

Dear Professor Chambers,

Thank you for giving us the opportunity to revise the manuscript of the Stage 2 Registered Report. We have addressed the comments. Please find our responses below.

1. *Thank you for your Stage 2 submission. One of the original Stage 1 reviewers was available to evaluate your manuscript, and we have decided to proceed on the basis of this review and my own reading of the manuscripts*

As you will see, the reviewer judges that your submission broadly meets the Stage 2 criteria and is a strong example of a rigorous and transparently reported Stage 2 RR. There are just three points to address in a revision.

Thank you for this positive evaluation of our manuscript.

2. *The first is the rationale for the exploratory analyses ([Stage 2 criterion 2D](#)). In my reading, they make sense, but I agree with the reviewer that their rationale could be fleshed out more to make their purpose crystal clear to readers. The reviewer also suggests deploying drift diffusion modelling as part of these exploratory analyses. On this point, I agree that this approach could offer some very interesting insights. At the same time, I also think the analyses as reported are sufficient to justify the conclusions, so I will let you be the judge of how to respond to this idea. Under PCI RR rules, at Stage 2 the scope for requiring additional exploratory analyses is (by design) highly constrained, unless the reviewers/recommenders judge that such analyses are necessary to justify the conclusions being drawn (a circumstances which does not apply in this case).*

The exploratory analysis is partially motivated by reviewers' comments at Stage 1, where they suggested performing a mixed effects regression to account for both item-level and participant-level variability. Adding the analysis allows readers who wonder about the effects of such variability to see that it does not influence the pattern of results, as the results of the two analyses (confirmatory and exploratory) are broadly aligned. At the same time, we had reasons to stick to the original analysis plan as the confirmatory analysis because it allowed us to make comparisons with previous research and answer critical questions about competing theoretical accounts of word recognition memory.

Additionally, the RT analysis is included in the exploratory analysis for the following reason: there is not a lot of research on RT effects in recognition memory, so we did not have predictions regarding the effects, but we thought that adding the results would be a useful contribution for other researchers who are interested in investigating the timecourse of memory processes.

We added the details of the reasoning behind the two exploratory analyses on p. 24.

3. *Second, I would be grateful if you could update the study design table (p35) to add a column on the far right called "Observed outcome", which summarises in very basic terms whether the hypothesis was confirmed or disconfirmed in each row. This will provide a helpful overview for readers and can assist in future systematic reviews. Please also give this table a name and caption.*

The table has been updated to include an "Observed outcome" column.

4. *Finally, in the section 'Ethics and Consent' you note that "All materials, anonymised data, analysis code and full results are available on the Open Science Framework at <https://osf.io/3ct7h/>". This link points to the Stage 1 registration made by PCI RR but doesn't contain any materials, data or code. I believe the correct link to include here is this one: <https://osf.io/hqd2m/> so please adjust as necessary.*

The link (p. 12) has now been updated.

5. *Overall, the authors stuck to their plan and report the results in an unbiased way. The discussion is aligned with the results and offers speculations on those that are not predicted by the hypotheses.*

We thank the reviewer for the positive evaluation of the work.

6. *I am unsure what the exploratory results add. Maybe the authors could explain this a little more. In this regard, it may be more interesting to perform drift diffusion modelling on the RT data. In addition, the authors may gain insights from computing the decision criterion in addition to d -prime. These are of course just some suggestions and the stage 2 RR can of course be published as is, if the authors wish. I see no deviations from the stage 1 plan that would necessitate a revision.*

As mentioned in response to point 2 above, we have added more details on why the exploratory analyses were employed on p. 24.