



## Anatomy of a research paper

### Abstract

- The abstract is a concise summary of the entire paper
- Typically there are 1-3 sentences corresponding to each of the subsections in the paper
- While some articles are behind pay walls the abstract is usually available to read for free
- **Tip:** Read the abstract first to decide whether the paper is going to be relevant to your topic

### Introduction

- The introduction or background describes what is known and what is unknown on a topic
- Starts broad and narrows to a specific research question
- Includes definitions of terms
- Provides a rationale for why the study is needed and what the study aims to achieve

### Methods

- The methods section explains how the research was carried out
- Study design and setting
- Inclusion and exclusion criteria
- Materials used
- Specifies the type of statistical analysis or qualitative data analysis used

### Results

- In this section key results are presented objectively, i.e., without any analytical explanation
- In the case of qualitative research this is where raw data are presented
- Includes statistics, texts, tables, figures, and graphs
- **Caution:** The results section can be tricky to understand, even for experienced researchers!

### Discussion

- The discussion section contains a more detailed summary of the results which includes the author's interpretation
- Key findings are summarised and compared or contrasted with previous studies
- Significance and implications of the findings are discussed
- Strengths and limitations of the study are addressed
- Future directions are highlighted

### Conclusion

- The conclusion is a summary of the key ideas and most important issues raised
- Restates the research problem
- Synthesises the major findings and their significance

### References

- A complete list of all the sources used in the paper
- **Tip:** Scanning the reference lists of relevant papers can be a great way to find previous work on your topic