

# Thesis

## The Serial Reaction Time Task – Development of an experimental Setup for Online Testing

### Description

The serial reaction time task (SRTT) is used frequently to assess motor learning as well as motor memory consolidation. It can be modulated to utilize either the declarative or the procedural motor memory. Several factors like sleep or also acute exercise are able to influence memory processes linked to motor learning, however in the lab it can be challenging to achieve high numbers of participants.

Therefore, this thesis aims at investigating memory consolidation, that is learned either consciously (explicit memory) or without any awareness (implicit memory) leveraging the sampling power offered by online crowdsourcing. The first step is to replicate the exact protocol of a known SRTT in the software PsychoPy<sup>3</sup>.

In a second step additional question like the influence of the level of awareness, or other factors like sleep or exercise on learning and consolidation can be addressed.

### Methods

Serial reaction time task (SRTT), PsychoPy<sup>3</sup>, programming knowledge desired

### Potential research questions

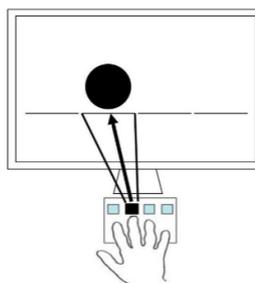
Development of a task that is running via an appropriate online platform (e.g. PsychoPy<sup>3</sup>)

Is running the SRTT online feasible compared to in lab testing?

Can in-lab results be replicated?

### Contact

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**PsychoPy<sup>3</sup>**  
Now running studies online

### Literatur

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