Pupil Size as an Online-Measure of Cognitive Load

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Preliminaries

Cognitive load:
• Amount of “mental effort” devoted to task(s)

Online-measurement:
• Measurement while the task is performed

Application-example:
• Deciding on Interruption:
  Interrupt the user with a notification of an Email-receipt?
**Why the Pupil?**

**Advantages:**
- quick reaction
- not intrusive
- no physical contact
- continuous measurement
- no subjective bias
- highly sensitive

**Disadvantages:**
- too sensitive
- not diagnostic
- noisy
Experimental Design

Data I - Behaviour

Reading times:

Subjective load:
Is the Pupil Size Unsuitable?

Recording ERPs (Event-related brain potentials) in addition to the pupil size may answer this question.