

Advice on Thesis Writing

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Introduction

Why writing fails:

- Uncertainty/hesitancy of author – what exactly do you want to say?
- Poor organization – edit, edit, edit, get someone else to edit, edit again.
- Overly complicated writing. Insecurity breeds jargon and avoidance of simplicity.

Compare:

- There is nothing wrong with short sentences.
- In comparing sentences of varying lengths, it must be concluded that, without question, longer, complicated sentences are inferior to sentences which seem intended only to impress someone else and test their stamina to continue reading to the bitter end.

Which would you rather read?

1. Format

Epi-related theses should be structured similar to an epi journal article: abstract, background/introduction, methods, results, discussion, conclusion. Because you don't have to be quite so concise, there is room to expand on this a bit, in particular to show the process you have engaged in from comprehensive data analysis to identifying key findings (and to include things like dedication, acknowledgements., etc.) However, the main conventions as journal writing should be followed.

A few specific comments:

Introduction vs Background – These essentially provide the same purpose. You can have either one or, if you prefer, both. If you have both, have a clear purpose for each. For example, the Introduction can provide a global view on the issue you are examining, and the background can be more specific to the research setting (including a description of relevant government or international donor program/policies).

Some students imagine these sections to be an overview of the literature. Well, that's partly true. Keep in mind that there are two kinds of literature survey: scene-setting and critical evaluation. The Introduction or Background should include a "scene setting" literature survey to help the reader understand what problems you are addressing (what's known, what's not known, why is the topic important) and how they relate to the work of others. But you'll need to engage the literature critically in the Discussion section later on to highlight how your results agree with, or contradict, others. A comprehensive literature review is not going to be really

helpful to orient the reader to the main purpose of this section, which is to set the context for understanding why you are addressing your topic. At the end of the Introduction, you should have a statement of the objective of the research, and then describe the chapters to come.

Research setting and Methodology - This section is harder to write than you might expect. Describe the context of where the research was conducted assuming the reader has never been there, and has no assumption of whether it is a wealthy urban metropolis or an impoverished rural village. Maps are helpful – both of the general setting (region within the country) but also, for example, of the lay-out of a specific village/neighborhood. Describe exactly what you did to design survey instruments, identify research participants, and conduct the research. Any thing that is presented as a “result” in the subsequent chapter needs to have a corresponding reference here. You also need to describe your (quantitative and qualitative) data analysis approaches. This section always ends with a discussion of ethics – specifically, IRB approval. Additional discussion of ethics can be mentioned here, or included in discussions of specific research (e.g., in discussing consent).

Results – Always start with a description of the population that participated in the study (age, sex, education, and other demographic variables). Then each major research issue can be its own sub-section. It can take a lot of data analysis and a lot of thought to determine the key research issues and what variables to use to present these variable (in cross-tabulation for example). It would not be unusual to present 25 tables and to have produced, and tossed 250 other tables that are less clear (was the question understood?), or less interesting (if everyone answers the same, you might include the result but have no need for a table).

Tables are useful and efficient but think about how best to present data in ways that are more visual, descriptive and intuitive – graphs. The results always begin with simple frequency and cross-sectional data and then move into regression models, which often look at a single key outcome (what predicts this outcome?). This both mirrors how you did the analysis, but also allows the reader to understand the data better than immediately presenting regression models.

If you have both quantitative and qualitative data, you can either integrate or separate out the data. It can be less redundant, and more interesting, to integrate, but it depends on the data, and on your preference. How to triangulate quantitative and qualitative data is a different discussion, but try to have a balance from section to section on the presentation of the data. If you have some sections where you only have quantitative data and some where you only have qualitative data, this can get confusing.

Discussion – The results section can be overwhelming. This section is your chance to take a step back, a deep breath, and to underscore the most important findings and say....what does it mean? Start in the first paragraph by outlining the key finding (you don't have to do this with

specific numbers and percentages – just say what the finding was). Then each of these key findings becomes a sub-section where you relate that finding to the literature: is this finding consistent with what has been previously reported? Is it new? Does it contradict other results? Be specific. Be comprehensive but if there is a lot of literature and it all says the same thing it's ok to be concise (“...this finding has been extensively reported in west¹²⁻²⁴ and central²⁵⁻⁴⁵ Africa...”).

Limitations - The last part of the Discussion in a journal article is always about limitations and future research. It's often superficial and rote. This is a mistake – recognizing limitations is critically important. For your thesis, this should be its own chapter. Spend a good amount of time thinking this through. Of course your sample size is a limitation. It almost always is. Mention it, but spend more time thinking about what challenges you faced given the constraints you had, and what you might have done differently. What were the strengths/limitations in the methodology you selected for the topic you researched? What were the specific challenges of measurement (sensitivity, specificity, reliability, validity) – in terms of the variables and outcomes you selected? Cross-cultural definitions? Bias? Confounding? Generalizability? Power of the study? What should future studies look at?

Policy Implications – What do your results mean for policy-makers?

2. More general advice

The process of going from data analysis to writing can be daunting. It can be the wrong approach to start with the introduction and plow forward linearly. One way to approach it:

1. Start with the conclusions. Write a couple pages on what you've found. In writing these conclusions, you should also be writing some of the introduction, in that you'll need to give enough background so that general readers can understand what you're talking about and why they should care. But you want to start with the conclusions, because that will determine what sort of background information you'll need to give.
2. Now step back. What is the principal evidence for your conclusions? Make some graphs and pull out some key numbers that represent your research findings which back up your claims.
3. Back one more step, now. What are the methods and data you used to obtain your research findings.
4. Now go back and write the introduction.

Keep in mind too that most people will not read your thesis from start to finish either. They might read the abstract, intro (maybe), results tables then decide if they want to dig into the paper. So, consider this and how sharp and independent these sections need to be.

3. Other Comments

1. Go through and remove all contentless words and phrases, such as:

- “Of course”
- “Note that”
- “Interestingly...unsurprisingly...”
- “very...extremely...exceptionally...”
- “We can see that”
- “It is important to note that...It is clear that...It is evident....”

I strongly oppose these because it invites the reader to start arguing with you before they have read through the entire piece. When I see this language I am immediately distracted thinking “I don’t find that interesting” or “is that important?” or “that is not clear/evident”. It’s better to have your readers considering your conclusion as a whole rather than debating your throw-away remarks.

2. Give descriptive captions to all your figures and tables.

3. I’m not really picky about the use of the passive voice, but especially in the methods section avoid using the passive voice when describing specific, active steps that were taken to define the sample, select subjects, develop the survey instrument, etc. Otherwise it sounds confusing and defeats the purpose of the methods – to describe what you’ve done.

4. Feel free to use Appendices. For sure your questionnaire should be in an Appendix, but you can also put more detailed info on the research setting and selection process.

Most important: When writing about people, be respectful and empathetic.

Find ways to ensure that you don’t reduce their lives to specific characteristics – put the ‘person’ first. This is both empathetic but also more accurate – we are not just one thing.

For example: Person with a disability, person who uses drugs (PUD)

“Our sample consisted of 200 individuals reporting current alcohol dependence and no stable housing over the past 12 months” vs “Our sample consisted of 200 homeless alcoholics...”