

## Information about EEG research Centre for Language Studies Lab

Your brain is made of cells called neurons. These cells send tiny electrical signals. This is called brain activity. We can measure this activity with a method called EEG (electroencephalogram). In an EEG experiment, you wear a special cap on your head. This cap has small sensors called electrodes. These sensors measure your brain activity. Sometimes, we also place a few electrodes on your face or neck. We use a small amount of gel to help the sensors work well. EEG experiments can take between 30 minutes and 2.5 hours, depending on the study.

### Preparation at home

To ensure that the EEG works properly, we ask you to do the following before you arrive:

- Wash and dry your hair
- Do not use gel or hairspray
- Do not use facial cream or make-up
- Bring a comb or hairbrush
- Bring your reading glasses. If you wear contact lenses, bring your glasses as well

### At the EEG-lab

We will put a soft cap (sort of bathing cap) on your head. Small electrodes will be attached to the cap. A few extra electrodes may be placed near your eyes and behind your ears with small stickers. Your eyes, nose, mouth, and lower face will not be covered. If this is not the case, you will be informed in advance.



We apply a special gel to your hair so that the electrodes can accurately measure your brain signals. Some hair types or hairstyles (such as dreadlocks or clip-in extensions) can make it difficult to obtain good signals. If you wear something on your head that you cannot remove, you will not be able to participate in the study. If you are not sure, please ask the researcher beforehand.

To obtain clear signals, your skin must be clean. Dust and dead skin cells can block the signal. Therefore, the researcher will gently clean your forehead, around your eyes, and behind your ears with a scrub and alcohol. Please inform the researcher if you are allergic to skincare products or alcohol.

### During the experiment

Each experiment is different. The researcher will tell you what to do. You may be asked to:

- Look at a computer screen
- Listen to sounds
- Do a reaction test
- Make small movements
- Or just sit and relax

During the experiment, you will be seated in a booth. The researcher will be in the same room, outside the booth. You can talk to the researcher via an intercom, and they can see you via a camera. This communication is not recorded.

## **After the experiment**

After the experiment, the researcher will remove the cap and electrodes. You may still have some gel in your hair or on your face. You can use a private washroom to wash and dry your hair and face. Shampoo, towels, and a hair dryer are available. You can also bring your own products. For hygiene reasons, please bring your own comb or hairbrush.

## **Safety**

EEG is safe and painless. You will not be given any medication or substances. You **cannot** participate if:

- You had surgery on your head or brain
- You have epilepsy
- You have claustrophobia (fear of small, enclosed spaces)

If any of these apply to you, please contact the researcher.

## **What happens to your data?**

In an EEG study, we measure how your brain reacts during the experiment. We collect this data to answer the research question. It cannot be used for medical advice or to diagnose health problems.