

# How to write a Bachelor's Thesis in Cognitive and Decision Sciences?

Gilles Dutilh

# Who I Am

- Gilles Dutilh, 32
- Psychology at University of Amsterdam
  - Master Psychological Methods
- Got my PhD in mathematical psychology
  - Dissertation on modeling of response times of speeded two-choice tasks
- Now Post Doc at Jörg Rieskamp's Economic Psychology Group
- [gillesdutilh.com/pages/BAseminar.htm](http://gillesdutilh.com/pages/BAseminar.htm)

Who are you?

# Goals of this seminar

- Advising you on writing your bachelor thesis in Cognitive and Decision Sciences
- Advice on:
  - Finding a topic, searching literature
  - Developing a research question and structuring the thesis
  - Practical issues (APA rules, scientific writing)
- Peer-to-peer support
  - Feedback and critics
  - Motivation
- Supervision
  - Seminar (4 classical sessions)
  - Individual meetings

# Topics of the Seminars

- Today: Introduction
  - Planning and goals of the seminar
  - Your motivation and expectations
- Week 2: Choosing a topic
  - Requirements
  - What is a good topic?
  - Work out a topic yourself vs. Choose one of the suggested topics
- Week 3: Literature search
  - How to search
  - How to read
  - How to keep account of you literature
- Week 4: Scientific writing
  - Working productively and creatively
  - How to structure your work
  - Writing tips

# Today

- What is a Bachelor's thesis?
- Short introduction of available topic suggestions
- Planning of the Seminars
- Your motivation and expectations

# Bachelor Thesis

- A bachelor thesis is a **literature review**
- However, it's not just a summary of the literature, but should build up to a strong message.
- A good thesis:
  - Defines and clarifies a problem.
  - Summarizes the state of the field.
  - Identifies connections, inconsistencies, and gaps in the literature.
  - Points to potential future research or suggests a solution to a problem.

# Bachelor Thesis

- A good Bachelor Thesis:
  - Has a research question that is relevant and strongly formulated.
  - Clarifies concepts, constructs and methods.
  - Is a nice read in scientific style.
  - Makes use of relevant literature, including research articles, review articles, meta-analyses, and book chapters

# Bachelor Thesis

- Rules
  - APA style 6 structuring and formatting
  - APA 6 writing
  - Size: 20 – 30 pages main text
  - Covers theoretical work (it's a literature review)

# Topics in Cognitive and Decision Sciences

- Heuristics
  - G. Gigerenzer, A. Bröder, H. Simon
  - E.g., Take The Best, Recognition Heuristic
    - Which city is larger?
- Simple rules vs complete information integration

# Topics in Cognitive and Decision Sciences

- Chance perception
  - Gamblers' fallacy
  - Streakiness
- Risk perception
  - Do you prefer 10 franks for sure or 10% chance of winning 100 franks?
  - Ambiguity: do you prefer 10 franks or *a chance* of winning 100 franks?

# Thesis Subject

- Probably the most difficult part of thesis.
- Consider choosing one of the subjects proposed here.

# Examples of Thesis Topics

- What is the difference between Risk and Ambiguity?
  - What models have been proposed to account for this difference?
- How well are we able to classify people as risk-takers?
  - Reliability of risk attitude assessment
  - Differences between means of measuring
- How does a person's educational background influence risky decision making?
  - E.g., economy vs. history students

# Examples of Thesis Topics (2)

- How can we improve peoples' understanding of probabilistic events?
  - Experience based vs Description based information presentation
- In what situations are heuristics used?
  - Take The Best
  - Recognition Heuristic

# 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 1<sup>st</sup> draft (optional)
- 15 – 04 – 2014: Deadline final version

# Proposal (10 – 11 – 2013)

- Structure of thesis in 2-3 pages
- Introduces most relevant:
  - Concepts
  - Constructs
  - Literature
  - Questions
- Properly written (not just catchwords!)
- Claims should be accompanied by citations
- Preliminary reference list
- When agreed on proposal, contract is signed

# Question round

- Why did you choose Cognitive and decision sciences?
- What do you expect from this seminar?
- Who of you already have an idea of a subject or general topic?