

Understanding a Journal Article

Most of us are familiar with reading a recipe for making a food dish. Recipes are typically made up of two parts: a list of ingredients and instructions on how to make the food. Our familiarity with this structure helps when it comes time to actually preparing the food. For example, if we are heading to the store, we can quickly scan the list of ingredients to see what we need to purchase. In addition, the step-by-step instructions can help even the most novice of cooks make delicious dishes!

The primary goal of this document is to help you become familiar with how to read published research that uses APA Style. Just like a recipe, it has a specific structure and writing style that, when understood, helps readers understand the material.

A typical research article (from a scholarly journal) has 7 main parts:

1. Title
2. Abstract
3. Introduction
4. Method
5. Results
6. Discussion
7. References

Title

An article's title is often the very first thing read. The title should illustrate the main topic of the research and include important variables. The title should help you to form some expectation of what the article will be about.

Abstract

The Abstract is a brief summary of the entire article, usually no more than 120 words. The purpose is to give the reader a quick review of the content of the article. Many times, readers will use an article's title and abstract to decide whether it is relevant or not to their topic.

The abstract usually contains a very concise summary of:

- (a) the article's problem that is being investigated or the hypothesis,
- (b) pertinent information on the participants,
- (c) brief overview of the methods used,
- (d) brief summary of the statistical analyses,
- (e) results of the study, and
- (f) implications of the study.

Not all abstracts will have this information, and it is your responsibility to NEVER USE ONLY THE ABSTRACT when writing a paper. The Abstract can, however, be used as a good starting point to help you with the rest of the article.

Introduction

The Introduction is the first part of the body of the paper (note that it is usually not labeled as such since it is assumed that the first part of the body of the paper is the Introduction). It usually begins with a broad statement of the phenomenon being investigated, then narrows the focus to the specific hypothesis or hypotheses of the study. The purpose of this section is to introduce readers to the overall phenomenon that is being tested as well as to provide some justification for the hypothesis. In order to do this, the author(s) should review past research on the topic and discuss those findings. One of the biggest problems many students encounter when reading an Introduction section is distinguishing between discussions of “past research” and information about the “current study.” The following is the *basic* structure of a typical Introduction (keep in mind that not all published articles follow this structure; however, you can use it as a guide):

Introducing the Problem: The paper typically begins by broadly specifying the research problem (or what is being studied). This part is usually 1-2 paragraphs long, and may include the research questions, a description relating the hypothesis and experimental design to the research problem, and the theoretical implication of the research.

Background Literature: This part will be the longest part of the Introduction. It consists of a review of previous research that is relevant to the current study. Since a researcher must provide a rationale/reason for why a hypothesis should be tested, it is important to discuss what has been done in the past.

Purpose, Rationale, and Hypothesis: The final part of the Introduction includes formally stating the study’s purpose, rationale, and specific hypothesis/hypotheses. The previous parts should naturally lead up to this. As a reader, you should be able to understand what is being tested and why. Keep in mind that sometimes hypotheses are spelled out for the reader; other times, they may be listed as predictions (“the researchers predict...”) or “we believe such and such will happen.”

Method Section

The purpose of the Method section is to provide the reader with a detailed description of how the study was conducted. Think of this section as the “step-by-step instructions” you would find in a recipe. The reason the Method section is so in depth is because it should act as “step-by-step instructions” in case someone wants to replicate (re-do) the study. This section is also divided into subparts (which are usually labeled):

Participants/Subjects: First and foremost, the correct term currently being used to describe human participants in a study is “participants.” The term “subjects” is used when referring to animals. Please adhere to this “rule” when you write your own papers. Older articles may use the term “subjects” when referring to humans; however, this is outdated and no longer considered acceptable or correct.

This subsection contains information such as:

- number of participants and how they were selected and assigned to groups
- major demographic characteristics
- description of agreements and payments made
- statements of ethical principles used in relation to the participants.

For nonhuman subjects, the information includes:

- genus, species
- strain number or location of supplier
- number, sex, age, weight, and physiological condition
- ethical guidelines on treatment and handling.

The purpose of this subsection is to allow the reader to make comparisons across different studies. For example, if you read a study that only used human male participants, then you may decide that the results can only occur in men and are not more generalizable to women.

Materials/Apparatus/Measures: All the physical aspects of the research design are described in this subsection (what tests were used, what type of computer, etc). Remember that the purpose of the Method section is to act as a “recipe” for someone else to replicate the study. So, the researcher has to list these things. (Consider this to be the “ingredients” in your food recipe).

Procedure: This subsection provides a detailed account of what happened in the study. (Consider this to be the “step-by-step” instructions part of your food recipe).

In general, focus your attention on the Participant and Procedure subsections. If you need specific information, go back to the Materials/Apparatus/Measures subsection.

Results

The Results section is the part where the author(s) report the statistical analyses used in the research. Authors typically report results of each hypothesis in the order that they appear in the introduction to assist the reader in his/her comprehension.

It is often difficult for undergraduate students to understand the Results section, even after taking Statistics I and II. In general, if you’re reading the article to write a literature review for

an undergraduate class, you will want to ignore the numbers and focus more on what group performed better. In fact, it may be easier to rely on the next section (the Discussion) for an explanation of the findings using non-statistical language.

Discussion

The Discussion section reviews, interprets, and evaluates the results of the study. This section typically begins by listing the hypothesis/hypotheses then stating if the results supported or contradicted them. Next, the author(s) usually discuss the similarities and differences between the current findings and the findings of previous research. Any weaknesses of the study are also reviewed, and suggestions are made on improving the research design. Finally, the discussion section usually ends with the writer providing directions for future research.

References

The last important section in any journal article is the list of references. It lists, in alphabetical order (usually), anything that was cited throughout the paper. There is a specific format that is used. The References can be used to help you find related articles for any topic you need to research. If you are doing a paper on a specific topic and you need help finding articles, the References section is a great place to start!