

## Writing an Journal Article Summary

Summarizing research articles will help you to develop your critical thinking skills and your ability to express yourself in the written form. Here are some practical hints on how to summarize a research article. A research article is written to get across a lot of information quickly to a reader. Reading such articles can be tedious and sometimes frustrating unless you are familiar with scientific writing and the reasons for this style. Research articles are highly structured to make information easy to find. Unlike literary writing, scientific writing emphasizes quantifiable information; as a result, the writing is very lean and extra words are avoided.

A research article has the following major sections: **Title Page, Abstract, Introductions, Method, Results, Discussion, References, Tables and Figures.** *An article summary highlights the information in the Introduction, Methods, Results, and Discussion.* Before you can write such a summary, you need to read and understand the article.

### **Reading the Article**

- ➤ *Allow enough time.* Plan to spend at least one half of the time you devote to this assignment to reading and understanding the article. Before you can write about research, you have to evaluate it. Before you can evaluate it, you have to understand it. Before you can understand it, you have to digest it. Before you can digest, you have to read it, thoroughly. This takes more time than most students realize.
- ➤ *Scan the article first.* You will get bogged down in detail if you try to read a new article from start to finish. Initially you should briefly look at each section to identify:
  - general information about the study (stated in the Abstract and Introduction)
  - the hypothesis (-es) or research questions (in the Introduction)
  - the test of the hypothesis, including the sample, variables and operational definitions, and the procedures used (in the Methods)
  - the findings (in the Results, including tables and figures)
  - how the findings were interpreted (in the Discussion).Underline key sentences or write the key point (hypothesis, design, etc.) of each paragraph in the margin. It may also be helpful to write down these key points on a summary sheet as you come across them.
- ➤ *Read for depth.* After you have highlighted the question, hypothesis, findings, and interpretations, go back to the article to read about each area in more detail. Now you should expect to read each section more than once. Expect not to fully understand the article the first time. You will have to read it more than twice before you can talk about it in your own words.
- ➤ *Plagiarism and taking notes.* Plagiarism is presenting someone else's work as your own. Most plagiarism is unintentional, from faulty note-taking and poor understanding of what is being reported. To avoid it:
  - Take notes in your own words.

- Remember that you are digesting information, not swallowing it whole. If an idea is relevant to your topic, you should be able to summarize it in your own words. If you can't, you probably don't understand it.
- Avoid writing complete sentences when note-taking.
- When note-taking, distinguish between what the author wrote and your comments about it (e.g., use different inks or put a star next to quoted sections).

### Writing the Article Summary

Like an abstract in a published research article, the purpose of an article summary is give the reader a brief, structured overview of the study that was done. It is important that you understand the writing an article summary is a low-stress activity. By using these tips, the task becomes very easy. To write a good summary, you must know (a) what is important to say and (b) how to condense important information. The better you understand a subject, the easier it is to write **both** knowledgeably and briefly about it (this is the rationale for essay exams).

- *Getting started.* Put down your pen and read all your notes to get an overview. Eliminate irrelevant notes. Drop anything that does not connect with something else in your notes (the earliest-taken notes are the most likely ones to be dropped).
- *Write a first draft.* Use the same order as the article itself used. The number of suggested sentences to use is given in parentheses below after each section. This number is arbitrary, but is meant to give you an idea of how much detail is needed to summarize each section of the article.
  - Announce the research question and explain why it is interesting.
  - State the hypothesis/hypotheses tested.
  - Briefly describe the methods (what was done? E.g., design of study, how many subjects, what they did, what the variables are and how they measured them.)
  - Describe the results (what was found).
  - Outline what the author considered the key findings of the study.
- *Edit for completeness and accuracy.* **Add** information for completeness where necessary. More commonly, if you understand the article, you will need to **cut** redundant or less important information. **Stay focused** on the research question; get rid of glittering generalities.
- *Edit for style.* Write as though explaining something to 'an intelligent, interested, naive, and slightly lazy listener' (e.g., yourself, your classmates, your parents). That is, expect your reader to be interested, but don't make them have to struggle to understand you. Don't write to your professor or TA; if you do, you will tend to leave out important details by assuming that they already know them.
  - **Eliminate wordiness**, including most adverbs ("very", "clearly"). Why say "The results clearly showed that there was no difference between the groups"? You lose no meaning if you just say "There was no difference between the groups".
  - **Use specific, concrete language.** Use precise language and cite specific examples to support assertions. Avoid vague references, e.g., "this" ("this illustrates" should be "this result illustrates"). Sentences that start with "I feel" often signal unsupported statements.

- **Use scientifically accurate language.** For example, you never "prove" theories in science, you "support" or "fail to find support for" them.
- **Rely primarily on paraphrasing, not direct quotes.** In scientific writing, paraphrasing an author's ideas is more common than using direct quotes. In this assignment, **you are only allow 3 sentence to be quoted directly**. If you use a direct quote, use quotation marks and proper citation. You do not have to cite your paraphrases.
- Check for spelling and typographical errors.
- *Re-read* what you have written. Ask other people read it; they will catch things that you miss.
- Pay attention to presentation. It has your name on it. Your paper should look as though you are proud of it.

### **A Template for the Journal Article Summary**

Here is a suggested format for your assignment:

- Paragraph One: Provide an introduction to the paper by describing indicating what the research is about. Tell the reader what the focus of the research is and state the hypotheses or research questions.
- Paragraph Two: Identify the subjects and the procedures used in the study.
- Paragraph Three (and possibly Paragraph Four): Present the variables and how each was measured. Be specific. Identify the name of the measurement and a brief description of each.
- Paragraph Five: Discuss the results of the study. Did the data support the stated hypotheses? Use the results and discussion section for this.
- Paragraph Six through Eight: Critique the study. Specify what was done well and what could have been improved. Some other questions to answer: was the research valuable?; was the study practical/helpful? To whom?; was the study done ethically?; should more research be done in this area?; who does the results of this study apply to?; what would you recommend the next step to be in this line of research?