

## Topic suggestions for theses supervision – spring semester 2025

### Martin Brandt

- Is There a Revelation Effect for Preference Judgments?
- Binding in Visual Short-Term Memory: Reliability of Individual Measures of Capacity and Binding
- Binding in Visual Short-Term Memory: Is Binding in Visual Short-Term Memory a Predictor of Associative Recognition?
- Storage Duration in Visual Short-Term Memory: A Signal Detection Theory Approach

### Daria Ford

My research focuses on answering the question about processes underlying memory for truth and falsity. It is inspired by the fact that in today's world, we are constantly exposed to misinformation, especially online. We face huge challenges—war, pandemics, natural disasters—and the way information is remembered on these relevant topics significantly impacts our decisions, such as vaccination choices and political stances.

Research Topics:

- How Does Negation Impact Memory for Truth and Falsity?
- Forgetting of False and True Information
- Are Truth and Falsity Two Complete Opposite Dimensions?

Please note that the main language of communication with the supervisor will be English, but experiments can be conducted in German. You can write your thesis in English or German.

### Beatrice Kuhlmann

- Context Effects in (Meta-)Memory of Older Adults (Bachelor's Thesis): The classic diver study by Godden and Baddeley on context effects on memory is well known among psychology students. Less well known is that context effects on memory, particularly on recognition memory, are quite small and difficult to replicate. In previous studies with younger adults, we found that metacognition, i.e., the subjective confidence in one's memory judgment, is more sensitive to context manipulations than actual memory performance (<https://psycnet.apa.org/fulltext/2025-33495-001.html>). Building on this, a study with older adults will be conducted, and a bachelor's thesis can be written on this topic.
- Motives for Senior Study Programs (Master's Thesis): Based on a survey of senior students at the University of Mannheim, the aim is to code and analyze the motivations for enrolling in a senior study program and how these are influenced by demographic factors such as age, gender, educational background, etc. Comparisons to previous surveys and any changes since then are also of interest. A master's thesis can be written on this topic.
- Stereotypes About IT and Aging (Bachelor's or Master's Thesis): While stereotypes about aging and health, cognitive fitness, and physical appearance are well researched, we know relatively little about stereotypes related to aging and the use of information technology (e.g., computer and internet use, smartphone use). In several studies, suitable for a bachelor's or master's thesis, this stereotype will be further explored, involving both younger and older adults, using explicit surveys and implicit tests.

### Désirée Schöning

- Metacognition for Sources: How well can people predict their source memory?

## Carolyn Streitberger

It has been shown that participants can correctly recall a word in a cued recall test even though they did not recognize it in a recognition test (Riefer & Batchelder, 1995). This phenomenon is surprising because cued recall depends more on retrieval processes than recognition does. The retrieval independence assumption suggests that this phenomenon occurs because cued recall and recognition are independent of each other, meaning the likelihood of retrieval in cued recall is independent of whether the word was previously recognized correctly or missed. However, this assumption is unrealistic, and when violated, storage and retrieval parameters are greatly overestimated.

This project will be supervised jointly by Beatrice Kuhlmann and possibly Julian Quevedo Pütter and Edgar Erdfelder. We are looking for a master's student with experience in R, simulation studies, and possibly MPT modeling.

## Nikoletta Symeonidou

- *Influence of Positive and/or Negative Affect on Stereotype-Based Source Memory Guessing:* Do people rely more or less on stereotypes when they are in a positive or negative mood? How would this affect source memory guessing?
- *Stereotype Threat in Older Adults & Its Impact on Source Memory:* Older adults often show a pronounced source memory deficit. Can this be minimized or intensified by creating conditions with higher or lower stereotype threat? (Laboratory study)
- *Emotional Reinstatement Effects in Memory:* Do emotional background images during learning and recall improve memory?