
How to write effective peer review comments: Some key points and a checklist

Richard Harris and John Zepernick, MS

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Peer review plays a crucial role in academic publishing, serving as an essential check on research quality and integrity. As a reviewer, your feedback not only helps shape the manuscript for publication but also guides authors in improving their work. Thoughtful, well-organized comments make the process more effective and ensure that an

authors' paper can fully benefit from your review.

Researchers who are selected as peer reviewers are given a unique responsibility, and this can be a daunting task, especially if you are reviewing a paper for the first time or doing the review in English as a second language. Luckily, there is a wealth of information guiding newly appointed reviewers — in fact, we've discussed peer review comments a few times, from the perspective of both [authors](#) and [reviewers](#). In this short featured article, we provide some more specific guidance for would-be reviewers. We've also prepared a checklist including important considerations when constructing helpful, clear, and actionable reviewer comments.

[Download the peer review comment checklist here](#)



Structuring your comments

A well-organized, structured approach to feedback ensures that both the editor and the authors receive the most relevant and actionable points. Start with a confidential comment to the editor, where you can express any concerns or provide context that will not be shared with the authors. Follow this with general comments to the authors, stating your overall recommendation (accept, reject, or revise) and your initial impressions of the paper.

A typical approach is to categorize your comments to the authors according to their degree of importance. *Major comments* should focus on critical issues such as methodology, data interpretation, or missing elements that could significantly impact the study's validity. In contrast, *minor comments* are for smaller adjustments like clarifying sentences, correcting typos, or improving the presentation of figures or tables.

General guidelines

Begin your review by summarizing the paper and giving your overall impression. Does the manuscript fit within the scope of the journal, and is it written clearly? Consider how the research contributes to the field and whether it encourages future studies. Don't forget to reflect on conflicts of interest that might influence your decision.

When making your recommendation, be as specific as possible. Does the paper need major revisions or just minor edits? Is the work ready for publication, or should it be rejected due to fundamental flaws?

It's a good idea to organize your comments section by section. This can help ensure that each section contains the necessary information. Start with the title, then move along to the abstract, the introduction, and so on. Grouping comments this way can help both you and the authors keep track of your recommendations and provides a clear framework for where changes need to be made.

Title and abstract

The title should accurately reflect the content of the manuscript. If you feel that it doesn't, suggest adjustments.



Similarly, the abstract must succinctly summarize the paper, including key details and conclusions while avoiding unnecessary information. If these sections don't align with the main text, provide suggestions for improvement.

Some important considerations here:

- Do the title and abstract correctly reflect the topic and summarize the study?
- Are all important details and conclusions included in the abstract?
- Are there any unnecessary or unimportant details in the abstract?

Introduction

The introduction should set the stage for the study, identifying gaps in the literature and clearly stating the research question or hypothesis. As a reviewer, assess whether the background provided is thorough and whether the rationale for the study is convincing. If the introduction is missing key references or does not highlight the novel aspect of the research, these are points to address in your comments.

Some important considerations here:

- Is the background to the study adequately described?
- Have the authors identified any gaps in the literature?
- Is the novelty or importance of the study highlighted?
- Have the authors clearly stated an aim, research question, or hypothesis?

Methods

A well-written Methods section contains sufficient details for readers to fully understand the results and for those results to be reproducible. Reviewers should check for sufficient detail and clarity in describing the methodology and whether appropriate statistical tests were used. If you notice missing information, such as how sample sizes were determined, be sure to point this out.

Some important considerations here:

- Are enough details given so that the methods can be reproduced and the results interpreted?



- Does the study include statistical analysis, and if so, have the authors clearly described the statistical methods used (sample size, tests, significance level, etc.)?
- Are the methods used appropriate?

Results

The Results should logically follow from the Methods and be presented clearly, with appropriate use of tables and figures. If any results seem out of place or unsupported by the methods, these should be noted in your feedback.

Some important considerations here:

- Is there a logical flow to how the results are presented?
- Are there any results that do not seem to have a corresponding method described in the Methods section (or vice versa)?
- Is the number of figures and tables excessive, and are these clear?

Discussion

The Discussion should summarize the main findings, relate them to the existing literature, and identify any strengths or limitations of the study. Are the authors too speculative in their conclusions, or do they effectively tie their results to their hypothesis? Highlight both strong points and areas where more balanced discussion is needed.

Also be sure that the authors have considered and discussed any limitations of their study – have they missed any? The main text should conclude with a brief summary of the study, often as a final paragraph of the Discussion or as a separate Conclusions section.

Some important considerations here:

- Does the Discussion summarize the main findings without simply repeating the results?
- How are the findings discussed in relation to the existing literature?
- Have the authors listed the specific strengths or limitations of their study?
- Have the authors clearly addressed the aim, research question, or hypothesis established in the Introduction?



References

Finally, you should ensure that the references are up to date and relevant. If any key studies are missing or if the references seem skewed, this is important to point out.

Some important considerations here:

- Are any key studies missing?
- Do the authors overly rely on out-of-date sources?
- Are the sources balanced, or do they paint a skewed view of the literature?

Summary

Providing helpful, well-structured reviewer comments is an essential part of the peer review process. Your feedback not only helps improve individual manuscripts but also upholds the integrity of scientific research. By using a clear framework and offering both major and minor suggestions, you contribute to a more robust and reliable body of academic literature.

We cover the points discussed above and more in our [reviewer comment checklist](#), which prospective reviewers can use to help structure their feedback. Of course, if you have any remaining questions about the peer review process or would like further guidance, feel free to [contact us](#) directly.

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