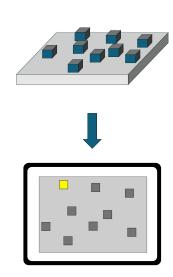






Tablet-Based Implementation and Evaluation of the Corsi Block-Tapping Task

Master Project (5LP) – The Corsi Block-Tapping Task (CBTT) [1] is an established psychological test used to measure the visuospatial working memory. The task involves a set of blocks arranged in a fixed layout. During the task, the experimenter taps a sequence of blocks, which the participant must reproduce in the same or reversed order. Previous research has indicated that variations in task modality (e.g., physical board vs. digital interfaces) can influence participant performance [2]. The aim of this project is to design a tablet-based version of the CBTT, suitable for use in empirical studies, and evaluate it against a physical version of the task. Two digital versions will be developed: Automated Mode – The blocks light up on the screen in a predefined order, which participants must replicate by tapping on the tablet. Experimenter-Guided Mode – The experimenter presents the sequence by tapping on the tablet, which participants must replicate by tapping on the tablet.



Tasks

- Create the tablet application implementing both task modes.
- Conduct a within-subjects study comparing participant performance across three conditions (Automated Mode, Experimenter-Guided Mode, Physical Corsi Board)
- Evaluate participant performance (e.g., span length, accuracy, error patterns) across conditions to identify differences due to to task modality.

Your Profil

- Experience with software development for mobile or tablet platforms.
- Basic knowledge of experimental design, data collection, and statistical analysis.

Interested?

If you are interested or have further questions, please send an email to lisa.gottschalk@uni-bielefeld.de.

