
Titles Writing in Scientific Research Papers

The purpose of a piece of scientific writing is to present information clearly and concisely so that it can be easily understood. Clarity therefore begins with the title. The title, abstract, and keywords play a pivotal role in the communication of research. Without them, most papers may never be read or even found by interested reader. Titles in science mirror a set of requisites that are crucial to the construction, communication, and progress of new knowledge. To scientists, titles in scientific publications are thus key elements in the organization and retrieval of scholarly data.

The title summarizes the main idea or ideas of your study. It should be descriptive, direct, accurate, appropriate, interesting, concise, precise, unique, and should not be misleading. A good title contains the fewest possible words that adequately describe the contents and/or purpose of your research paper.

If the title is too long, it usually contains too many unnecessary words e.g., "[A Study to Investigate the...](#)" On the other hand, a title which is too short often uses words which are too general. For example, "[African Politics](#)" could be the title of a book, but it does not provide any information on the focus of a research paper.

In scientific and technical writing, a poetic or stylized title does not help the reader at all. For example, the following title

The Kopje Drummers of the Karoo

does not tell the reader that the paper is about birds, woodpeckers to be exact.

However, this title

The mating rituals of *Geocolaptes olivaceus*, South Africa's Ground Woodpecker

tells the reader very clearly what the subject of the paper is.

Elements in a title

In technical and scientific writing the title is a precise description of the contents.

It should include

specific words to indicate the following:

- ✚ the topic, that is, the main, general subject you are writing about
- ✚ the focus, that is, a detailed narrowing down of the topic into the particular, limited area of your research
- ✚ optionally, for a scientific article, the purpose of your writing. This means including a word such as the following, which tells the reader what kind of argumentation to expect:

An analysis of ...	An assessment of ...	A comparison of ...	A description of ...
A discussion of ...	An evaluation of ...	An explanation of ...	An outline of ...

Some sample titles:

purpose	topic	focus
An analysis of	carp culture management	as a tool for Mexican crayfish conservation.
An overview of	nutritional needs	before, during and after an endurance event.
A discussion of	genetic engineering technology	and its effects on the environment.
An evaluation of	sewage treatment	as a tool in environmental protection.

Punctuation of titles: capital letters

- ✚ It is clearer to type your title in lower case rather than in capital letters.
- ✚ Use capital letters for the first letter of all the main words in the title, including nouns, pronouns, verbs, adjectives, adverbs, longer prepositions, conjunctions
- ✚ Do not use capital letters for short structural words (except when they are the first word of the title), such as articles (a, an, the), short prepositions (of, in, to ,at), co-ordinating conjunctions (and, or, nor, but, for)

Points to check in your own writing:

- ✓ Write the title after you have written your research paper and abstract.
- ✓ Include all the essential terms in your paper.
- ✓ Keep in short and to the point. (16 words or fewer)
- ✓ Avoid unnecessary jargon and abbreviation.

- ✓ Use keywords that capture the content of your paper to inform readers about it, but try not to choose too many technical words as this will not attract a wider audience.
- ✓ Be precise and concise; strive for clarity and avoid terms with multiple meanings which might lead to misunderstanding.
- ✓ Never include a period at the end of you title. (it is not a sentence)
- ✓ Titles stand alone; they are not a part of the opening sentence or paragraph