

Writing a Bachelor's Thesis in Cognitive and Decision Sciences

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Today

- State of your research topic
- How to **write** a thesis
- Planning

Scientific Writing

- Style
- Language
- Citing Literature
- APA-rules

That's all to make the reader understand you!

Scientific Writing

- Structure of your thesis
 - Title page
 - Abstract
 - Index
 - Main text
 - References
- Formatting
 - 1.5 line spacing
 - Regular font (e.g., Times New Roman, Book Antiqua, Helvetica)
 - Fontsize 10-12 pt

Scientific Writing

- Goes in three phases

- 1 Outline by headers

- Fill in Key references, claims and main messages
- This should tell the complete story roughly
- This step is mostly what your proposal should be

- 2 Start writing real paragraphs

- Don't mind too much about ugly wording
- Still finding out if your story is complete

- 3 Rewrite to a nice, readable final draft

Scientific Writing

- Headers tell the structure of your thesis
- Each paragraph has one key message
- No paragraph is unnecessary
- The end of each chapter summarizes shortly what it has added to the bigger story

Scientific Writing

- At every level of writing:

Start with what the reader knows and built new knowledge on that

Known → New

Scientific Writing

Known → New: Thesis level

- Introduce each concept and construct before using it
- Built up complexity step by step
 - e.g., first introduce general intelligence, before you explain which different domains there are and only then how they are measured

Scientific Writing

Known → New: Chapter level

- E.g., introduction
- Starts with the real-life behavior
- Explains how this behavior is assessed in psychology
- Shows what view you are going to take on these assessments

Scientific Writing

Known → New: Paragraph level

- Start with what the last paragraph ended with
 - That is the “known” info here
- Introduce new information
- Conclude with the information that is to be carried on to the next paragraph
 - If there is nothing to use in the next paragraph, the paragraph might be not relevant enough

Scientific Writing

Known → New: Sentence level

- Start a sentence with the words or concepts that were introduced in the previous sentence
- End a sentence with new information
 - New terminology
 - A new viewpoint
 - New property of the known thing
- In this way: create an information daisy chain

Scientific Writing

Known → New: Sentence level

- Not: *Students who followed this course wrote a better thesis. Example sentences helped them to improve their writing.*
- But: *Students who followed this course wrote a better thesis. This improvement was due to the use of example sentences.*

- Not: *In many tasks, people slow down after they make an error. An increase in response caution is thought to cause this phenomenon of post-error slowing (PES).*
- But: *In many tasks, people slow down after they make an error. This phenomenon of post-error slowing (PES) is thought to reflect an increase in response caution.*

Scientific Writing

- General tips
 - Use active constructions
 - Not: *This will be discussed later*
 - But: *We/I will discuss this later*
 - Use explicit words
 - Not: *Pandas use bamboo for nutrition*
 - But: *Pandas eat bamboo*
 - Not: *Group A had significantly shorter response times than group B*
 - But: *Group A was faster than group B*

Scientific Writing

- General tips
 - Use clear actors and actions
 - Not: *This claim has been subject of debate*
 - But: *Researchers have debated this claim*
 - Use parallel constructions
 - Not: *Strategy A is used in Situation X. In situation Y, people use Strategy B*
 - But: *Strategy A is used in Situation X. Strategy B is used in situation Y.*

Scientific Writing

- General tips
 - Write in present tense
 - Kill your darlings
 - An example that looked nice might just miss the point
 - A nicely constructed sentence might turn out just too complicated
 - Delete it! (really)

Scientific Writing

- All claims go with citations
- Opinions are only in place when going with arguments and citations

APA

- All APA rules should be followed
 - Citations
 - Tables
 - Figures
 - Word use (e.g., sex-neutrality)

APA

- Don't ask me!
- It is important, but you'll learn it on the fly
- With everything you add to your thesis: do it APA
- Take one paper from an APA journal that has
 - Figures
 - Tables
 - References
- Look up how they did it
- Shortly some rules that I do know:

APA

- Citations

- Supporting claims:

- X leads to Y (Thomson et al, 2009)
 - X leads to Y (Smith, 2008; Thomson et al, 2009)

- Indirect speech:

- Thomson et al. found that X leads to Y (2009)

- Literal citations:

- Thomson (2009) stated that “X leads to Y” (p. 423)

APA

- Tables and Figures have capitals
- Tables and Figures have a separate numbering
- Tables have a number and title above and optional “note” below
- Figures have a number and a caption below.

APA

References

- Cummings, J. N., Butler, B., & Kraut, R. (2002). The quality of online social relationships. *Communications of the ACM, 45*(7), 103-108.
- Hu, Y., Wood, J.F., Smith, V., & Westbrook, N. (2004). Friendships through IM: Examining the relationship between instant messaging and intimacy. *Journal of Computer-Mediated Communication, 10*(1), 38-48.
- Tidwell, L.C., & Walther, J.B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research, 28*(3), 317-348.
- Underwood, H., & Findlay, B. (2004). Internet relationships and their impact on primary relationships. *Behaviour Change, 21*(2), 127-140.

Planning

- Plan!
 - Have a look at the weeks to go
 - Are there important things that take your attention? (exams etc.)

42	43	44	45 Proposal!	46
47	48 Exam!	49	50	51
52 Vacation!	1	2	3	4
5 First draft!	6	7	8	9

Planning

- Plan!
 - Fill in the tasks you give yourself as explicitly as possible
 - “Read paper X and Y to find out Z”
 - “Summarize all work I found on X”
 - “Write subparagraph so and so”

42 Read x	43 Read y Write x	44 Write y	45 Proposal!	46 Read, summarize x, y, z
47 Write x, y, z	48 Exam!	49	50	51
52 Vacation	1	2	3	4
5 First draft!	6	7	8	9

Planning

- Plan!
 - This planning gives a goal to everything you do
 - Keep this goal in mind while reading/writing/administrating
 - When you don't know why you are reading/writing/administrating something: Stop doing it and look at your planning to see what you are supposed to do now

Planning

- Writing your thesis should be fun.
- If it is not fun, you probably forgot your goal
- Take a breath and find your goal back
- Enjoy

Important Dates

- 24 – 09 – 2013: Start searching for and developing a topic
- 10 – 11 – 2013: Hand in proposal & signing bachelor thesis contract
- 02 – 02 – 2014: Deadline in 1st draft (optional)
- 15 – 04 – 2014: Deadline final version