

**RADBOD UNIVERSITY
CENTRE FOR LANGUAGE STUDIES
INFORMATION ABOUT fEMG RESEARCH**

General

Information processing and response can be recorded, among other ways, by analyzing the electrical activity of the facial muscles. This minimal, continuous electrical activity in facial muscles can be measured and recorded by placing electrodes on the surface of the skin. The result of such a measurement is called Facial Electromyography (fEMG).

Depending on the research goal, the duration of an fEMG experiment varies from 45 minutes up to 2 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 fEMG measurement run smoothly, we ask you to prepare the following at home:

- Wash and dry your face beforehand;
- Do not use face cream or make-up;
- Bring your (reading) glasses or contact lenses (if required).



Preparation at the CLS Lab

Small stickers (like a plaster) will be put onto certain locations on your face, particularly on your forehead and cheeks. Attached to these stickers will be a number of measuring electrodes. Your eyes, nose, mouth and the bottom part of your face will still be able to move freely.

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 cleaning the skin with a mildly abrasive cream or alcohol, and applying conducting gel.

The experiment

The experimenter will instruct you on what you have to do during the experiment. You will be asked to look at a computer screen and read (silently) what is presented to you. The fEMG 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 stickers with the electrodes.

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 fEMG experiment if one of the following applies:

- 1) You have previously received facial Botox injections
- 2) You suffer from claustrophobia.
- 3) You have previously had an allergic reaction to a conducting gel or skin adhesive (e.g. Band-Aids).
- 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.