



# Critiquing a journal article

---

## Introduction

This resource is primarily based on how to critique a journal article that reports a scientific study. However, **many of the questions / issues included are also relevant to evaluation of other source types** (such as books).

---

## Getting started

When you have been given your source carefully read through it a few times to familiarise yourself with its content.

Once you start to feel comfortable with the content of the source, it is a good idea to identify and make notes about the main points and conclusions (for tips around making effective notes see the note – taking study skills guide). Making notes is important because it will help you to develop a better understanding of exactly what the author is claiming or has found.

Key to critiquing is asking questions - the following outlines some key questions you should ask as you read through a journal article.

## Critique the abstract

The first thing you will read when given a journal article is its abstract. It is therefore important that an abstract is well written and accurately describes an article's content. Here are some things to consider when critically reviewing an abstract:

- Is the abstract concise and to the point?
- Is the abstract accurate?
- Does the abstract contain key pieces of relevant information (such as sample size and significance values)?

Be aware that a poorly written abstract may indicate that a poorly written article will follow!

---

## Critique the literature review

As you read a source's literature review, you need to critically examine the material that is being presented. To do this, ask yourself:

- Are references in the literature review from academically appropriate sources such as peer-reviewed journals?
- Are references in the literature review relevant?
- Has the author represented evidence (references) accurately?
- When were the articles used as evidence published? Has the author used out of date research?
- Has the author built up a good justification for why it was important for them to undertake their research?

## **Critique the design** (if applicable)

If you are asked to critically examine a piece of research, it is important that you explore how it was designed. To help you perform this analysis, ask yourself:

- Is the methodological design that was employed appropriate? For example, if the article is examining a sensitive area (such as eating disorders) was data collected in an ethically appropriate manner?
- Would it have been possible to conduct the search using a different approach? If so, has the author justified the approach that they have undertaken?
- Is the design appropriate given the nature of what has been explored?

---

## **Critique the sample** (if applicable)

If the source you are reviewing used a sample, it is a good idea to critically examine the quality of the sample. The following are some questions to think about:

- Are there any groups of people who are underrepresented? For example, in relation to sex, age, social class and ethnicity?
- If the sample only included volunteers, is it possible that there could be differences between people who did and did not volunteer to participate that might influence results that were not addressed?
- How large is the sample? If the sample is small, then the author(s) will not be able to make wide generalisations about their findings.

## **Critique interview questions** (if applicable)

In some studies, an author may have collected data using interviews. If so, think about:

- How were interview questions compiled?
- How was data analysed?

---

## **Critique questionnaires** (if applicable)

If the author has reported using a questionnaire, it is important to think critically about the quality of the instrument:

- How was the questionnaire constructed? Has the author developed a questionnaire? If so, have they tested to ensure that the questionnaire has both reliability (accurately measures) and validity (measures the construct it claims to measure).
- If an author is using a pre-existing questionnaire, is this appropriate? Is the context that the questionnaire was originally designed to be used analogous to the context reported?
- Who administered questionnaires? Were administrators trained to ensure that they were administered a questionnaire consistently and correctly?
- Who administered the interviews? Did interviewers receive training to ensure that interviews were administered in a consistent manner?

## **Critique other materials that were used (if applicable)**

It is important that you critically examine any other materials (for example a coding framework / experimental materials) that the author has used. Are they suitable?

## **Critique the procedure (if applicable)**

In a research report, an author must provide a clear and accurate account of how they conducted their study so that it would be theoretically possible to replicate their work. When examining a procedure ask yourself:

- Is it clear how data has been collected?
- Is it clear who collected different aspects of the data?

---

## **Critique the statistics / analysis (if applicable)**

Examining complicated statistics can sometimes be confusing. However, a good critical evaluation should examine the nature of statistics that a source author has used. Think about:

- Are the statistics appropriate given the size of the sample? Some statistical tests need large samples in order for their results to be robust.
- Has the author used appropriate statistics / analysis given the type of data that they collected? Some statistics tests should only be used with particular types of data.
- Has the source author clearly explained their findings?

## **Critique the discussion / conclusions**

It is important that you critically consider the discussion section of a journal article. In order to do this here are some questions to consider:

- Has the author effectively linked their findings to literature that they discussed in their literature review?
- Are conclusions that have been drawn valid, given results?
- Has the author identified that there are limitations with their own study? All studies have limitations; good articles will identify these and suggest how they could be addressed in future work.
- Is it possible to draw other conclusions that the author has not reported? If so, failing to report these could indicate a significant weakness with the source.
- Do conclusions have real world application? Are any recommendations made in light of research findings realistic?

---

## **Other areas to consider whilst undertaking a critique**

### **How well written is the article?**

Good research will be written in a style that is logical and clear to follow. The paper should be written in the third person and use appropriate terminology. If a source is poorly written, this can undermine the quality of what they are reporting and so should be commented on when performing a critical review.

## What does other research say?

When critically evaluating a source it can be useful to examine what other pieces of analogous research have found and how these were conducted.

- Have other studies used the same methodology? If not, why have they opted to use different methods? Is it because there is a weakness surrounding the approach used in your source?
- Have other studies used the same analysis? Again, if not, why have they opted to use different methods?
- Have analogous studies drawn the same conclusions as your source? If not, why? Is this because of a weakness with your article?

---

### Further information

The Learning Resources Study Hub provides a range of opportunities (such as workshops and drop-ins) for you to enhance your academic skills. For more information visit: **I**

**[lrweb.beds.ac.uk/studyhub](http://lrweb.beds.ac.uk/studyhub)**

