Reply to PCIRR Stage 2 decision letter: Peters et al. (2006) replication and extension

We would like to thank the editor and the reviewers for their useful suggestions and below we provide a detailed response as well as a tally of all the changes that were made in the manuscript. For an easier overview of all the changes made, we also provide a summary 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/GTzBAFiiaioY

A track-changes manuscript is provided with the file: PCIRR-S2-RNR-Peters-etal-2006-replication-extension-main-manuscript-v2-G-trackchanges.docx"

Response to Editor: Prof. Chris Chambers

One of the original Stage 1 reviewers was available to evaluate your Stage 2 submission, and I have decided that we can proceed on the basis of this assessment and my own reading of the manuscript. As you will see, the reviewer is positive about your completed study, while offering some suggestions for revisions to clarify specific points and correct minor errors. I agree with the reviewer's evaluation and I anticipate being able to accept your manuscript without further review following a round of revision.

Thank you for the reviews obtained, your feedback, and the invitation to revise and resubmit.

Response to Reviewer #1: Dr./Prof. Elena Rusconi

The authors did a very thorough, clear and comprehensive job, the Stage 2 report is to the point, well organised and delivers a clear message. I am happy to recommend publication pending a few minor revisions.

Thank you for taking the time to review our manuscript again and providing us with detailed, thoughtful, and valuable feedback. We have addressed each of the issues you raised in our revision.

Methods: a typo in the Power Analysis section (between-subjective).

Thank you for the reminder. We corrected the typo.

Page 22: consider splitting this sentence into two and clarifying what you mean esp. with "when some studies replicate successful whereas others do not".

Thank you, we can see how this might not have been clear enough, We appreciate the nudge to improve on this framing.

We changed it to:

The methodology is especially powerful in addressing potential concerns about the target sample (e.g., naivety and attentiveness), such as when some studies in the target article replicate successfully whereas others from the same article do not, which suggests that it is likely the failed study that is the cause for the failure rather than the participants' characteristics. This methodology also allows for examining possible links between the different studies and the consistency in participants' responding to similar decision-making paradigms.

Table 7: Extension dependent variable "How confident are you that you made an accurate assessment of the five students?" pls check (this appears to belong to Table 4)

Yes, thank you for spotting that, appreciated. We corrected the sentence to:

"How confident are you that you made an accurate assessment of the bet's attractiveness?"

We also went through the manuscript and spotted several other minor oversights, which we corrected in the revision.

Page 28: "the target article ran data collection for each of the studies separately using pencil and paper". I agree this is most likely – it does seem to contradict your previous Table where sample characteristics are reported and "pencil and paper" is only indicated for Study 1.

Yes, thank you for pointing out this oversight. Indeed, only Study 1 reported the method using pencil and paper. We rewrote the sentence to:

"The target article ran data collection for each of the studies separately, and reported using pencil and paper in Study 1 (Studies 2, 3, and 4 not reported)."

Results: I find the main deviation from the original plan (i.e. analyses conducted without previously planned exclusions) to be justified and functional to the objective of this work, given that the analyses with exclusions have also been provided.

Thank you.

Page 33: replication, dichotomised numeracy - interaction effect for study 1; after reporting a significant interaction, the authors "concluded support for the hypothesis that the less numerate..." however at this point we do not really know in what direction the interaction is going; it may be useful to provide planned contrasts, or means and stdev for each numeracy group (although this was not done in the target paper), and/or refer to Figure 1 (as in the target paper).

Thank you, great point and suggestion.

We provided the means and standard deviations for the each numeracy group for Study 1, 2 and 4 in the supplementary materials (Table S17). We also added one guided sentence in page 34:

"Further, we provided the descriptives of each subgroup analyzed of the following ANOVA tests in the supplementary materials (Table S17) to elaborate on the interaction effects."

In addition, we also referred each study to the corresponding figures.

Figure 1: in addition to providing exact p values, it might be useful to provide significance levels with reference to a standard threshold in the legend for better readability (the same observation applies to the following figures)

The plots were created with ggstatsplot which is rather limited in the ability to customize things like p-values formatting. In those figures all the p values reported for supported findings were very low p-values (p < .001).

General evaluative statements about the replication and extension outcomes are repeated throughout the Tables, the Results and Discussion sections - consider limiting these statements to where they are most necessary.

We appreciate the general feedback, though we were not sure how to best implement that in practice in our revision.

We meant the different sections to serve a different purpose. The tables were meant to summarize the text and present readers with a concise clear to understand overview of the results. We tried to keep the discussion concise but to have enough information to allow readers to not have to go back and forth to the results section.

We were worried that without any specific guidance or requests, any changes that we make would hinder readability. We would be very happy to revise further given an example or clear editorial guidelines on what to cut or keep.

The discussion is largely descriptive, concise and coherent with the reported results. Several limitations have been identified, which can be useful for future research.

Thank you.