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Informed consent

Dear participant,

You have volunteered to participate in this study. Here you will now receive some information about your rights and the procedure of the following experiment. Please read the following sections carefully.

1) Purpose of the study

In this study, we will investigate how humans perceive images by recording brain activity with EEG and eye movements using an eye-tracker.

2) Study procedure.

The study will proceed as follows:

1. We perform an eye test (visual acuity and dominant eye).
2. We verbally query whether there is photosensitive epilepsy, photosensitive migraine or any other neurological disorder (major depression, ADHD, autism, or similar).
3. EEG: You put on an EEG cap. An electrode gel (similar to ultrasound) is applied with a blunt needle and the top layer of the scalp is gently roughened to create ideal conductivity.
4. Eye-tracking: The eye tracker needs to be calibrated, for this, a moving dot will appear on the monitor which you will follow with your gaze.
5. We will present different pictures on the screen. Your task is to freely explore these pictures.
6. The EEG cap will be removed and you can wash the gel out of your hair.

Including the questionnaires and preparations, the experiment takes about 3 hours.

3) Risks and side effects

According to current knowledge, this study is harmless and painless for the participants. By participating in this study, you are not exposing yourself to any particular risks and there are no known side effects. In the case of virtual reality experiments, exposure may cause motion sickness or eye strain. However, because this study is new in its entirety, the occurrence of as-yet-unknown side effects cannot be completely ruled out.

Important: Please inform the experimenter immediately if you have a neurological disease, if strong (light) stimulation can trigger migraine, or if you have had an epileptic seizure. If you have any questions about this, please contact the experimental investigator.

4) Termination of the experiment

Participation in the study is voluntary. You may withdraw your consent to participate in this study at any time without giving any reason and without any disadvantages. Even if you terminate the study prematurely you will be remunerated accordingly for the time spent up to that point.

If you experience headaches or any other kind of discomfort during the experiment, please inform the experimental investigator immediately.

5) Confidentiality

Your data will only be stored in pseudonymized form (e.g. "sub-003"). The mapping file will be deleted after the completion of the data collection. The data will be made available for scientific publications, but also as open scientific data for third parties. Deletion is then no longer possible. Data protection is regulated in more detail in the data privacy policy.

6) Remuneration

The study will be remunerated with 15 € per hour. Partial half hours will be rounded up.

7) Declaration of consent

I hereby confirm that I have understood the participant information described above and that I agree to the stated conditions of participation, in particular:

- *an unlimited storage of my pseudonymized data.*
- *the usage of my pseudonymized data for the current research project and for other exclusively scientific purposes.*
- *a publication of my pseudonymized data as open data.*

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Place, date, signature