

## Abstract

- A summary of main thesis, research focus, research gaps, finding and future direction
- Only single paragraph
- Should be simple
- Don't use abbreviations

## Introduction

- Research purpose (the reason for doing the research)
- Research hypothesis (or research question)
- The first sentence is all about importance of the topic and shall bring the reader attention.
- The second paragraph may be a motivation ... Introducing the state of the art research approaches and research gap
- The third paragraph would be on the purpose and methodology of the paper, explaining why it is important for the research community
- Shall highlight research gap
- Address shortcomings in the current research

## Background

- Give relevant citations at the end of each sentence.

## Related Works

- Classify the papers in terms of time (most oldest to most recent)

## Methodology

- How hypothesis is tested
- Describe author's approach to obtain relevant results to solve the research question
- Past tense

## Results

- What the findings were
- Confirms or rejects the research hypothesis
- How the results illustrate the validity of the question
- How the results weaken the validity

- Shall not include raw data

## Discussion

- How the findings were interpreted
- Restate the thesis
- Highlight research gap, consequences and possible solutions and future directions
- State the boundaries and limitations

## Conclusion

- Demonstrate the importance of research findings
- Synthesize the significance
- New findings or research methods

## Acknowledgement

- Funding institution
- Contributing colleagues (not authors)

## References

- Use a unique reference style.
  - Use software tools such as Endnote, Bibtex, etc
  - Cite everything discussed within the paper
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## Research Article

It is an article systematically prepared, peer reviewed and published in:

- Magazines, media and newspapers (media article)
- Scholarly journal
- Trade publications

### Media article

- Cover current news or ceremonial occasions and entertainments
- Authors are volunteers or paid employees
- Very mild review or no review.
- No citations but may be quoting
- May contain paid contents (advertisement, appraisal, promotion, degrading, etc.)

## **Trade publication**

- Covers news and topics which are
  - Profession-specific
  - Industry-specific
  - Project-specific
- Authors are paid employees
- No review
- No citations
- Contains ads

## **Scholarly Articles**

- Original research/review on a specific scientific topic in a specific research area
- Authored by domain experts affiliated to a scientific organization
- Peer reviewed by other domain experts
- Different types:
  - Primary article
  - Review article
  - Systematic review
  - Meta Analysis
  - Conference papers
  - Original research

## **How to conduct research?**

1. Observe
2. Understand
3. Identify the problem
4. Hypothesize
5. Make a plan
6. Data collection
7. Data analysis
8. Conclude
9. Suggest new direction

- Our term paper was a review article of the collected papers
- Proof read: is reading and mark any errors