

## **Research Writing**

## Eight Steps to Developing an Effective Outline

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- Preparing an outline is the most important step in the process of producing a manuscript for publication in a journal.
- The purpose of an outline is to divide the writing of the entire paper into a number of smaller tasks.
- There is no single best way to prepare a scientific manuscript you should know your own style of writing best.
- At this stage, you are only constructing an outline you are not writing the paper, only notes.
- The following steps serve as a guide to a good outline.



#### 1. Develop a central message of the manuscript

Prepare a central message sentence (20-25 words). If you were asked to summarize your paper in one sentence, what would you say? Everything in the manuscript will be written to support this central message.

#### 2. Define the materials and methods

Briefly state the **population** in which you worked, the **sampling method** you employed, the **materials** you used, and most importantly, the **methods** you used to carry out the study.

#### 3. Summarize the question(s) and problem(s)

What was known before you started the study? What answers were needed to address the problem(s)? List the key points pertaining to the question(s) and problem(s). What did you do to answer the question(s)?



#### 4. Define the principal findings and results

Your central message sentence probably encapsulates the most important findings. List these and some additional ones (if important to mention) in note form.

#### 5. Describe the conclusions and implications

Make brief notes on each of the implications that arise from your study. What are the principal conclusions of your findings? What is new in your work and why does it matter? What are the limitations and the implications of your results? Are there any recommendations you would provide?

### 6. Organize and group related ideas together

List each key point separately. Key points can be arranged chronologically, by order of importance or by some other pattern. The organizing scheme should be clear and well structured. Identify the important details, describe the principal findings, and provide your analysis and conclusions that contribute to each key point.



#### 7. Identify the references that pertain to each key point

#### 8. Develop the introduction

Before beginning to write the introduction, read through the notes you have made so far in your outline. See whether there is a coherent and cohesive story and a unifying theme that runs through the outline.

Your introduction outline should start with the main message, describe what the purpose or objective of your study was, how you went about doing the study, what you found and what are the implications of what you found.



# Thank you...