

RADBOD UNIVERSITY
CENTRE FOR LANGUAGE STUDIES
INFORMATION ABOUT EEG RESEARCH

General

Information processing in the central nervous system occurs, among other things, by electrical activity of the nerve cells. This minimal, continuous electrical activity of the brain, which is produced by the brain itself, can be measured and recorded by using electrodes. The result of such a measurement is called an ElectroEncephaloGram (EEG).

Depending on the research goal, the duration of an EEG experiment varies from 1 hour up to 2,5 hours. The research data collected in the CLS Lab can't be viewed from a clinical perspective. Your participation in the research is therefore not a clinical test.

Preparation at home

To make the EEG measurement run smoothly, we ask you to prepare the following at home:

- Wash and dry your hair beforehand;
- Do not use gel, hairspray, etc.;
- Do not use face cream or make-up;
- If needed, bring a comb or hair brush;
- Bring your (reading) glasses. Also if you are wearing contact lenses.



Preparation at the CLS Lab

A cap (sort of bathing cap) will be put onto your head. In this cap a large amount of measuring electrodes will be attached. In addition, a few single electrodes will be attached around your eyes and behind your ears using small stickers. Your eyes, nose, mouth and the bottom part of your face will remain free.

To obtain good signals it is important that the resistance of the skin is not too high. If necessary, the experimenter will make sure the resistance between your skin and the electrodes drops to the desired value by using some alcohol and conducting gel.

The experiment

The experimenter will instruct you on what you have to do during the experiment. It may be that you have to look at a computer screen, listen to sounds, carry out a reaction-time task, or just sit and be relaxed. The EEG experiment takes place in a sound attenuated booth. During the measurement the door of the booth is closed, but not locked. The experimenter can see you by use of a video camera and talk to you by means of an intercom. The measurement itself will not be noticeable for you.

When the experiment is finished, the experimenter will remove the cap with the electrodes. If you want you can rinse your hair, wash and dry it. For this purpose shampoo and towels are available. For hygienic reasons it is practical if you bring your own comb.

Additional information

The risk associated with participation can be considered as negligible risk and minimal burden. No invasive procedures are involved.

You can NOT participate in a EEG experiment if one of the following applies:

- 1) You had head/brain surgery.
- 2) You suffer from epilepsy.
- 3) You suffer from claustrophobia.
- 4) You are younger than 18 years of age.

If one of the above is applicable, please contact the researcher before the day of the experiment.