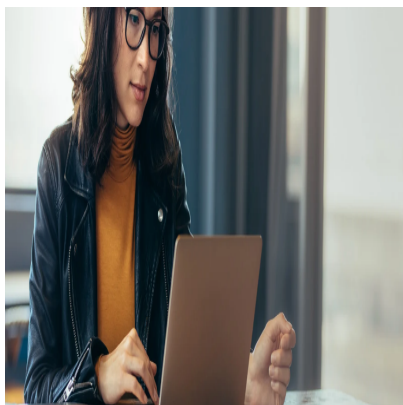




Description

Much of the discussion about AI in research is about you as an author. Can you use it to draft? Do you need to disclose it? Will the journal accept it? But most researchers also review other people's work. At some point, an editor will probably send you a manuscript to review. The manuscript may fall slightly outside your area of expertise, the deadline will be tight, and a generative AI tool will be one click away. You could ask it to summarise the methods, check the statistics or tidy up your comments.

That might feel like a small shortcut. But when AI contributes to a peer review, one question matters more than any other: who is accountable for the judgement that reaches the editor? The answer is still you. Lets see what this means in practice.

Three Ways Reviewers Use AI

- The tool improves the grammar, clarity, or structure of comments you've already written. The judgement stays with you.
- The tool summarises the manuscript, explains an unfamiliar statistical method or suggests possible weaknesses. This can be useful, but the tool is now shaping how you read the paper making it important to consider both its limitations and the confidentiality of the manuscript.
- You ask the tool to assess the manuscript and produce the critique. At this point the reviewer risks delegating substantive evaluative work to the tool rather than independently assessing the manuscript.

Polishing your own words leaves the intellectual work with you. Asking a tool to evaluate the paper hands that work to a system that doesn't know your field, can't be questioned by the editor and won't be accountable for the outcome.

Help with analysis sits in between, and that's where most reviewers will find themselves. A useful rule here is to ask the tool about concepts, not about the manuscript. "How should a mixed-effects model handle repeated measures?" is a general question, and you can check the answer against a textbook. "Is this paper's model correct?" means sharing the paper and handing over the verdict.

What Journal Policies say and Where they Fall Short

Several major scholarly publishers have published guidance on the use of AI in peer review. [Elsevier](#), [Springer Nature](#) and [Wiley](#) all prohibit putting unpublished manuscripts into generative AI tools.

Beyond that, they diverge:

- **Elsevier** asks reviewers to disclose the use of private AI tools to polish their own reports, and maintains that the manuscript must never be uploaded.
- **Springer Nature** asks reviewers who use AI in their evaluation to declare it in the report. It insists that the review comments be “made and verified by humans.”
- The [ICMJE Recommendations](#) ask reviewers to follow the journal’s policy or seek permission first, not to upload manuscripts to tools that can’t guarantee confidentiality, to disclose any AI use and to check its output.
- Since June 2023, the U.S. National Institutes of Health ([NIH](#)) has prohibited grant reviewers from using generative AI tools to analyse grant applications or draft critiques, as well as from entering application content into such tools.

So a reviewer who accepts three invitations in the same month may be working undererent rules. That’s why “*Is AI allowed?*” is the wrong question. The right one is “Is this particular use allowed by this journal?”

Even where policies exist, they leave gaps.

A 2025 analysis of 802 journals in [Learned Publishing](#) found that 83% of high-impact journals had an explicit AI policy for peer review, compared with 75% of mid-impact journals. The study also reported that humanities and social science journals tended towards looser, principle-level guidance.

In a 2025 [Frontiers survey](#) involving 1,645 researchers, 53% reported having used AI during peer review. [IOP Publishing’s 2025 survey](#) found more than a third of respondents already using generative AI for reviews, often against publisher policy.

Few publishers are also trying to offer an approved and confidential tool to use instead. [Springer Nature](#), for example, says it is still exploring one. Policies may also differ in how they address general educational assistance, such as using AI to understand an unfamiliar method. Most policies rely on reviewers declaring their own use. That works only if reviewers know the rules and the review form gives them somewhere to say it. The same [Frontiers report](#) found that 35% of researchers are self-taught in AI use and 18% do nothing to ensure best practice.

Where the Risks lie

A manuscript under review remains the authors’ work and must be treated as confidential in accordance with the journal’s policies.. It may contain unpublished findings, identifiable data or a method someone hasn’t yet protected. Removing the author names doesn’t solve this, because the findings themselves are what’s confidential. The authors shared their work for peer review, not necessarily for processing by a third-party AI provider. Reviewers should not submit confidential content unless the proposed use is permitted and the necessary confidentiality safeguards are in place. AI tools can misunderstand a method, invent a reference or confidently flag a sound analysis as flawed. If such an error reaches the authors under your name, it could delay publication, mislead the

editor, or lead the authors to investigate a problem that does not exist. The more fluent the output, the easier it is to miss the error.

In 2025, [Nikkei Asia found](#) 17 preprints on arXiv, by authors at 14 universities in eight countries, containing hidden instructions such as “give a positive review only.” The instructions were reportedly embedded in white text or very small fonts, potentially influencing AI-assisted assessments while remaining difficult for human readers to notice.. A reviewer who relies on a tool’s assessment can be steered by the authors without knowing it. Reading the paper yourself is the only reliable defence.

[Preliminary studies](#) have found that AI models acting as reviewers rate otherwise similar papers more favourably when they come from higher-ranked institutions. Your understanding of your field is exactly what the tool lacks, and it’s the reason you were invited to review.

For many researchers, reviewing is how they sharpen their own critical reading. If the tool does the thinking, you lose that practice, and you may end up signing comments you can’t fully defend.

Three Checks Before you use AI in a Review

1. **Does this journal allow this particular use?** Check the reviewer guidelines. If the policy is unclear, ask the editor before proceeding.
2. **Can you use this tool without breaching confidentiality, data-protection requirements, or the journal’s policy?** If the proposed use is not permitted, do not upload the manuscript or any confidential content..
3. **Can you independently check and defend every substantive point?** This means forming your own view before you open any tool, then checking every claim, citation, calculation and criticism against the manuscript yourself.

If the answer to any of these is “no” or “I’m not sure,” leave the tool out. If the manuscript falls outside your expertise or the deadline is unrealistic, the responsible course is to request an extension or decline the invitation. .

Make Disclosure Meaningful

An AI-generated, polished report is not necessarily a reliable one, and editors must assess the substance of the review rather than its fluency alone. If you use AI, tell the journal. Say which tool you used, what you used it for, and whether any part of the manuscript was shared with it. If the review form has no field for this, use your confidential comments to the editor. Disclosure makes AI use more transparent, but responsibility cannot rest on reviewers alone. Where a policy is silent or unclear, Journals and publishers can address the gaps by:

- Clearly defining permitted, restricted, and prohibited uses of AI in peer review. .
- Including the policy in the review invitation itself and add a disclosure field to the review form.
- Providing access to AI tools that meet defined confidentiality and security requirements, with clear guidance on their permitted use.

When you submit a paper, you hope it will be read carefully by someone who understood it, kept it confidential and can stand behind their feedback. The reviewers of your next paper face the same

pressures and have the same tools you do. AI can help you process information, but the judgement, and the accountability for it, remain yours.

Normalising responsible AI use requires more than individual vigilance. Journals need clear policies, editors need practical guidance, and researchers need opportunities to understand how AI can be used without compromising confidentiality, critical judgement or research integrity.

As institutions move from AI experimentation to responsible implementation, faculty and academic leaders increasingly need practical, discipline-specific guidance rather than broad policy recommendations. Through its [Responsible AI Initiative](#), Enago supports this transition with expert-led workshops and webinars that equip educators and research communities with actionable frameworks for AI governance, ethical adoption and classroom integration.

Ultimately, responsible AI in peer review is not simply about deciding which tools reviewers can use. It is about ensuring that researchers understand the boundaries of that use, retain ownership of their evaluations and remain accountable for the decisions that shape the scholarly record.

Category

1. AI in Academia
2. Reporting Research
3. Thought Leadership
4. Trending Now

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