

# Checklist for writing a research article

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## Introduction

An important part of doctoral studies in the IMPDET-LE programme is to write and publish a set of **research articles**. The articles published during the doctoral studies will, in most cases, eventually form the core content of the doctoral dissertation. In this page, we have collected important aspects that need to be taken into consideration when writing the research articles.

It is **strongly** encouraged that you will go through the checklist before submitting the research article or even before giving a draft of the article to your supervisor for reading/commenting. Please note that individual supervisors might have their own preferences and requirements for the structure and content of the article.

Kindly also note that this is just one example of the possible structure. For example, some publication forums might have specific requirements for the structure of the article or specific type of research articles (for example, technical papers, theoretical work, literature review) might have a different structure.

## Title

Characteristics of titles:

- Catchy
- Short
- Attentive
- Provides novel insight
- Concrete
- Clear

## Typical structure of a research article

### Abstract

- Should shortly describe objectives, research method (design & approach), results and conclusions of the article.
- The main outcomes/novelty of results should be explained clearly and precisely
- Please note:
  - Do **not** repeat the introduction part
  - The abstract should **not be** a table of content

### Introduction

- Write a clear answer already in the very first paragraphs to the following question; **what has been done in this study/piece of research** ?
- Discussion about the **importance** of the research problem that will be addressed
- Elaboration what is the relevance of the article; state what is lacking in the **current knowledge** or provide other justification **why it is important that the article should be published**
- Identify the main audience for the article
- State the objectives or research questions
- Stress the novelty aspect of the article; what are the new perspectives, results or contribution of the article to the current scientific knowledge or practice

## Background/Literature/Related work

- Define clearly the key terms and concepts used in the article. Remember to use the terms and concepts **consistently** later in the article. Do not expect that the reader is familiar with the terms and concepts.
- Discusses/Introduces relevant earlier scientific work, and research findings related to the article (both champions and most recent findings)
  - Purpose: to integrate and summarise what is known about the research topic, to establish credibility, to show a path to the prior research and reflect how the study is linked to earlier research efforts, to justify the purpose of the study
- NOTE: The role, as well as the breadth and length of the background/literature/related work section, might differ depending on the publication forum, and the type of the research article. In some cases, it might be enough to write an extensive background related to the study/research topic, while other forums might require a systematic review of literature, even establishment of a **theoretical framework** to guide the study
- Re-use figures from literature sparingly, only if you need to use the figures as source materials to support your own analysis

## Research design and methods

- Describe the context, research setting, and study participants
- Introduce the research design
- Describe the data collection methods
- Provide an outline of the data analysis
- Discuss ethical aspects of the study

## Results

- Present the demographic data of the participants
- Present the results of the study, preferably clearly referring to the research questions
- Use figures, graphs and tables in a way that they support or extends the body text, but not repeat it

## Discussion & Conclusion

- State the main findings of the study
- Discuss the findings of the study with reference to previous studies introduced in the Background/Literature/Related work section
- Elaborate possible practical implications of the study, for example, guidelines, good practices, recommendations for practitioners, etc.
- Discuss possible weaknesses of the study, as well as measures taken to consider validity, reliability, generalizability, trustworthiness, and other applicable research quality metrics
- Future work

## General pieces of advice

### Technical aspects

- 1) Make sure that the references are **correctly and consistently** formulated both in the body text and the in the reference list. Please remember to check from the publication forum instructions what reference style should be used.
- 2) Spell check the text very carefully
- 3) Check that all figures and tables have headings. Also, check that each figure and table is referred in the body text.
- 4) Check the word/page limits, and most importantly respect the limits. Shorten the article if needed. Do not send an article that is too long.

### List of resources to support the writing process

1. [Publishing content](#) - training webcasts for researchers by Elsevier
2. [How to write a journal paper in seven days](#) - A Prezi presentation by Dr. Inger Mewburn