Paper Writing Guide

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Note: this is a constantly developing document. This version: August 20, 2025. Please send all questions and comments to peter.luca.versteegen@univie.ac.at

Title of Paper: Subtitle of Paper

Name

If applicable: Bachelor's/Master's Thesis

Date

Abstract

In not more than 150 words, briefly summarize the paper. The abstract should describe the research problem, highlight your research question and argument, state how you're examining it and what you found. Finally, it should say why this matters. 150 are very short, but try to be as specific as possible.

Keywords: put 3-5 keywords here that describe your research

[word count abstract: XX]

Number of words: XX
Tables: XX
Figures XX

On the first pages, you need to communicate a couple of elements. As you have limited space, you need to be very specific. Basically, each of the following paragraphs should provide one or several of these essential elements. The first paragraph starts with a veeeery *introduction to the problem*. You can use a media report, a recent example, or just a very simple of academic literature. In any case, it should be so simple that a dog can understand it.

In the second paragraph, you specify what we know and what we don't know. Briefly introduce what the most prominent academic work has said about the problem (this is what we know). Don't be too specific here, the details can go into the literature review. Be broad on this. In the same paragraph, also mention what we *don't know*: this could be a particular question on this problem, an empirical limitation in previous research (e.g., design, certain countries, only certain methods) or a follow-up. Make clear *what is lacking*.

Based on this lack, you start the third paragraph saying what your *research question* is. Obviously, this question should directly tap into the gap that you just identified. Ask the question (in italic) and then add 1-2 sentences to *describe what this question means*. And then have 1-3 sentences where *you think the answer is*. These sentences will be your central argument, theoretical framework, or methodological development throughout the paper. You'll need to remain general here (the specifics go into the theory section) but still be as specific as possible. By now, the first page is probably full.

But we're still in introduction. What do you do right after your brief summary of your research question and your theory? You summarize your empirics to tell readers how you examined your question and argument. What are your data, where is the study conducted, and what analysis do you use? In the same or a new paragraph, you summarize your findings. Again, be brief, but give readers an impression of the most important results.

In the next paragraph, you specify the *contributions* of your paper. Here, you try to identify 1 to 3 contributions where you think that the scientific literature or ordinary citizens benefit from your work: is it that you develop a method or that you advance a theory? Or that you apply a method to a new case? Or that, if your theory is supported, voters could really improve their health, well-being, knowledge? Could it help us understand something that is really weird? What does your paper add to our world (no worries, often this is quite small, and that's OK!)?

A related but slightly different element you need to provide in the same or another paragraph are the implications. What do your findings mean for the real world? Do they suggest we need to change policies? Do they change how we understand a certain behavior? To they tell that the method we're be using is no longer usable?

In the final paragraph of this introduction, you briefly summarize what you're going to do in this paper: You say that you will start by reviewing the literature before you develop your theory. You will then continue with the methods and present the results. Finally, in the last sentence, you write that you will end the paper with a discussion of the findings, the paper's strengths and weaknesses, and avenues for future research. This introduction is about 2-4 pages long and, as you may have noticed, basically a small paper within the paper. And they are often the most difficult pages to write, so once you're done, relax and take a break!

Literature Review: Some Title Summarizing the Lit Review

In this section, you have a couple of paragraphs where you describe in more detail what's been done in earlier research. The length of this section depends on the paper. Usually you have 2-3 pages on this.

There are various ways to do this,

- most papers start broadly and then increasingly narrow down the literature that is relevant for their question.
- Another way would be to combine two lines of research (e.g., one on voting and one on gender differences in political participation, which you would then merge into a paper on gender differences in voting). You review both and then connect them to conclude that there is something that we don't know.

It's very (!) important that you don't just mention previous literature. Do not devote one paragraph to a single paper (unless it's central for you). Likewise, don't just mention one paper per sentence. The idea of a literature review is to *critically discuss the literature and connect the papers to each other*. You discuss one reference and then say how the next one builds on this, studied the same question with a different method, looked at a different case, contradicts the previous one etc.

- A bad example: "A study by Penguin and colleagues (2012) shows that people who like ice cream are particularly like to vote for conservative parties. An experiment by Dolphin (2008) shows that people are less likely to vote for a radical right party if they had just eaten loads of chocolate. Crab and colleagues (2016) find that salad tend to vote for left parties."
- A better example: "Previous literature on the relationship between sugar intake and vote choice is ambiguous. On the one hand, Penguin and colleagues (2012) used a correlational design and found that people with high levels of ice cream consumption were more likely to vote for radical right parties. While this suggests initial support for the theory, causality remains unclear. More causal evidence comes from a Spanish study conducted by Dolphin (2008), who randomly assigned people to eat loads of chocolate (vs. nothing) and found that individuals in the chocolate-condition were significantly more likely to vote for a conservative party. Recent research by Crab and colleagues (2016) corroborates these findings. Their work used cross-national evidence

> and found that salad-consumers sympathized with left parties[1]. Despite these important findings, it remains unclear if these effects are indeed linear or if, in fact, people will again vote more conservatively if they eat salad only. Before I will explain why I think this could be the case, it is important to also acknowledge the literature on vitamins and voting (next paragraph)."
>
> - Note that this example discussion mentions a.) the designs and type of evidence, b.) when they were published (this gives an impression of how the literature developed, c.) whether findings are consistent (e.g., "corroborates"), and d.) mentions why there still is a gap.

By the end of the literature review, you again summarize what we know so far and why you think that this isn't enough (theoretically, empirically, etc.). If you've done this, you're ready to come up with your own theory/develop an existing theory to improve this "not enough."

A good literature embeds your argument in the existing literature. It does not mention all the literature in a field, not does it touch upon all limitations and problems existing therein. Instead, it should provide an overview of the field but quickly help you situate your focus in the literature. At the end of the literature review, readers should think "this really is a big problem and I think we need to do exactly xyz." Then there's a cliffhanger and in the theory section, you exactly propose to do xyz (and then you do it in the empirics). For excellent advice on the purpose of literature reviews (and on academic writing in general), see the blog by Catherine de Vries here.

[1] Please note that this is not real evidence. In fact, it's likely that voters from all camps eat chocolate (and that NO ONE likes salad).

Theory: Here You Say What Your Theory Is

Here you basically propose "a solution" to the problem that you've identified above. A theory section does *not* mean to discuss many different theories, or start discussing any theory. In the theory section, you formulate your solution to the problem you identified. While the literature review section is about writing what others have and have not done, it is on you "to do" in this section. But remember that your time and resources are limited. It's unlikely that you will reinvent the wheel (which probably wouldn't be a good idea anyway). However, you can significantly develop an existing theory. For example, you could say that a well-established theory only works for some individuals, in poor but not wealthy countries, or is mediated through another factor. Here, you could also say that you don't focus on developing a theory so much but testing a study more rigorously.

The length of this section again varies, but could be 1-3 pages.

- For example: "In the present paper, I theorize, based on what I have reviewed above, that there is a non-linear relationship between sugar consumption and vote choice: specifically I suggest that the more sugar people eat, the more conservative they vote. However, at a certain threshold, they have eaten so much sugar that they will vote more left. This is illustrated in Figure 1 and formally hypothesized as Hypothesis 1 (H1)."
- Another example, if you don't like the previous theory: "An alternative one would be that there is a positive relationship between sugar intake and conservatism among people who like sugar. However, for people who do not like sugar (~ weirdos), the relationship between sugar intake and conservatism will be negative. This idea is visualized in Figure 2 and formally hypothesized as Hypothesis 2 (H2)[2]."

[2] Again, this is for illustrative purposes only. These two hypotheses make little sense together and are only meant to show how you could visualize these different theories.

You can often help readers and yourself with a visualization of your proposed theory.

FIGURE 1. Hypothesized model.

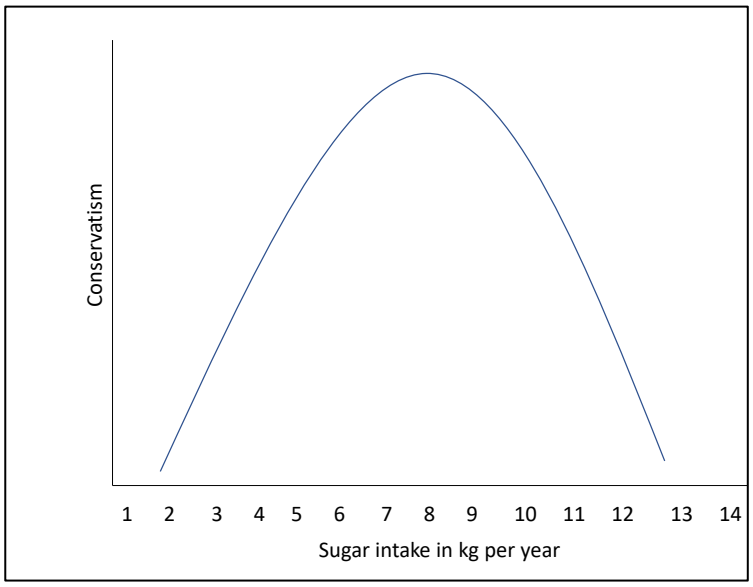
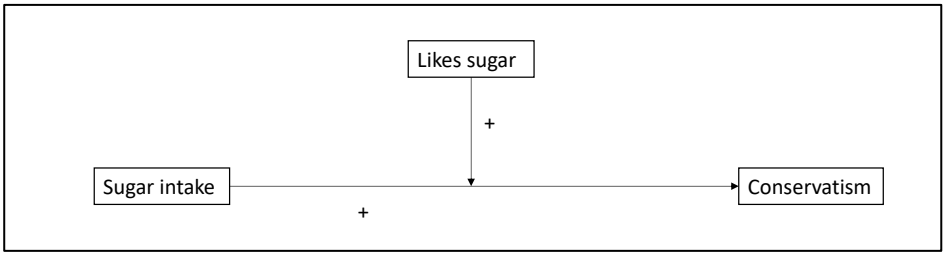


FIGURE 2. An alternative hypothesized model.



At the end of this section, you provide formal hypotheses (if a quantitative paper) *or* specific questions (if a qualitative paper). Once the reader has gone through the literature review and your theory section, they should not be surprised by your hypotheses or empirical questions.

- H1: There relationship between sugar consumption and vote choice will be curvilinear.
- H2: The relationship between sugar intake and conservatism is moderated by "sugar liking," such that it becomes more positive among people who like sugar.

Methods: Here You Say How you Studied Your Theory

Data and measures

These sections very much depend on your theory. For the example outlined above, it may make sense to test the causal effect of sugar intake on vote choice by conducting an experiment. You could randomly assign people to one of two conditions: in one condition, they eat sugar. In the other condition, they eat salad. And then you measure people's levels of conservatism.

- Specify the design of your study
- quantitative methods:
  - Specify the measures
  - Specify statistical power
- qualitative methods:
  - Specify the interview questions/observation procedures.
  - Discuss positionality
- Also discuss ethical aspects of your work.
- Also discuss open science aspects (e.g., pre-registration, data availability etc.)

Analysis

For whatever analysis you choose, be detailed.

- Quantitative methods: It's not enough to say that you ran regressions. Say what kind of regressions you ran.
- Qualitative methods: It's not enough to say that you ran critical discourse analysis or that "themes emerged". Describe the single steps of your coding, documentation, interpretation, and presentation of the results (depending on what qualitative method you used.

Results

The setup of the results section depends on your method.

- Usually, you have a subsection with descriptive findings
  - quantitative methods: this will often be means of variables, correlations, etc
  - qualitative methods: this will often be a structuring of your themes (in thematic analysis) or frequencies of codes (in qualitative content analysis)

- Usually, you also have one subsection with the main results
  - quantitative methods: presentation of hypothesis tests
  - qualitative methods: e.g., description of themes, presentation of informative quotes (depending on the method). The responses to the empirical questions should become clear.

General advice for the results section

- Be specific, but ensure to communicate your main results.
- Good papers have some figures to summarize the main results.
- Strong papers provide robustness tests. These show, for example, that a quantitative result is not sensitive to the kind of regression you use. Alternatively, you could show that your theory also applies to a similar outcome or different measure of the same concept. Qualitative papers could point to some data visualization to show that you did not cherry-pick the quotes you presented.

Discussion and Conclusion

- One paragraph summarizing where the paper departed, what your argument was, and how you went to study this.
- Another 1-2 paragraph(s) on what you found
- Then 1-2 paragraphs integrating this into previous literature
- Next you have 1-2 paragraphs discussing the major limitations and avenues for future research. Don't list all limitations but focus on those you find most relevant. Ideally, you also manage to defend your methodological choices and weave the paper's strength into discussing the limitations (it's kind of marketing. Don't say "The limitation of this car is that it only has three wheels" but phrase it positively "While this study was the first to show that cars cannot fly, our materials were limited to three wheels. Ideally, future research follows up by testing whether this finding also applies to four wheeled-cars or even trucks"). For future research, be bold and write about what you think would be most relevant to do.
- Discuss how your paper advances scholarship and the real world. Obviously, your paper likely won't be revolutionary, but good research papers develop knowledge and real problems in small, specific regards. Tell readers why this matters, or (again future research) what needs to be done to make this really matter. You decided to study this field for a reason, so think big here and tell us why it matters!
- Finally, you conclude with one paragraph summarizing the paper's argument and result, and preferably end with something inspirational.

References

Alphabetically, list *all* references that you cite in your paper. Do not include references that you have not used and not read. Make sure that you use a consistent referencing style both in-text and in the reference list. This could be, for example, APA or Harvard. Be consistent!

Regardless of the reference style, all references include all author surnames, first names (full or abbreviated depends on referencing style), year of publication.

Journal references also include the name of the journal and the issue number. Also provide the Digital Object Identifier (DOI-number).

Book references also include the publisher (E.g., Cambridge University Press). If the book has several chapters, provide the chapter name and the page numbers. If the book has been edited and includes several authors, include the editors' names.

For all these different references, look at reference guides, they have illustrations for the weirdest forms of references.

Please note that referencing is very important in scientific work. Even if your paper is very good, you may lose readers (or marks) if you do not cite properly. It is probably not the most entertaining part in academic writing but pay attention to this, this can turn your great paper into a brilliant paper.