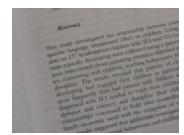# Think SCIENCE

MEMBERS AREA HINT SHEET

Ten tips for writing an effective abstract...

The abstract is the reader's first encounter with your paper and it is through the abstract that you will entice him or her to read your entire article. You must therefore write an abstract that clearly explains what you have done and why your findings are important to your field. Our ten tips will help you do just that! We also provide a "template abstract" to help you construct your own effective abstract.

But, first, let's briefly recap what an abstract is...

An abstract is a very brief overview of the entire study. It should be a stand-alone document that can be understood without reading the article in its entirety. In general, your abstract tells the reader why you decided to study the topic (introduction, hypothesis), what you did (methods), what you found (results), why your findings are important and what recommendations you have (discussion, conclusion).

Abstracts can be **structured** (using section headings such as "Background" or "Introduction") or **unstructured** (usually less than 100 words with no headings); **informative** (summarizes the entire article and gives the reader an overview of the facts that will be presented in detail in the article) or **descriptive** (describes only the paper's organization, not its content; does not provide results, conclusions, or recommendations).

Whichever type of abstract you intend to write, your abstract should be complete and accurate, and present enough information for the reader to understand your research. The ten tips below will help you avoid the pitfalls of abstract writing and focus on creating an abstract that does your research justice.

And now, the ten tips...

1 Different journals and conferences ask for slightly different formats of abstracts, so if you have already chosen where you will submit your abstract, be sure to read the Guidelines for Authors before you begin writing. However, if you don't yet know where you will submit it, we suggest you write a structured abstract. It's easier to change a structured abstract into an unstructured abstract later. (You can use our worksheet below to create a general structured abstract if you wish.)

2 The abstract is generally written after the entire article is completed, although it is intended to be read first. However, as you write your article, we suggest you make notes about the important parts of each section. Then when you've finished writing the article, read the article over a few times and make a list of keywords as you read. Next, organize these keywords and your notes, and begin the first draft of your abstract.

3 Don't just copy key sentences from your article to make your abstract: you'll include too much or too little information, and you will probably forget to make logical links between the information. Write from scratch and make sure the information you include flows logically.

4 It is important to include only essential information, using no more words than necessary to convey the meaning. Leave out unimportant details. Remember, your editor can reduce the word count somewhat, but he or she will do this by manipulating the English. Your editor is not responsible for removing science content, so try to keep your abstract within any word limit stated by your target publication.

5 Your abstract should summarize the content of your article and not include any information that is not mentioned in the paper itself.

6 Your abstract must contain key words that reflect the essential theme of your work so that your paper can be indexed properly. When someone searches for information in your field, you want to be sure that the electronic information retrieval systems locate your paper and present it in the search results. Think about the key words and phrases someone would use to find out about your research and try to incorporate these into your abstract.

7 Avoid using bibliographic references (citations) in the abstract unless they are essential for understanding the background or relevance of your work. One of the acceptable reasons for including references would be if your article were a major advance on a published work. Also check the Guidelines for Authors of your target publication to see whether bibliographic references are permitted in the abstract—many journals do not permit them.

8 The end of your Abstract is as important as the beginning, because this is where you should 'hook' the reader into reading the rest of your article. Be sure to state clearly the implications of your research to your specialist field so that your readers (peers) will want to learn more about your work.

9 Review and upgrade your abstract:
‣ Check the abstract is written in the same voice as the paper
‣ Make sure your data is consistent between the abstract and the paper
‣ Remove any unnecessary data
‣ Add any important data you omitted
‣ Be sure your abstract flows logically

10 Ask a native speaker to edit your abstract in order to fix any grammatical errors and unclear phrases, as well as check for good logical flow. He or she can also advise you about removing any superfluous data and adding missing information, and help you stay within any word limit stipulated by the target publication. If you change the wording before submission, ask the native speaker to check your final version. Journal editors appreciate reading abstracts with no errors…

As you can see, submitting an effective abstract is important to maximize not only your chance of publication but also of others reading your entire paper and citing it.

We hope that this hint sheet has been helpful.

Think SCIENCE

Template abstract

Please feel free to use the template below as a guide when drafting your next abstract. But, remember, if you already have a target publication in mind, make sure you also follow the Guidelines for Authors provided by that publication. You can also ask a native speaker to check that you have followed these guidelines appropriately...

To create the skeleton of an effective abstract, follow these steps:

1. List the keywords you used in your article.

Key words used in your article	

2. Summarize the most important aspects of your research by adding one or two concise sentences to each section of the table below. (Remember to refer to the notes you made when writing each section of your article.)

3. In the final column of the table, list other important information to mention in your abstract.

You should now have the basis for an effective abstract.
To continue the writing process, copy and paste your concise sentences and additional information into a new document. Now you need to concentrate on _**writing**_ the abstract, making sure you include logical links between the information.

Section	Tip	Keywords to use	1-2 concise sentences	Important information to add
Introduction	What is your research about? Why is it interesting or important?			
Hypothesis	What did you think you would find? Why?			
Methods	What did you do?			
Results	What were your findings?			
Discussion	Are your results consistent with your initial hypothesis? Why or why not? Based on your findings, what recommendations do you have?			
Conclusion	What is your interpretation of the relevance of your findings? Why should others be interested in your findings?			