the only) passive constructions in the paper, I suggest making it active, i.e., “we found an identical effect for liking”.

“We found the same for each comparison (1 vs. 2 traits, 2 vs. 4 traits, 3 vs. 6 traits, 4 vs. 8 traits and 5 vs 10. traits; $\chi_s > 25.6$, $ps < .001$).” should be “vs.”, not “vs”.

LeBel et al. is referred to as both (2018) and (2019), with the correct citation being (2018),
<https://journals.sagepub.com/doi/10.1177/2515245918787489>.

“Study 2: Perceived similarity and linking by condition” should be “liking by condition”, I assume.

In Table 1, “0.14 [-0.03,0.30]” is missing a space.

“We found that more people thought they like a person more the more they know more about them” should be “would like” or some similar

construction.

“; $t(329.4) = 1.67, p = .097, d = 0.14, 95\% \text{ CI } [-0.03, 0.30]$.” is again missing a space at the very end.

“<https://doi.org/10.1037/0033-2909.116.1.75>” does not work

“Zhu, M., & Feldman, G. (2023). Revisiting the links between numeracy and decision making: Replication Registered Report of Peters et al. (2006) with an extension examining confidence. *Collabra: Psychology*, 9(1), 77608. <https://doi.org/10.1525/collabra.77608> “ there should be no period after “Feldman”.

We greatly appreciate your careful review of our work, thank you!

We addressed all of the issues listed above, and checked the manuscript to correct any other possible oversights.

LeBel et al. have two relevant articles and we use them both for different purposes. LeBel et al. (2018) is our replication closeness categorization (close to far replication), whereas LeBel et al. (2019) is the replication outcome evaluation comparing the target article’s original effects to those in our replication (consistent/inconsistent, signal, etc.). The citations were provided in the References section:

LeBel, E. P., McCarthy, R. J., Earp, B. D., Elson, M., & Vanpaemel, W. (2018). A unified framework to quantify the credibility of scientific findings. *Advances in Methods and Practices in Psychological Science*, 1(3), 389-402.

<https://doi.org/10.1177/2515245918787489>

LeBel, E. P., Vanpaemel, W., Cheung, I., & Campbell, L. (2019). A brief guide to evaluate replications. *Meta-Psychology*, 3. <https://doi.org/10.15626/MP.2018.843>