“5 Steps to …” writing a manuscript - overview

Introduction

Every year there is good quality research that doesn’t achieve publication. Sometimes it is not written up at all, or a manuscript may be written and submitted to a journal, only to be thrown out because it does not meet the required standard.

Perhaps this isn’t surprising, because writing a manuscript is not easy. For this reason we have produced the **“5 Steps to …”** series, in order to guide you through the process and to maximise interest and readership once you have achieved publication.

Why publish?

As a scientist and researcher, you will be judged by your publications.

Publication is a permanent record of your research which makes the investment of time and money worthwhile. It is a way of communicating to your (unknown) colleagues across the globe and places you in a ‘wider’ research team.

If your investigation has been well planned and conducted, it is valuable to share your results so that others may use them to inform their own research programmes. This enables researchers across many different countries to work together, and in this manner contribute to and advance scientific understanding.

Why are manuscripts rejected?

It is important to become familiar with the journals that are potentially relevant to your area of research. Scan them to understand the subject areas they publish, and read relevant articles in more detail. Gain an idea of their readership, the editorial and review processes, the impact factor, acceptance rates and the required format. Speak to the editor about your draft title and project synopsis before writing. Is it an area that is of interest to their readership? Can they offer advice?

The relevance of your research question, and your research methodology and results, are clearly essential to a reputable potential publisher, but a paper may be rejected on other grounds.

We have looked into the most common reasons for manuscript rejection and summarised the findings of two publications in Table 1.

In the “5 steps to ...” series, we aim to address some of the identified reasons why manuscripts are rejected, and also to encourage readers to read (on) once publication is achieved.

Table 1 Reasons for manuscript rejection

Author, journal and link to article	Reasons for manuscript rejection
Peter Thrower Editor in Chief 'Carbon' journal Full article at: http://rc.rcjournal.com/content/49/10/1246.full.pdf	**Top reasons for rejection by 'Carbon':** • Failure at the technical screening stage. This may be for a number of reasons, including: evidence of plagiarism; an incomplete manuscript (e.g. omission of essential elements such as title, key words, figures (and annotations), key words, etc....); incomplete or out-dated references • It does not fit within the scope of the Journal • It is procedurally, methodologically or analytically deficient • The conclusions drawn are not justifiable – arguments are unstructured or ignore large portions of the literature • Findings do not add to the body published literature • It is not easy to understand, e.g. poor language and structure, figures are poor • It is boring! The research question is not of interest.
David Pierson University of Washington 'Respiratory Care' Journal Full article at: http://rc.rcjournal.com/content/49/10/1246.full.pdf	**Top reasons for rejection by 'Respiratory Care':** • Poor study design • Inadequate description of methodology • Sub-optimal reporting of results • Getting carried away in the discussion • Poor writing skills • Failure to adhere to guidance, re manuscript format and preparation • Picking the wrong journal for topic

A stepwise approach to writing a manuscript

Writing-up your research project into a manuscript, with a view to publication, is daunting!

With any task, it helps to break it down into a series of manageable chunks. This is what we have done with the **"5 Steps to ..."** series. We consider each section that makes up a scientific journal article, and guide you – stepwise - to write your own. So, for example, there is a **"5 Steps to ... the title"** and **"5 Steps to ... the abstract"**...

Each section is instructive and interactive – with activities and signposts, where appropriate, to facilitate and deepen your understanding.

Key to activities

Throughout the text, you will see the following icons:

Activity

This icon indicates you need to **do something**. The shaded text boxes indicate where action is needed, and you are required to complete a field or answer a question.

It is recommended that you **complete all activities**: they are designed to aid your understanding and all work towards producing a high quality manuscript.

Look up

This icon indicates that further reading will aid your understanding and signposts or links you to more information.

Writing your manuscript - don't start at the beginning …

Making a start is frequently the most difficult part of any piece of writing. It requires much thought and planning, and even then, many mind-maps and drafts later, it can evolve into something quite different to your original intention.

We have proposed a work order to piece together your manuscript

1. Write a vague title (so you can refer to the work) — first
2. Carry out (another) focused literature review
3. Materials and Methods (Experimental)
4. Results
5. Introduction
6. Discussion
7. Conclusion
8. Organise references and citations
9. Abstract
10. Write your final title — last