

GLES Open Science Challenge 2021 – Guidelines For Reviewers

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A Registered Report is a form of an empirical research article in which the methods and proposed analysis are pre-registered and reviewed prior to data access. Manuscripts are provisionally accepted for publication before data access commences. This format is designed to minimize publication bias and research bias in hypothesis-driven research, while also allowing the flexibility to conduct exploratory (unregistered) analyses and report serendipitous findings.

The review process for Registered Reports is divided into two stages. At Stage 1, reviewers assess study proposals before data are accessed. At Stage 2, reviewers consider the full study, including results and interpretation.

Conflicts of Interest: Before accepting the invitation to review a manuscript, the reviewers are asked to disclose any potential or known conflicts of interest. Conflicts of interest are assessed on a case-by-case basis.

1. Stage 1 Review

Stage 1 manuscripts are created prior to data access and therefore, include all parts of a manuscript except for result and discussion sections. In considering papers at Stage 1, reviewers will be asked to assess the complete manuscript as they would review a regular submission (e.g., the relevance of research question, theoretical argument, included literature, etc.). In addition, they should put particular emphasis on:

- The completeness of the literature review and existence of a research gap
- The logic, rationale, and plausibility of the proposed hypotheses.
- The soundness and feasibility of the proposed research design, concept operationalization, variables selected, and statistical method of data analysis.
- Whether the proposed analysis offers an adequate and appropriate test of hypothesis.
- Whether the clarity and degree of methodological detail are sufficient to replicate exactly the proposed data analysis.
- Whether the authors have pre-specified sufficient statistical tests for ensuring that the obtained results can test the stated hypotheses, including outcome-neutral tests, robustness, and quality checks.

Following Stage 1 review, manuscripts will be in-principle accepted, offered the opportunity to revise, or rejected outright (and IPA or rejected after revision). Manuscripts that pass peer-review will be issued an in-principle acceptance (IPA), indicating that the article will be published pending successful completion of the study according to the pre-registered methods and analytical procedures, as well as a defensible and evidence-based interpretation of the results.

2. Stage 2 Review

Following completion of the study, authors will complete the manuscript, including the Results and Discussion sections. These Stage 2 manuscripts will more closely resemble a regular article format. In considering papers at Stage 2, reviewers will be asked to assess:

- Whether the Introduction and Theoretical Background, as well as the stated hypotheses and analysis plan, are the same as the approved Stage 1 submission (required). Deviations from the Stage 1 Introduction and Methods section, in general, must be minor (e.g., the addition of newer citations) and in no way inconsistent with the Stage 1 manuscript. If there are any deviations from the original manuscript, assess whether they are made transparent and sufficiently justified.
- Whether the data are suitable for testing the authors' proposed hypotheses in terms of conforming to the approved outcome-neutral criteria (such as the absence of floor and ceiling effects or success of positive controls or other quality checks). Failure to pass these conditions may lead to manuscript rejection.
- Whether the authors adhered precisely to the registered data analysis procedures.
- Where applicable, whether any unregistered analyses are justified, methodologically sound, and informative.
- Whether research data and visualizations contain any major flaws, such as insufficient data points, statistically non-significant variations, and unclear data tables.
- Whether the authors' conclusions are justified given the data.

Please note that editorial decisions will not be based on the final empirical results. Reviewers at Stage 2 may suggest that authors report additional post hoc tests on their data; however, authors are not obliged to do so unless such tests are necessary to satisfy one or more of the Stage 2 review criteria.

3. Structure of Review

Reviews are submitted via the editorial manager. To assist in your review process, we provide the following structure and categories to help organize your assessment. In writing your review, please include page numbers and page lines, if available, when citing specific content for revision.

Executive summary and comments for the editorial team

In this paragraph, please include your overall assessment and whether your decision is rejecting, revise and re-submit, or acceptance.

Reviewers' comments to the authors

In this section, please write your review for the authors. Please do not include your decision here.

If you have any questions or informal inquiries please do not hesitate to contact the <u>Editorial</u> <u>team</u>.