Usability Engineering

Objective

- identify if participants are interested or have a strong emotional reaction to a series of commercial videos based on their physical eye reactions (blinking rate and average eye opening level).

Setup

- 15-20 people
- 5 videos per person (otherwise fatigue and attention span become a factor)
- fill out a questionnaire after each video

Content

Commercials:

- different categories (pleasant, controversial, unpopular, ...)
- e.g. correlation buying interest & eye behaviour
- similar length (~2min)
- English

Measurement:

- compare the objective results of the eye behaviour with the subjective responses given in a questionnaire
- eye behaviour:
 - total blinks
 - avg eye opening level
- questionnaire:
 - rate the interest on a scale (1 to 5)
 - questions:
 - general interest in the product category
 - how captivated the viewer was by the video
 - positive or negative emotion

Goal:

- good grade (plz) 🙂

Experimental Design

Independent variables:

- order of the clips: will be fixed to have comparable results
- clip content: five arbitrary clips
- webcam quality: trying to perform all tests with the same webcam

Dependent variables:

- interest, captivation, positive / negative emotions (data collected via questionnaire)
- blink rate, eyelid distance

Within- or between-group design:

- within-group design: compare each user's results with the other users

Possible next meeting times

- Monday 05.06. 10.00 11.00
- Wednesday 07.06. all day from 9.00 18.00
- Friday 09.06. 9.00 16.00