

17th January 2022

Dear Prof. Dienes,

Many thanks for the opportunity to clarify the issues. Unfortunately, we believe are unable to meet the standard set by item-3 and -4 below.

3) Use an inferential procedure that can provide justification for the claim there was not an effect, i.e. the data counted against a hypothesis predicting an effect. For an overview, see <https://psyarxiv.com/yc7s5/>.

4) In the light of 3), indicate how your N was determined, and what properties this gives your statistical procedure in terms of the likelihood of results counting for or against your hypothesis (e.g. power if you are using frequentist tests; see previously cited article for overview).

The sample size for the planned study is largely based on resource constraints. However, to assess our ability to make claims about the absence of an effect, we conducted a simulation-based power analysis. Following the recommendations in Dienes (2021), we examined the lower bound of the 95% CI of the interaction effect found in one of our previous studies that is closely related to this one. This lower bound represents an effect that we believe would be theoretically meaningful, so we performed a simulation to determine how much power we could expect to have to detect an effect of that size. We found that the planned sample size would provide quite poor power to detect such an effect (i.e., 15.40%), and as such, it would be extremely demanding in terms of resources to recruit enough participants to be adequately power for this effect. Unfortunately, we do not have the resources to possibly obtain evidence of no effect. Thus, unless there is the possibility of proceeding with a registered report despite this limitation, we regretfully have to withdraw the proposal. For example, the proposal might be explicitly framed as exploratory work—one that may count toward identifying a point estimate for future confirmatory work.

1) Include a Study Design Template in the main manuscript. See here for details:

https://rr.peercommunityin.org/help/guide_for_authors#h_27513965735331613309625021

This involves creating a table aligning specific theoretical questions with hypotheses with the specific statistical test that will test that hypothesis, and the conditions under which support will be inferred for the hypothesis, or rather the results will actively count against the hypothesis.

We have now included a study design template on page 18 of the manuscript.

2) Make sure you remove all analytic flexibility from the analysis plan. Thus, be clear how convergence will be assessed, precisely when it will be decided to not have not occurred; precisely when parameters, like random slopes, will be dropped, etc.

We have now edited the analysis plan to remove all the flexibility we are aware of.

Sincerely,
Authors