Understanding Peer Review

1. Introduction

Have you been told to find peer reviewed articles for an assignment?

Or have you heard the expression 'peer review' and wonder what it means?

This activity will help you understand what peer review is and why it's relevant to you.

Learning outcomes

By the end of this activity, you will:

- understand what is meant by peer review
- be able to apply this to your own studies
- be familiar with ways of checking if a journal has been peer reviewed
- be aware that not everything within a peer reviewed journal will have been peer reviewed

2. What is meant by peer review?

Put simply, peer review means that an article is checked by academics before it is published.

These academics will be working in the same area as the subjects in the article. This checking is also referred to as critical reading.

Why peer review matters

Peer review acts as a mark of quality. If original research is submitted to a peer reviewed journal it will not be published unless the academics reviewing it deem it to be accurate.



In addition, if you are studying you may have been asked to find peer reviewed articles for your assignments.

3. How can I check if a journal is peer reviewed?

Here are our top three methods for checking, listed in order of complexity.

- Do an internet search for the journals title and the words "peer review". This works a lot of the time as journals like to advertise if they have peer review status.
- Go to the journal's website. If a journal has been peer reviewed it will often say so in the about section or in any 'information for authors' pages.
 Exactly where this is listed will vary from journal to journal.
- 3. For OU students only, you can search for the journal on <u>Ulrichsweb</u>. This final option works all the time but is the most time consuming.

4. When peer reviewed is not peer reviewed

Peer reviewed **journals** and peer reviewed **journal articles** are not the same thing. You should not assume that everything published in a peer reviewed journal has been peer reviewed.

This can be a difficult concept to understand, so let's look at a metaphor to help explain this concept.

Let's think of a restaurant. It has been inspected by a health official and given a food hygiene certificate. During the inspection the inspector assessed certain hygiene standards and may have sampled the food. They would not have sampled everything on the menu.



In the same way that a health inspector would not sample every daily special served in a restaurant, not everything published in a peer reviewed journal is a peer reviewed journal article.

So what is not peer reviewed?

Within peer reviewed journals the following types of material would not be peer reviewed:

- Editorials
- book reviews
- letters to the editor
- news articles
- opinion pieces
- commentaries, which also called overviews

Remember that to be counted as a peer reviewed an article must contain or report on original research, **and** be published in a peer reviewed journal.

How do you spot original research?

The exact wording varies from journal to journal, however looking for these phrases will help you spot original research.

- **Research** Some journals do label original research articles as research in the contents, or at the top of the article.
- **Method** or **Methodology** All research articles will contain a section detailing how the research was undertaken.

5. Can you spot original research?

These 3 items have all been published in peer reviewed journals. Can you spot the one that contains original research?



- Saunders, T. E. and Ingham, P. W. (2019) 'Open questions: how to get developmental biology into shape?', *BMC Biology*, 17, article 17. Available at: https://doi.org/10.1186/s12915-019-0636-6.
- Tong, Y. et al. (2019) 'The origins of viruses: discovery takes time, international resources, and cooperation', *The Lancet*, 398(10309), pp. 1401-1402. Available at:

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02180-2/fulltext (Accessed: 30 May 2025).

 Borgström Källén, C., & Ferm Almqvist, C. (2024) 'Gender equality in higher music education: Consecrated and peripheral positions', *Arts and Humanities in Higher Education*, 24(1), pp. 71-87. Available at: https://doi.org/10.1177/14740222241276164.

Feedback

- Feedback for option 1: This article does not contain original research it is an outline of some subject specific questions, and concise answers (backed up by references to other papers and research).
- Feedback for option 2: This article does not contain original research it is a short article that summarises the known details (at the time of writing) about discovering the origins of viruses, notably SARS-CoV-2 (backed up by references to other papers and research).
- Feedback for option 3: This article reports on original research undertaken by the authors – there is a Method section reporting on the different interviews conducted as part of the study.

6. Using filters for Peer Review

Many databases and search tools give you the option to limit your search results to peer review using filters.



This sounds great, however the peer review here refers to the journal rather than to the individual items, and ss we have already discovered not all items in a peer reviewed journal are actually peer reviewed (for example book reviews or editorials).

Even if you have used a peer review filter you will still need to check that the results found contain original research.

7. Summary

We have looked at:

- what peer review means
- the importance of peer view
- how you can check if a journal has been peer reviewed
- how you can check if a journal article has been peer reviewed.

