

	<p>Safety And Operation Instructions at Aalto TMS laboratory</p> <p>Appendix 2</p> <p>SAFETY SCREENING</p>	<p>Author, date: J. Silvanto, M. Nyrhinen 15.10.2013</p> <p>Edited (name, date): Mikko Nyrhinen, 21.11.2014</p>
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AALTO TMS LABORATORY SAFETY SCREENING

Aalto TMS is a laboratory specialised in the magnetic stimulation of the brain. The research techniques used in the laboratory include transcranial magnetic stimulation (TMS), electroencephalography (EEG) and psychophysical testing. Aalto TMS operates under OV Lounasmaa Laboratory and is part of Aalto Neuroimaging infrastructure.

TMS involves the stimulation of brain tissue with weak electric currents which are induced through a coil placed over the scalp. The targeting of the magnetic field over specific brain regions will be monitored in real-time using computer software. The electric field has a short-lasting functional effect on the targeted brain region; for example, targeting of the motor cortex can induce twitches in the hand.

TMS studies cannot be carried out with participants who have suffered a stroke or brain trauma, have surgical clips in the brain or have a pacemaker. Exclusion criteria also include pregnancy (female participants are required to be certain that they are not pregnant), epilepsy (including epilepsy in the immediate family), history or febrile seizures, heart disease, as well as medication affecting the central nervous system. All exclusion criteria are listed on the next page. All metal objects near the body (piercings, jewellery, credit cards, watch, etc) need to be removed in the beginning of the testing session. Please consult the experimenter if you are not sure whether a specific item should be removed.

TMS is a safe technique, but can cause brief discomfort or even slight pain in the scalp and in the face muscles during the stimulation. TMS has not been found to induce long-lasting side effects. Earplugs are used for hearing protection. The earplugs, when correctly in place, are deep in the ear canal and environmental sounds are clearly attenuated. In case the noise level feels uncomfortable, inform the researcher in charge immediately.

SAFETY SCREENING

Please answer all the questions listed below. In uncertain cases contact the researcher in charge,
_____ before imaging.

- (1) Do you have epilepsy or have you ever had a convulsion or a seizure?
YES () NO ()
- (2) Have you ever had a fainting spell or syncope? If yes, please describe on which occasion(s)?
YES () NO ()
- (3) Have you ever had a head trauma that was diagnosed as a concussion or was associated with loss of consciousness?
YES () NO ()
- (4) Do you have any hearing problems or ringing in your ears?
YES () NO ()
- (5) Do you have cochlear implants?
YES () NO ()
- (6) Are you pregnant or is there any chance that you might be?
YES () NO ()
- (7) Do you have metal in the brain, skull or elsewhere in your body (e.g., splinters, fragments, clips, etc)? If so, specify the type of metal.
YES () NO ()
- (8) Do you have an implanted neurostimulator (e.g., deep brain stimulator; epidural/subdural, VNS)?
YES () NO ()
- (9) Do you have a cardiac pacemaker or intracardiac lines?
YES () NO ()
- (10) Do you have a medication infusion device?
YES () NO ()
- (11) Are you taking any medications? (please list)
YES () NO ()

PLEASE LIST HERE MEDICATIONS THAT YOU ARE TAKING:

- (12) Did you ever undergo TMS in the past? If so, were there any problems?
YES () NO () YES () NO ()
- (13) Did you ever undergo MRI in the past? If so, were there any problems?
YES () NO () YES () NO ()

The purpose and procedure of this examination has been explained to me beforehand. I have been given the opportunity to ask the researcher in charge questions about the procedures and I have been given answers to my questions. I understand the contraindications to this investigation and I have notified the researcher about such by filling in the safety questionnaire in this form.

Place and date

Signature of person completing the form (and clarification of signature)

The identity number and address of the person completing the form

Signature of researcher in charge (and clarification of signature)