

Evaluating Journal Articles

by Sophia Tutorial



WHAT'S COVERED

In this lesson, we'll discuss some basic guidelines and tips for reading and understanding scholarly research articles by looking at the makeup of these articles.

The specific areas of focus include:

1. Components of Research Articles
 - a. Abstract
 - b. Introduction
 - c. Methods
 - d. Analysis/Conclusions

1. Components of Research Articles

Reading and understanding scholarly research articles can be a little bit different from reading traditional forms of articles, such as those that appear in magazines like Time or Newsweek. This is because research articles are written in a different style intended for a more academic audience.

In order to understand these articles better, let's take a look at the different components or sections typical of research articles.

1a. Abstract

When reading a research article, you first want to know what exactly is being studied. The best place to look for that information is in the abstract.

The abstract is a structural component specific to scholarly research articles, and is essentially a short summary--about one paragraph long--at the very beginning of an article.

Most importantly, the abstract identifies the **variables** that are discussed in the experiment or research.

🔗 **EXAMPLE** If the abstract states that the article is a study about soda and children, then you know that those two subjects are the variables in this study.

The abstract also provides a quick overview to help you understand exactly what the methods and

conclusions are for the experiment itself.



BIG IDEA

If you need a quick understanding of the material covered, or if you need to refer back to the methods or conclusions later, the abstract is a good place to look.



TERM TO KNOW

Variables

Anything that can be changed; anything that can affect the results of an experiment

1b. Introduction

Next, you want to understand the most important information about this topic or area of study. The introduction provides any prior research about the topic that's being addressed within the paper. In other words, it gives you a good amount of background knowledge on what the author is talking about.

➞ **EXAMPLE** Suppose you're looking at an article on a particular area in developmental psychology. If you don't necessarily have a clear understanding of this area, then the introduction is a good place to start.

The introduction can also be a good place to look for other research that you might want to understand within this area; you can then go to the end of the paper for the references section in which citations for other papers are provided. You can use the introduction as a jumping-off point to find more research in the particular area of study discussed in the article.

1c. Methods

Next, you might want to know exactly how the research or study was conducted, or how it functions within the paper you're reading. This information would be found in the methods section, which tells all about the study itself so that it can be reviewed and replicated.

The methods section provides specifics such as:

- Who was in the study
- What methods of measurement were used
- How the subjects themselves were tested

The methods section is also a good place to look if you want to understand potential sources of bias or confounding variables. In other words, the methods section can be helpful if you want to know what might have influenced the study in ways that were unintended. One way this can occur is if the researcher used an invalid test, meaning a test that doesn't necessarily measure what it claims to.

➞ **EXAMPLE** If the researcher said he or she was studying IQ, but used a Rorschach inkblot test, you could see that those two don't fit together. This would then lead to incorrect conclusions or data.

Additionally, some studies have errors in regards to the people that were used, or methods that were confusing or not necessarily related to the topic. The study may simply have had too many elements.



BIG IDEA

The methods section of a paper details specific components of the study as well as any errors that occurred.

1d. Analysis/Conclusions

Finally, when you want to know what the research proves, you jump down to the analysis, or conclusions, section at the end of the paper.

This section tells you how research relates to the subject that's being discussed in the introduction, and makes connections to the methods and data.

When looking at the conclusions section of a paper, it's important to think about whether the conclusions made are logical, and whether the results show what the researcher claims they show.

 **EXAMPLE** If the conclusions section states that soda causes children to have lower IQs, you would need to consider whether the data is saying that as well. If the research doesn't prove this statement, then it would be an incorrect assumption that isn't logical for the researcher to make.

In the conclusions section especially, a researcher needs to be careful that the statements aren't being applied too broadly to everybody based on the research. If only certain people were being tested within the experiment, they can't necessarily say that the conclusions will be the same for all people involved.



HINT

When looking at the conclusions section of a research article, you want to make sure that the conclusions are being made correctly for the particular populations or people that were being studied.



SUMMARY

In this lesson, you learned that reading and understanding scholarly research articles entails a different process than reading traditional articles. This is because research articles are intended for a more academic audience.

You now understand that there are four basic sections or **components of research articles: abstract, introduction, methods, and analysis/conclusions.**

Good luck!

Source: Adapted from Sophia tutorial by Erick Taggart.



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