How to write a research paper

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Carl Spitzweg: Der arme Poet (1839)

Resource Toolkit
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Available from www.martin-muller.net
What is research paper?

1. What is a research paper?
   - analyses and interprets empirical material
   - embedded in the academic literature
   - focused on a research question
   - trains your writing and argumentative skills

2. Structuring and writing a research paper

3. Dos and Don’ts
1. What is a research project?
2. Structuring and writing a research paper
3. Do and Don‘ts
Writing needs a lot of preparation.

For a research paper you will often have concluded the following steps of a research project (see the corresponding toolkit):

- Review the literature
- Formulate a research question
- Design your methods and research strategy
- Collect and process empirical material
- Analyse empirical material

Writing a research paper orders the results of your analysis and puts them into a larger context. It presents the major findings to an audience.
Outline of a research paper

1. What is a research paper?
2. Structuring and writing a research paper
3. Dos and Don’ts

1) Introduction
2) Literature review
3) Research design and methodology
4) Analysis
5) Discussion
6) Conclusion
Drawing up a storyboard

✓ Do not start writing until you have figured out the storyboard.
  • What is it that you want to say?
  • Through what evidence are you going to corroborate it?
  • Draw up a storyboard through filling an outline of the research paper with notes, bullet points and/or graphics.
✓ This involves a process of selection:

“Perhaps a great deal of your hard-won knowledge and material will end up, as film people used to say, on the cuttingroom floor” (Becker 2007: 31).

✓ Construct a coherent narrative.
1. What is a research paper?

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A film storyboard...
1) Introduction

The introduction sets the scene for the things to come.

Tasks to be achieved include:
✓ Point out the relevance of the subject matter
✓ Introduce the research question
✓ Signal the methodological approach to answer the question

Strategies to start a good introduction:
• with a catchy, pertinent example
• with a catchy quote (but establish the relevance of the quote)
• with an unusual observation
• with a, perhaps controversial, claim from the literature
• with a gap in the literature
2) Literature review

The literature review provides the context and background for the research.

Tasks to be achieved include:
✓ Introduce the relevant published literature on the topic, organised around the research question.
✓ Structure ongoing discussions and controversies in the field.
✓ Show how the research questions relates to the field.
✓ Position your own contribution.

The literature review is not just a summary! It structures the field around the research question, evaluates the literature and perhaps points out lacunae.

Review with a purpose! Don’t let the sources organise your paper.
3) Research design and methodology

This section gives a transparent overview of how you collected and analysed your material.

Tasks to be achieved include:

✓ Outline methods of data collection and rationale for choosing these methods.
✓ Describe the material that your analysis will be based on.
✓ State how you have processed the material. (e.g. transcription of interviews, transfer questionnaires into SPSS)
✓ State principles and methods of analysis. (e.g. coding of interviews, regression analysis, t-test)
✓ Include survey questions or interview guides in a separate appendix.

This section should contain the necessary information so that the reader could replicate your project!
4) Analysis

The analysis presents your major findings in relation to the research question.

Tasks to be achieved include:

✓ *Select the strongest bits and pieces*: There will be plenty of material: cut it down to what you think helps you make your argument best.

✓ *Order the material into a coherent argument*: What is the story behind your research? How does the empirical material link up? What aspects are there?

✓ *Interpret and explain the material*: do not just summarise or collate things, but go one step further and interpret. Why do we see what we see? What are the reasons for it?

✓ *Highlighting patterns*: Can we see any regularities or perhaps contradictions?
5) Discussion

The discussion situates and evaluates your findings against the initial research question and the literature in the field.

Questions to be asked include:

- How do the results relate to the original question? What have we learnt?
- *Qualify and contextualise:* Are there other ways to interpret your findings? What might be the limits of your findings? Against what context do they have to be understood?
- How are your findings different or similar to those of other authors? For what reasons?

The discussion establishes a frame with the literature review.
The conclusion should be crisp and short and wraps up the research paper. It can contain one or several of the following elements:

- What is new or different in your findings?
- Why are your findings important?
- How do your findings connect to a bigger picture or other cases?
- What political, social, economic etc. implications do your findings have?
- To what extent were you able to answer your research question? What were reasons why you were not able to fully answer it?
- What further research needs have emerged?

The conclusion establishes a frame with the introduction. The two parts need to fit together.
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1. What is a research paper?

2. Structuring and writing a research paper

3. Dos and Don’ts

- A good research paper needs revising and editing.
- Finish a first draft at least one week before the deadline to allow enough time for revisions.
- Plan for contingency – some things take longer than expected.
1. What is a research paper?

2. Structuring and writing a research paper

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Do... revise.

- Much of the process of writing is in fact re-writing.
- Thoughts form in the process of writing: this is natural and happens with the most accomplished writers.

Example: the frequent revisions of James Joyce’s *Finnegans Wake* (an unreadable masterpiece of 20th century fiction)

The argument you start out from will often not be the one you end up with. This asks for revisions of things written at the beginning.
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Do... be specific.

- Avoid general and generalised arguments.
- Do not treat an issue at a superficial level of general knowledge – a research paper demands to be more specific and dig deeper.

Avoid this:
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Do... keep your focus!

- There is so much to write about – don’t get distracted.
- Refer back to your research question and the introduction to remind yourself what you are writing about.
- Cut parts that do not contribute to your overall argument.

- Daddy, why are starfish shaped like stars?
- Uh...
- That’s a very interesting question, Sadie. Functional adaptability and anatomical determination in biological systems is a fascinating issue that certainly warrants further investigation.
- Does that mean you don’t know?
- It’s beyond the scope of my research.
Do... avoid jargon.

- Keep the text as simple as possible without compromising your argument.
- Excessive use of jargon is not a sign of academic excellence but of messy thinking.
- Use technical vocabulary where necessary but never at the expense of clarity.
Do: Keep your balance.

There is no need to pass over counter-arguments in silence. Acknowledge them. This can strengthen your own thesis even more, because you anticipate doubts and pre-empt objections. weigh alternatives before arguing for one. confront difficulties instead of sweeping them under the rug.

- What counter-arguments have been or could be put forward (or could be put forward)?
- Might there be an alternative explanation for the phenomena you have found?
- How does your account differ from the conventional wisdom? For what reason?
Creating the title is the last step of a research paper: it needs to accurately capture what has been done.

Criteria for choosing a good title:
1. Gives the reader a clear idea what s/he can expect to find.
2. Contains no obsolete words or phrases (such as "study of", "analysis of", "case of" or similar constructions).
3. Uses important keywords of the field.
4. Is limited to a maximum of 10 substantive words

Subtitles can be used to move from the theoretical ambition to the specific case:

*State dirigisme in megaprojects: governing the 2014 Winter Olympics in Sochi*
Do... document your sources.

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- Use academic referencing and an established reference format to document thoughts, information, figures etc. from other sources.
- Draw up separate bibliographies for academic literature and empirical material (interviews, newspapers, films etc.) that you use for your analysis.
- When using online sources, only quote from trustworthy, respected institutions.
- Wikipedia is not an appropriate academic source for referencing as such, but may guide you to relevant material.

Corcoran, J. 2005. The role of the Financial Times in the promotion and defence of the British and the European Communities.
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“Do... write.

• Start to write early on – thoughts put down on paper reveal their messiness much easier than thoughts whirring around in your head.

• Be prepared to revise these first drafts.

“A writer who waits for ideal conditions under which to work will die without putting a word on paper.”

E. B. White
Further reading

Two classics on general style and how to write: