

Dear Corina Logan and Chris Chambers,

Thank you once again for the opportunity to revise our Stage 1 manuscript.

We agree with Point 9 from Reviewer 4 regarding the many forms that a preregistration can take and the potential for this to influence our findings. We also agree that this is important to address this complexity given that one of our outcome measures specifically focuses on statistics and research methods knowledge.

We believe, however, that requiring participants to upload a PDF of their preregistration could cause some unintended consequences. First, we are concerned that this would lead to attrition/participant withdrawal at Time 2 if participants believe that we might check and/or evaluate their preregistration. We are also concerned that participants may simply skip this question due to additional effort of finding their preregistration link and copying this over. With the relatively large sample we require from Time 1 to Time 2, we do not wish to introduce any questions that may lead participants to drop out and lower the statistical power of our proposed analyses.

We do fully agree that this concern needs to be addressed, and that we should only include participants in our analyses who preregistered both their research questions and analysis plans (eg., as required by the standard OSF template and aspredicted.org).

We therefore propose that instead, we will ask students to self-report the specific features of their preregistration at Time 2. Students will now self-report features of their preregistration from a list taken from the OSF standard preregistration template (see revised materials here: <https://osf.io/wgka5/>). This will allow us to report more concrete data about the nature of students' preregistrations. It will also allow us, as you suggest, to remove participants at Time 2 whose preregistration does not contain an analysis plan. We make this change explicit in the manuscript on p. 18:

We will also ask participants at Time 2 to identify what features their preregistration included from a list. This list will include 14 items taken from the Open Science Framework standard preregistration template (Bowman et al., 2020), including items such as “Information about study background”, “testable hypotheses”, “design plan”, and “sample size”. Crucially, one item will be “data analysis plan”. Any participant who does not indicate that a data analysis plan was included in their preregistration will be removed from the study. The rest of this preregistration data will only be used descriptively in our study.

In line with this, we have also updated the inclusion criteria in the manuscript on p. 12:

To be included in the preregistration group at Time 2, participants must indicate that their preregistration included a ‘data analysis plan’ (see Time 2 measures).

We hope this addresses this concern and we believe this addition makes the methodology robust .

Sincerely,

Madeleine Pownall, Charlotte Pennington, Emma Norris, and Kait Clark,