



How to write a research paper

Writing a research paper is an integral part of life in academia. Writing a paper while doing a research degree is a good idea for a number of reasons.

It not only gives you an idea of the things you would be doing if you had a career in academia as a researcher but it also illustrates to your examiners that some of your work was original and of high enough quality to be published in a journal.

This short guide gives an overview of some of the things you should consider when writing a paper. Different disciplines have different customs and practices so advice from those in your area is key to being successful.

1. Consider the question

The first thing you need to do is consider the issue you are trying to address and make sure you review the existing literature carefully to make sure that no one else has published what you intend to. You will need to review all of the literature on your subject for your paper but more on that later.

2. Consider the evidence

Once you have settled on your question make sure you have the evidence to prove your hypothesis. At this stage it may be useful to talk your idea through with someone else in your field. Don't be afraid to share at this stage in the development of your paper or any other – your work will be reviewed before it is published so get used to it!

3. Where and what to publish?

This is an important question and one to get advice on from those who have been in the field longer than you. You probably have a good feel for where people in your subject area publish but consider the scope of your paper and where it sits best. Journals will have guidance on the sorts of topics they are interested in but be realistic. If your proposed paper is based on a small study and/or only addresses a small part of a bigger question then it is unlikely that the most prestigious journal in your area will want to publish your work just yet. You have a couple of options open to you. Either do more work and publish one paper in the prestigious, high impact publication or publish your work in parts as you go along in less prestigious or more niche journals.

Once you have decided on your target publication follow their guidance on how to set out your article and use previously published papers as working examples if you need further help.

4. The bones of the publication

As mentioned earlier, different disciplines have different ways of setting out their papers but you can normally expect to have to write an abstract which should address the following issues concisely:

1. What is the problem?
2. How did you solve it?
3. What is the proof?
4. What needs to be done next?

Most publications require a list of references too. There are programs such as endnote which will help you to keep an electronic note of the bibliographic information of each publication that you have read. Endnote can add these details to your document saving you from writing the detail out again. (Courses on endnote are available at the University. Please contact HR or the Graduate Research Centre at gro@southwales.ac.uk for details)

5. Peer review

Once submitted your paper will be passed to people in your field for review. They will be asked a number of questions including whether the work is original and of a high enough standard for publication. Do not be upset when comments come back which are negative. Put yourself in the reviewers position. It is easy to pick holes when most reviewers remain anonymous and finding fault tends to indicate that the reviewer has read the paper!

After review one of three things can happen to your paper.

- a. Your paper maybe rejected out-right. If it is ask colleagues for help especially when trying to weigh up whether the rejection was fair. Whatever the case, try not to be too discouraged. Academic judgement cannot be appealed and sometimes when you are a researcher, judgements are made that are not entirely fair. It goes with the territory and most academics will have examples of when this has happened to them. This paper can be submitted elsewhere or can form a part of another paper. It is not the end of the world even though it may feel like it is initially.
- b. Your paper maybe accepted subject to amendments. This is the usual result. If you think the proposed amendments are incorrect then be careful how you go about saying so. Do so with tact. Upsetting editors and reviewers is not advised. Write a response and put it away. After at least a day and night has passed look at it with fresh eyes. If you still think it is appropriate then show it to colleagues before sending it off. You may, however, wish to tone it down or abandon it altogether. If you agree then address the comments thoroughly and send the update back. Keep a copy for your records just in case!
- c. Your paper is accepted with no changes. If this is the case well done! This is an achievement – keep the letter and enjoy feeling smug. This hardly ever happens.