How to conduct a review

1- Before you begin

Before you accept or decline an invitation to review, consider the following questions:

- Does the article match your area of expertise? Only accept if you feel you can provide a high-quality review.
- Do you have a potential conflict of interest? Disclose this to the editor when you respond.
- Do you have time? Reviewing can be a lot of work – before you commit, make sure you can meet the deadline.
- Do you need to find out more about reviewing and the peer review process? If so, check out the free tutorials on the Elsevier Researcher Academy, especially the Certified Peer Reviewer course.

Respond to the invitation as soon as you can (even if it is to decline) – a delay in your decision slows down the review process and means more waiting for the author. If you do decline the invitation, it would be helpful if you could provide suggestions for alternative reviewers.
Methodology

If the manuscript you are reviewing is reporting an experiment, check the methods section first. The following cases are considered major flaws and should be flagged:

- Unsound methodology
- Discredited method
- Missing processes known to be influential on the area of reported research
- A conclusion drawn in contradiction to the statistical or qualitative evidence reported in the manuscript

For analytical papers examine the sampling report, which is mandated in time-dependent studies. For qualitative research make sure that a systematic data analysis is presented and sufficient descriptive elements with relevant quotes from interviews are listed in addition to the author’s narrative.

Research data and visualizations

Once you are satisfied that the methodology is sufficiently robust, examine any data in the form of figures, tables, or images. Authors may add research data (https://www.elsevier.com/authors/author-resources/research-data), including data visualizations (https://www.elsevier.com/authors/author-resources/data-visualization), to their submission to enable readers to interact and engage more closely with their research after publication. Please be aware that links to data might therefore be present in the submission files. These items should also receive your attention during the peer review process. Manuscripts may also contain database identifiers or accession numbers (e.g., genes) in relation to our database linking program (https://www.elsevier.com/authors/author-resources/research-data/data-base-linking).

Critical issues in research data, which are considered to be major flaws can be related to insufficient data points, statistically non-significant variations and unclear data tables.

NB for certain types of visualization, preview tools are available, allowing you to inspect how files will display on ScienceDirect if the manuscript is accepted. For other data visualizations, there may be other ways of inspecting the files (https://www.elsevier.com/authors/author-resources/data-visualization).

Ethical considerations

Experiments including patient or animal data should properly be documented. Most journals require ethical approval by the author’s host organization. Please check journal-specific guidelines for such cases (available from the journal’s homepage, accessible via the journal catalogue (https://www.elsevier.com/catalog?producttype=journal).
If you don’t spot any major flaws, take a break from the manuscript, giving you time to think. Consider the article from your own perspective. When you sit down to write the review, again make sure you familiarize yourself with any journal-specific guidelines (these will be noted in the journal’s guide for authors).

3. Structuring your review

Your review will help the editor decide whether or not to publish the article. It will also aid the author and allow them to improve their manuscript. Giving your overall opinion and general observations of the article is essential. Your comments should be courteous and constructive, and should not include any ad hominem remarks or personal details including your name (unless the journal you are invited to review for employs open peer review).

Providing insight into any deficiencies is important. You should explain and support your judgement so that both editors and authors are able to fully understand the reasoning behind your comments. You should indicate whether your comments are your own opinion or are reflected by the data and evidence.

Checklist

The journal for which you are reviewing might have a specific format (e.g. questionnaire) or other instructions for how to structure your feedback. Below are some general tips on what to include/consider if no other guidelines apply. View the checklist here.

Here is an example of a published peer review report.

Your recommendation

When you make a recommendation, it is worth considering the categories the editor will likely use for classifying the article:
2- Managing your review

Confidential material
If you accept, you must treat the materials you receive as confidential documents. This means you can't share them with anyone without prior authorization from the editor. Since peer review is confidential, you also must not share information about the review with anyone without permission from the editors and authors.

How to log in and access your review
Your review will be managed via an Elsevier submission system such as Editorial Manager (https://service.elsevier.com/app/answers/detail/a_id/28465//supporthub/publishing/~/how-can-i-submit-my-review-in-editorial-manager%3F/). Elsevier journals use different submission systems so there is no one generic login link.

To access the paper and deliver your review, click on the link in the invitation email you received which will bring you to the submission/reviewing system.

How do I submit a review in EVISE?

Journal-specific instructions
When you sit down to write the review, make sure you familiarize yourself with any journal-specific guidelines (these will be noted in the journal's guide for authors available on each journal's homepage (/catalog)).

First read the article. You might consider spot checking major issues by choosing which section to read first. Below we offer some tips about handling specific parts of the paper.
Bear in mind that there will be the opportunity to direct separate comments to both the editor and author. Once you are ready to submit your report, follow the instructions in the email or visit our support center if you encounter any difficulties.

Access the support center for further help

The final decision

The editor ultimately decides whether to accept or reject the article. Elsevier plays no part in this decision. The editor will weigh all views and may call for another opinion or ask the author for a revised paper before making a decision. The submission system provides reviewers with a notification of the final decision, if the journal has opted in to this function.

4. After your review

Once you have delivered your review, you might want to make use of Elsevier's reviewer recognition platform to ensure that you receive credit for your work. The platform provides a private profile page, certificates, editor recognition as well as discounts for Elsevier services.

If you make use of the Mendeley profile, your reviewing activities will be automatically captured. Your profile will display your reviewing history and thus demonstrate your input to the peer review process as well as detailing your own articles, positions and editorial work.
Do not forget that, even after finalizing your review, you must treat the article and any linked files or data as confidential documents. This means you must not share them or information about the review with anyone without prior authorization from the editor.

Finally, we take the opportunity to thank you sincerely on behalf of the journal, editors and author(s) for the time you have taken to give your valuable input to the article.

Tools and resources

General resources

- Free Certified Peer Reviewer course on Researcher Academy (https://researcheracademy.elsevier.com/navigating-peer-review/certified-peer-reviewer-course)
- Peer review Public Library of Peer Review Studies group (https://www.mendeley.com/community/peer-review-resources/)

Useful articles from Reviewers’ Update

- Ten tips for a truly terrible peer review (https://www.elsevier.com/connect/reviewers-update/ten-tips-for-a-truly-terrible-peer-review)
- An early career researcher’s take-home tips on peer review (https://www.elsevier.com/reviewers-update/story/career-tips-and-advice/an-early-career-researchers-take-home-tips-on-peer-review)
- Your top tip to (potential) authors (https://www.elsevier.com/reviewers-update/story/tutorials-and-resources/your-top-tip-to-potential-authors)
- A reviewer’s guide to ethics in publishing (https://www.elsevier.com/reviewers-update/story/publishing-ethics/a-reviewers-guide-to-publishing-ethics)