

Reviewing Guide

Thank you for participating in post-reviewing a paper.

You will have three goals when evaluating the paper using these guidelines: **quantitative assessment**, **narrative digest** and **forward thinking questions**.

Quantitative assessment

Use the rubrics in the table below to assign ratings (ranging from 1 to 7) to various aspects of the paper you are evaluating. You do not need to articulate your decision in this part of the evaluation process.

Rubric Explanation

- **Items:** The aspect of the paper you are estimating in each rubric can be found in the “items” column.
- **Additional notes:** details about the things we want you to pay the most attention to.
- **Scale:** For every item, please rate the quality of the particular aspect of the paper on a scale from 1 to 7. The examples of lowest (terrible quality) and highest (fantastic quality) ratings are provided in the table for each rubric.

If a study contains multiple experiments – your assessment should reflect the quality of the experiment with the lowest quality. A paper with 4 amazing experiments and 1 terrible experiment should receive low scores on the review. The rationale here is that if the initial study produced flawed and biased results, building follow-up studies on such basis can lead to flawed and biased results even if the quality of the follow-up studies is high.

There is an exception to this rule, however! If the authors seem aware of the limitations of the original study and are attempting to refine their method in study 2, 3, etc. - you can disregard the low quality of the original study when giving the final evaluation and only consider the revised methodology.

Digest of the Paper

How would you describe the results of the paper? Please write an easy-to-digest summary of the paper below. Your summary should be understandable by a non-scientist. Imagine talking about the results to a person without a graduate degree—your friend, family member, or a stranger sitting next to you on a plane. How would you describe the study to that person? We recommend answering the following points by 1-2 sentences each:

- **Question:** What are the authors trying to figure out? What did the authors think would happen?
- **Rationale:** Why did the authors think that way? Were the previous studies in the field pointing at this prediction?
- **Results:** What did the authors find out? Explain the pattern of the key results.
- **Conclusion & implications:** Why do the results matter to the society?

Verdict (1-2 sentences each)

- What is the strongest part of the paper? Something they did right in your opinion.
- What is the weakest part of the paper? Something they did wrong in your opinion.

Forward Thinking Questions

What are the questions you had while reading the paper? Please break down your questions into conceptual questions and method questions (1 each):

- Conceptual questions: questions about broader implications for society and science (e.g., would the results extend to explain a certain process in the world? Would concept from another literature explain the results and should we consider this connection?). Often these questions assume that the results are true.
- Method questions: questions about the methodology used in the results. (e.g., Is the method used in the study appropriate to test this hypothesis? Would it be helpful to run an additional analysis to look at the obtained data at a different angle?)

Note that questions will be posted on ResearchHub with your name. You will earn RSC if people answer your questions.

Rubric

Item #	Section	Items	Additional notes	Low-end of the scale (1)	High-end of the scale (7)
1	Title	How informative and appropriate is the title?	The title should match the content of the paper and should never be misleading	Has nothing to do with the actual content of the paper	Concise, elegant, matches the content perfectly
2	Abstract	How well are the key findings summarized in a narrative form?	How well does the abstract reflect the actual content of the paper? Is it accurate and concise or confusing and misleading?	Confusing and misleading	Accurate and concise
3	Introduction : previous studies	How thoroughly are the relevant contemporary studies summarized? Is their relevance explained?	Did the authors adequately set the stage for their study?	No theoretical background provided whatsoever	Provided summary is complete and intuitively leads to the current study
4	Introduction : research question	Is the focal research question clearly laid out in the introduction?	Ideally hypotheses should be explicitly spelled out	No research question or hypotheses mentioned	The research question and hypotheses are clearly stated
5	Method: sampling (overall)	How well are the sampling specifications stated?	Initial sample size (+exclusions), basic demographic details, when and how participants were recruited?	No details about sampling	Sample size, demographics, sampling procedure, and exclusion criteria are described in detail

6	Method: conditions	How explicitly is the design stated? Are the resulting conditions listed and described?	Do the authors specify the design explicitly, with detailed descriptions of experimental conditions?	Unclear study design	Design and conditions are described sufficiently and in detail
7	Method: procedure	How thoroughly is the procedure described?	Is the reader guided through the timeline of what activities participants engaged in (and in what order)? Are the properties of the stimuli materials (and used devices if relevant) stated? Would one be able to perfectly reproduce the study using this information?	Unclear procedure description	Extremely detailed and thorough description of the procedure in its entirety
8	Results: analytic strategy	How well is the analytic strategy described?	Do the authors state what analyses were performed to test the hypotheses? What was the rationale behind their choice? Does their analytic strategy seem appropriate to the design? Was the data preprocessed in any way (averaging, outlier exclusion, etc.)? Why and how?	No commentary on the conducted analyses, no rationale, no preprocessing details	The conducted analyses, rationale, and preprocessing details are all clearly stated
9	Results: analyses output	How well are the results of the statistical analyses described?	Were all the relevant statistical analyses test results reported for each corresponding primary outcome? Was the effect size estimate reported alongside the significance test results?	No analyses results reported	Analyses results reported in great detail

10	Discussion: hypotheses	How well do the authors articulate whether the data supported the hypotheses or not?	A statement of support or nonsupport for all hypotheses, whether primary or secondary is expected	No statements addressing whether the hypotheses were supported or not by the data	Explicit statements for all hypotheses whether they are supported or not
11	Discussion: relation to other studies	How well are the results discussed in the context of relevant contemporary studies?	Do the authors discuss the similarities and differences between reported results and other work in the field?	No references to other studies	Thoughtful and insightful discussion encompassing major contemporary findings
12	Discussion: limitations	Are the limitations of the paper discussed in sufficient detail?	Do the authors discuss the limitations of their study? What would they do differently in the ideal circumstances if they had a chance?	Limitations not discussed	Limitations of the study are openly revealed and potential improvements for follow-up research are discussed
13	Discussion: implications	Are the implications sufficiently explored?	Do the authors discuss the implications of the results for future research, programs, or policies?	Implications not mentioned	Implications are carefully and thoughtfully discussed