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Research and Development

# Getting Published - Tips on Writing a Journal Article

**Dr Benjamin Gray, on behalf of the Research & Development Team**

# Why publish?

**“Sharing our knowledge is vitally important....We need to publish the results of research and service evaluation, as well as present ideas for discussion and debate, so that these can be used by clinicians, managers, policy makers, researchers and service users to improve practice.” (cahpr)**

A further benefit to publishing is that the thorough peer review process involved will generally improve the quality of your work.

Sometimes a condition of an externally funded grant can be that the research is published and effectively disseminated.

Sharing and publishing your work also provides a platform through effective dissemination for future collaborations.

# Overview

These slides aim to provide some useful hints and tips to guide you through the academic writing process and ultimately publish your work as a journal article.

1. Before you start writing
2. Writing your paper
3. Submission and Peer-Review
4. Acceptance and Dissemination

# THINGS TO CONSIDER BEFORE YOU START WRITING



# What is your message?

To start with you should think about the one or two key messages that you are trying to communicate in your paper.

For example completing one of the following sentences is a great place to start;

“The most important (and new) thing I want people to know or understand as a result of reading this paper is...” **or**  
“what this paper/study adds to current knowledge is...”

Completing one of these questions will also start you thinking about your target audience.

# Target Audience

You should have a think about who would benefit most from learning about your research.

- Those directly working in your field?
- The wider public health community?
- Policy Makers?\*
- Patients?

Thinking about this will help to both maximise the impact of your article and will also help you to choose and shortlist about 2-3 target journals (journals that have published articles/papers similar to your research).

\*If writing for Policy Makers, Christopher Whitty has published a good article

# Target Journal

“Check that your article is within the scope of the journal that you are submitting to. This seems so obvious but it’s surprising how many articles are submitted to journals that are completely inappropriate. It is a bad sign if you do not recognise the names of any members of the editorial board. Ideally look through a number of recent issues to ensure that it is publishing articles on the same topic and that are of similar quality and impact.”

Ian Russell, editorial director for science at Oxford University Press

Online Tools to help find a target journal

- [Springer Journal Suggestor](#) - [Elsevier Journal Finder](#)

**When considering target journals you should also check if the journal charges a publication/article processing fee.**

# Information for Authors

Once you have decided on a target journal it is important to read the 'Information for Authors' page ([JPH example](#)).

This section will provide details on;

- Types of papers considered (Original research, short reports etc)
- Word count,
- Sections and format,
- Number of figures and tables permitted,
- Reference style (Harvard, Vancouver etc), and
- Number of [co-authors](#) allowed

Reading this Information for Authors section will also help you think about [planning and structure](#) of your paper.

# Think about your co-authors

Another important consideration in your planning phase of the paper is to think about the individuals who also made a significant contribution to the work with you.

Authorship should be based on the **four** following criteria

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work;
- Drafting the work or revising it critically for important intellectual content;
- Final approval of the version to be published;
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

You should agree your co-authors (and order) before you start writing and you may need to write an [author contribution statement](#).

# Author contribution statement (examples)

- A.B. and B.C. designed the model and the computational framework and analysed the data. A.B. and C.D. carried out the implementation. A.B. performed the calculations. A.B. and B.C. wrote the manuscript with input from all authors. D.E. and E.F. conceived the study and were in charge of overall direction and planning.
- A.B. designed and performed the experiments, derived the models and analysed the data. B.C. assisted with XYZ measurements and C.D. helped carry out the XYZ simulations. A.B. and D.E. wrote the manuscript in consultation with C.D., B.C. and E.F..
- A.B., B.C., C.D. and D.E. contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Source: <https://www.epj.org/images/stories/faq/examples-of-author-contributions.pdf>

# WRITING YOUR PAPER



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# Planning and Structure

Generally, papers have a structured abstract (150-300 word summary of your paper) and four main sections (IMRAD);

- Introduction,
- Methods,
- Results, and
- Discussion.

The STROBE and CONSORT checklists also provide additional structural guidance for observation and RCT studies, respectively.

The 'Information for Authors' guidance is especially relevant for this stage and your paper should follow the layout as described (e.g. the discussion could be required to be written in a certain style or there may be more sections than the typical IMRAD structure).

# Where should you start?

The first two sections you should complete when writing your paper are the **Methods** and **Results**.

The **Methods** section is generally straightforward and is in essence a step-by-step guide of what you did in your study. Think of this section as instructions for someone who wishes to replicate your study.

The **Results** section involves you putting together your tables and figures and writing the commentary to go with these. The results will then guide the 'story' for the introduction and discussion.

**Once these two sections are complete you have written half of your paper already!**

# Writing the Introduction

For some good examples, remember to look at some recently published articles in your [Target Journal](#).

Your Introduction should provide context and background but should not be a history lesson. Your Introduction should flow as a story that progresses logically, rather than chronologically. You should make sure that any new idea raised clearly follows the previous one discussed.

It is also **very** important that the argument/point which you are attempting to answer in your paper appears early on in your introduction, even the **first sentence** if possible. This argument/point should 'thread' through your whole paper and be revisited in your [discussion](#).

# Writing the Discussion

In this section you will be explaining your results, especially in the context of what was already known on the subject. Your discussion should also explain how your research has moved the existing body of scientific knowledge forward. Remember, any conclusion you make **must** be supported by your results.

As with the **Introduction**, it is essential that you write for an international audience. Your supporting references and implications all need to cater for an audience of this nature.

This is **highly important** because as a rule journals will not largely be interested in local issues, or in things that only apply to UK policy. \*\*\*This is where most people fall down in their writing and it is a skill that can take experience to learn\*\*\*.

# Writing the Abstract (and Keywords)

Many people leave writing the abstract last so that it accurately represents and summarises the paper.

A clear abstract will strongly influence whether or not your paper is  
(a) considered for publication  
(b) if published, whether readers decide to download and read your full article.

Keywords (along with the title) are the components that help to get your paper noticed when people search for articles.

Medical Subject Headings (or MeSH) are the most common keywords and [MeSH on Demand](#) can identify keywords from an abstract.

# General advice when writing

Setting short-term goals are also a good way to overcome 'writer's block'. For example, setting the aim to write 500 words in the next 3 hours is a better motivator than having the paper complete by the end of the month.

Rowena Murray, Professor in Education and Director of Research at the University of the West of Scotland has also shared her 10 'common sense' tips for getting published in a [blog](#).

Make sure that you proof read your paper and continually ask your [co-authors](#) for comments, advice and to check for grammatical errors. You should also learn from your co-authors and try not to get too offended or disheartened if your early work gets heavily edited, this is perfectly normal and all part of the learning process.

# Main Reasons why a paper is accepted

- 1. It provides insight into an important issue**
- 2. The insight is useful to people who make decisions**
- 3. The insight is used to develop a framework or theory**
- 4. The insight stimulates new, important questions**
- 5. The methods used to explore the issue are appropriate**
- 6. The methods used are applied rigorously and explain why and how the data support the conclusions**
- 7. Connections to prior work in the field or from other fields are made**
- 8. The article tells a good story.**

Source: '8 reasons I accepted your article' by Elizabeth Zwaaf

# SUBMISSION AND PEER-REVIEW



# Formatting for submission

A final read of the 'Information for Authors' guidance especially with regards to submission procedures is the important step here.

Not reading this section is a reason for rejection and a common frustration experienced by editors (see below)

"Often authors don't spend the 10 minutes it takes to read the instructions to authors which wastes enormous quantities of time for both the author and the editor and stretches the process when it does not need to."

*Tangali Sudarshan, editor, Surface Engineering*

# Formatting for submission (example)

Page 3 of 22 Diabetes & Vascular Disease Research

**Introduction**

The relationships between cardiorespiratory fitness and the risk of both cardiovascular disease (CVD) [1-3] and type 2 diabetes (T2DM) [4-5] have been well established. However, despite these evident and strong associations, cardiorespiratory fitness is widely overlooked as a cardiometabolic risk factor in clinical practice. The measurement of physical activity levels is preferred and tailored advice to reduce the risk of type 2 diabetes for example is recommended to be provided from these findings [6]. As the health challenges of both CVD and T2DM remain, it could be time to reconsider these recommendations.

Occupational physical activity for instance has been reported to have a protective effect against the development of both CVD [7] and T2DM [8]. However emerging research has highlighted a substantial prevalence of cardiometabolic risk factors in males employed within the industrial sector [9-11], in occupations typically perceived to be 'physically active'. There is further evidence that suggests that males within the industrial sector are protected from developing T2DM by their increased levels of cardiorespiratory fitness [12].

Therefore, the aim of this study is to examine the relationship between cardiorespiratory fitness, self-reported physical and the prediction of cardiovascular disease and type 2 diabetes and associated risk variables in a group of males employed within the industrial sector. Furthermore, to our knowledge no studies have directly examined whether the association exists between cardiorespiratory fitness and current risk prediction scores for either condition.

Diabetes & Vascular Disease Research  
1-8  
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DOI: 10.1177/1479164115599907  
dvr.sagepub.com  
SAGE

Original Article

## Cardiorespiratory fitness is a stronger indicator of cardiometabolic risk factors and risk prediction than self-reported physical activity levels

**Benjamin J Gray<sup>1</sup>, Jeffrey W Stephens<sup>2</sup>, Sally P Williams<sup>3</sup>,  
Christine A Davies<sup>3</sup>, Daniel Turner<sup>2,4</sup> and Richard M Bracken<sup>2,4</sup>,  
on behalf of the Prosiect Sir Gâr Group**

**Abstract**  
This study investigated the relationships of self-reported physical activity levels and cardiorespiratory fitness in 81 males to assess which measurement is the greatest indicator of cardiometabolic risk. Physical activity levels were determined by the General Practice Physical Activity Questionnaire tool and cardiorespiratory fitness assessed using the Chester Step Test. Cardiovascular disease risk was estimated using the QRISK2, Framingham Lipids, Framingham body mass index and Joint British Societies' Guidelines-2 equations, and type 2 diabetes mellitus risk calculated using QDiabetes, Leicester Risk Assessment, Finnish Diabetes Risk Score and Cambridge Risk Score models. Categorising employees by cardiorespiratory fitness categories ('Excellent/Good' vs 'Average/Below Average') identified more differences in cardiometabolic risk factor (body mass index, waist circumference, total cholesterol, total cholesterol:high-density lipoprotein ratio, high-density lipoprotein cholesterol, triglycerides, HbA<sub>1c</sub>) scores than physical activity (waist circumference only). Cardiorespiratory fitness levels also demonstrated differences in all four type 2 diabetes mellitus risk prediction models and both the QRISK2 and Joint British Societies' Guidelines-2 cardiovascular disease equations. Furthermore, significant negative correlations ( $p < 0.001$ ) were observed between individual cardiorespiratory fitness values and estimated risk in all prediction models. In conclusion, from this preliminary observational study, cardiorespiratory fitness levels reveal a greater number of associations with markers of cardiovascular disease or type 2 diabetes mellitus compared to physical activity determined by the General Practice Physical Activity Questionnaire tool.

**Keywords**  
Type 2 diabetes, cardiovascular disease, cardiorespiratory fitness, risk prediction, risk factors

**Introduction**

The relationships between cardiorespiratory fitness and the risk of both cardiovascular disease (CVD)<sup>1-3</sup> and type 2 diabetes mellitus (T2DM)<sup>4,5</sup> have been well established. However, despite these evident and strong associations, cardiorespiratory fitness is widely overlooked as a cardiometabolic risk factor in clinical practice. The measurement of physical activity levels is preferred, and tailored advice to reduce the risk of T2DM, for example, is recommended to be provided from these findings.<sup>6</sup> As the health challenges of both CVD and T2DM remain, it could be time to reconsider these recommendations.

Occupational physical activity, for instance, has been reported to have a protective effect against the development of both CVD<sup>7</sup> and T2DM.<sup>8</sup> However, emerging research has highlighted a substantial prevalence of cardiometabolic risk factors in males employed within the industrial sector,<sup>9-11</sup> in occupations typically perceived to be 'physically active'.

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Formatting an article for submission looks very different to the finished product.

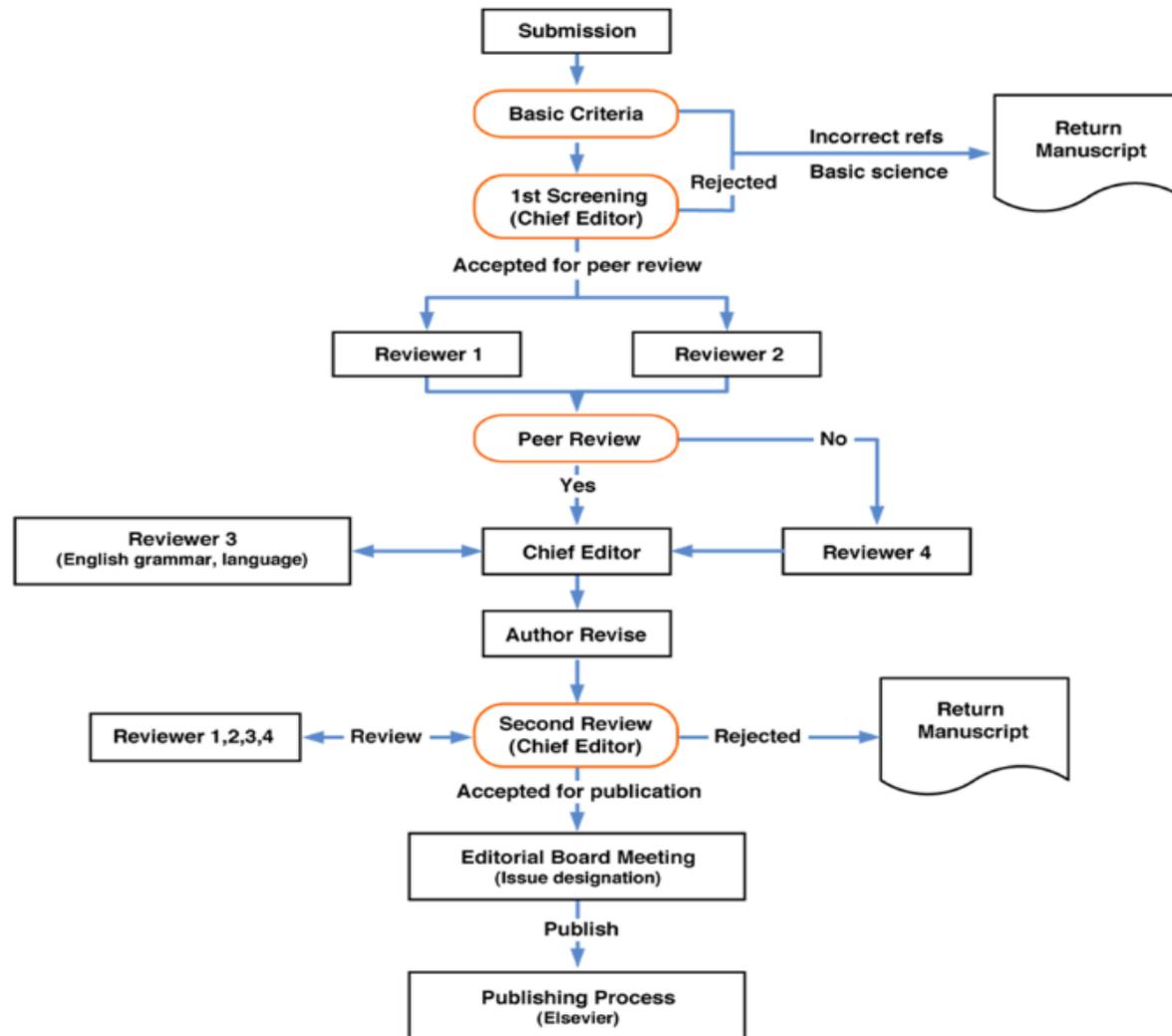
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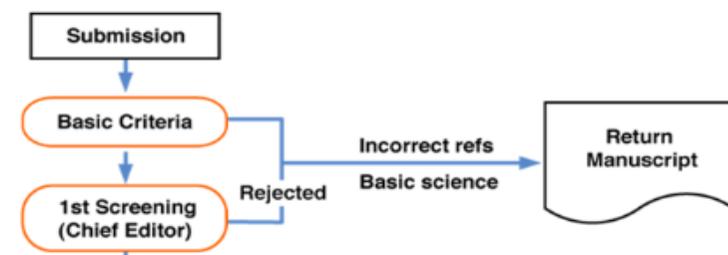
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# Peer review process



Source: <https://www.elsevier.com/reviewers/what-is-peer-review>

# Submission



This process takes place online and you will be guided through a step by step process.

You will also be required to submit a cover letter where you should highlight the importance of your paper and why you think it is a good fit for the journal.

Your paper will usually be read initially by two individuals;

- An editorial assistant who will check the formatting, and
- An editor who will assess the quality and decide whether to send your paper out for external [peer review](#).

**If your paper does not meet this initial check the paper will be rejected and returned to you.**

# Main reasons for rejection

- 1. The paper fails the technical screening**
- 2. The paper does not fall within the Aims and Scope**
- 3. The paper is incomplete**
- 4. The procedures and/or analysis of the data is seen to be inappropriate**
- 5. The conclusions cannot be justified from the rest of the paper**
- 6. The paper is simply a small extension of a different paper (usually by the same authors)**
- 7. The paper is incomprehensible**
- 8. The paper is boring**

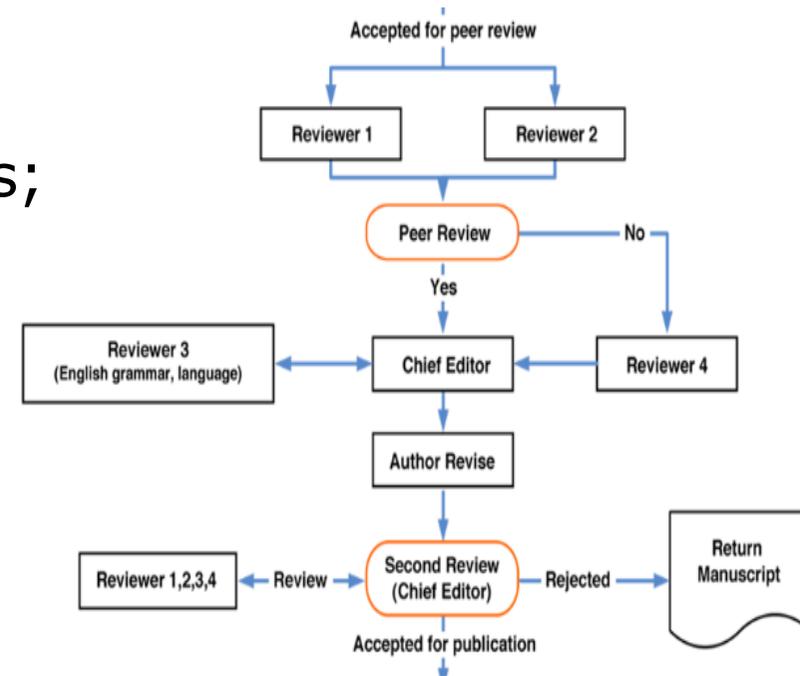
Source: 'Eight reasons I rejected your article' by Peter Thrower

# Peer Review

Your paper will then be reviewed by (at least) another two individuals for accuracy and quality.

The decision will have one of four outcomes;

- Accept
- Revise and resubmit (Minor revisions)
- Revise and resubmit (Major revisions)
- Reject



If you receive either of the revise and resubmit outcomes you will be given the opportunity to [address reviewer comments](#).

**\*\*Even if your paper is rejected after peer review you should still receive some feedback to help you to improve your paper.\*\***

# Addressing Reviewer Comments

**Addressing reviewer comments isn't compulsory, however the journal will not accept your paper in it's current format.**

The reviewer comments are designed to improve your paper and you should pay close attention and respond carefully. You do not have to address each point if you do not agree with them but you do need to provide a valid and robust argument if you disagree with a comment.

Your paper will then be peer reviewed again, either internally by one of the editors or externally, usually by the same reviewers who commented on your original paper.

# Don't Give Up...

The final piece of advice is provided by Fiona Macaulay, an editorial board member of the Journal of Latin American Studies.

“You’d be surprised how many authors who receive the standard “revise and resubmit” letter never actually do so. But it is worth doing - some authors who get asked to do major revisions persevere and end up getting their work published, yet others, who had far less to do, never resubmit. It seems silly to get through the major hurdles of writing the article, getting it past the editors and back from peer review only to then give up.”

You should also be aware that the time from first submission to publication can be quite long (~6 months upwards). The Journals will have this information as metrics on their websites for you.

# ACCEPTANCE AND DISSEMINATION



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# Remember to Celebrate

The process of writing a paper from start to finish can be long and challenging but ultimately it is rewarding. The opportunity to share new ideas on a paper with your name on it makes the process worthwhile.

On that note make sure that you celebrate each paper that you have successfully accepted and published.



# Dissemination

Social media platforms such as Twitter and LinkedIn provide an opportunity to share the link of your research to a wider audience.



Academic 'social media' platforms such as [ResearchGate](#), ORCID and Kudos are useful both to share your work and for future collaborations.

The R&D office ([PHW.Research@wales.nhs.uk](mailto:PHW.Research@wales.nhs.uk)) can help with dissemination of your research when published.

# Things to Remember (1)

## (1) Inform your line manager

- It is important that you let your line manager know that you are planning on writing your research into a journal article.
- Your line manager will also be able to advise you whether you need any approval from the Corporate Team or whether a Communications Plan is necessary.
- Your line manager may have some internal funding available for open access publishing costs.

## (2) Fund in publication costs at the onset when preparing your research proposal

- Open access can be costly otherwise! (Upwards of £1,200)

# Things to Remember (2)

## (3) Inform the Knowledge and Evidence teams

- The Knowledge Hub can help you access journal articles you may wish to reference in your article.
- The Evidence Service also keep a record of Staff Publications so ensure you let them know when your article is published.

## (4) Ensure you have obtained the necessary permissions

- Make sure you inform the original data owners of the intention and reason for publication.
- Make sure you do not require ethical approval to publish your work, again the R&D office will help here.

# Things to Remember (3)

## (5) Share your findings with your colleagues

Although this presentation has focussed on writing a paper for a peer review journal you should also make sure that your findings are shared with colleagues within the organisation.

As part of the Knowledge Mobilisation Strategy it is important that we become better at sharing learning, understanding what other are working on/have expertise in and if shared internally, colleagues may provide some feedback that could help to shape and improve your paper.

# References and Useful Information

The content included in this guide has been adapted from the following sources;

'Getting your paper published' – Council for Allied Health Professionals (cahpr)

The Guardian - How to get published in an academic journal: top tips from editors

<https://www.theguardian.com/education/2015/jan/03/how-to-get-published-in-an-academic-journal-top-tips-from-editors>

Elsevier – How to publish in scholarly journals

[https://www.elsevier.com/\\_data/assets/pdf\\_file/0003/91173/Brochure UPP April2015.pdf](https://www.elsevier.com/_data/assets/pdf_file/0003/91173/Brochure_UPP_April2015.pdf)

Emma Bruun – How to get a paper published

<https://www.slideshare.net/emmabruun/how-to-get-a-paper-published>

Christopher JM Whitty (2015). What makes an academic paper useful for health policy? BMC Medicine 13:301.

# Any Questions?

If you have any questions about the content included in these slides or would just like some general and informal advice when thinking about writing your research work up as a journal article feel free to contact me

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