

Privacy Notice

Semantic processing in the brain: How brain integrates information coming from multiple modalities.

This privacy notice describes how your personal data will be used in the research study as a participating individual or as an audio recording provider. You have also been provided with document called the "Participant Information Sheet", which explains in more detail how the study is carried out.

1. What is being studied in this research study and the purpose of processing personal data

This brain imaging study examines how we integrate information coming from different modalities in the brain, i.e., visual and auditory. This is done by collecting magnetoencephalography (MEG), magnetic resonance images (MRI) and behavioural responses during word processing.

This research is funded by Aalto University and the Academy of Finland.

2. What personal data is processed in the research study

Recruitment for the study

In case you express willingness to participate in the study, we will collect your name and email via electronic Webropol form.

In case you participate in the full study

We will collect the following personal data:

- Your name, signature (in the consent form) and contact information
- Gender, age, native language, educational level, and handedness
- Data of brain activity recorded with magnetoencephalography (MEG)
- Structural magnetic resonance images (MRI) of your head (including your face)
- Eye movement data (with electrodes) for artefact removal
- Heartbeat data (with electrodes) for artefact removal
- Behavioral data of button responses'

Audio recording providers

For those providing their voice recordings for the generation of the stimuli we will collect your voice recording, name, e-mail address and signature.

Special categories of personal data (sensitive personal data)

Data belonging to special categories of personal data or other specially protected personal data **will not be processed** in the research study.

Personal data is collected from the following sources:

From the participant: name, signature, contact information, gender, age, native language, self-reported proficiency in foreign languages, educational level, handedness, button responses.

From a data register: N/A

Other: MEG data of brain activity, structural MRI of head, eye and head movement data

The research methods are described in more detail in the "Participant Information Sheet" document.

3. Processing of necessary personal data and removal of the direct identifiers from the data

The research study only processes personal data that is necessary for the purpose and execution of the study. The research data is processed during analysis phase of the research in a manner that you are not directly identifiable to the researchers. Your direct identifiers, such as your name, have been replaced, for example, with a random identifier.

Identity of the individual research participant will not be disclosed in a scientific publication or other research results to be published.

4. Legal basis for the processing of personal data

The legal basis is scientific research, a task in the public interest.

5. Sharing personal data

Research data containing your personal data may be shared with the following parties:

Scientific reviewers and publishers: Research data which consists of your personal data may be transferred to a third party, such as scientific publication, for peer-review process or for other purposes, which are mandatory for scientific publishing or validation of the research results. Research data will be provided to such parties in pseudonymous form in which the data subject's direct identifiers, such as the name, have been removed or replaced with a random identifier.

Research partners: Research data containing personal data is retained to be used for further scientific research in the same scientific discipline or in other disciplines that support this research study. Research data may also be transferred to other universities or research organisations as part of further research projects. Research data will be provided to such partners in pseudonymous form in which the data subject's direct identifiers, such as the name, have been removed or replaced with a random identifier.

Medical doctors: In the event that the recorded data happen to reveal a markedly nontypical unexpected finding which the participant is not aware of, a specialist doctor of the appropriate field will be consulted about the finding. In that case, your personal data may be processed by the consulting doctor.

6. International data transfers

During the execution and analysis phase of research, research data containing personal data will not be transferred to non-EU / EEA countries or international organizations. However, as part of the scientific publishing process, it might be necessary to transfer the data outside EU/EEA for publishers or peer reviewers for verification of research results, as such parties

may be located outside EU/EAA area. However, it is exceptional that scientific publication process would require transferring data regarded as personal data.

7. Storage and protection of personal data

Protection of manual material: Consent forms (name and signature) and the re-identification key linking your name and contact information to the research data are stored in the coordinating researcher's office in a locked cabinet, in a locked and monitored space.

Information processed in IT systems: Your personal data is processed and preserved in secure IT systems, which are approved by Aalto University and suitable for personal data. Access to all computers and IT systems are protected by username and strong personal password. Access to IT systems containing personal data is technically restricted in a manner that only researchers participating in the study and persons necessary for the implementation of the study have access to your personal data.

The research data is archived: Aalto University network drive until deletion (see below).

8. Retention and deletion of personal data

Research data containing personal data is retained to be used for further scientific research in the same scientific discipline or in other disciplines that support this research study. Research data containing personal data is deleted after five (5) years since the last publication where this research data has been used and exploited.

If you choose to not participate in the study, your personal data provided through the Webropol will be deleted within 7 days of receiving such information by email.

Audio recording providers

For those providing their voice recording for the generation of the stimuli, the consent forms will be deleted after five (5) years since the last publication where this research data has been used and exploited. The voice recordings will be archived in the Language Bank of Finland (Kielipankki) as stated in the consent form.

9. Rights of the research participant

According to the General Data Protection Regulation (GDPR), a data subject has the right to:

- receive information on the processing of their personal data
- right to access the personal data collected and processed
- right to rectification of inaccurate personal data
- request that the processing of personal data be restricted
- object the processing of personal data
- right to erasure of personal data if the conditions of Article 17(1) of the Data Protection Regulation are met and processing is no longer necessary for archiving purposes in the public interest or for scientific research or statistical purposes in accordance with Article 89(1)

If the research purpose does not require, or no longer requires the identification of the data subject, the controller shall not be obliged to obtain further information so that the data or the data subject may be identified only for purposes to enable the data subject to exercise his/her rights. If the controller is unable to link the data to a particular data subject, the data subject does not have the right to access or correct the personal data, object the processing, or delete

the personal data. However, if the data subject provides additional information that allows their identification from the research data, the rights will not be restricted.

10. Contact details of the controller

The controller of this research study is Aalto University Foundation sr., operating as Aalto University.

Persons in charge of the research study

Questions regarding the conduct of the research study may be addressed to the persons in charge of the study:

Coordinating researcher:	Principal investigator:	Principal investigator:
Shristi Baral Doctoral Candidate tel: 050-4799893 email: shristi.baral@aalto.fi	Marijn van Vliet Academy Research Fellow tel: 044-9155561 email: marijn.vanvliet@aalto.fi	Riitta Salmelin Professor tel: 050-3442745 email: riitta.salmelin@aalto.fi

Data Protection Officer

If the research participant has questions or requests related to data protection or the processing of personal data, the research participant should contact the Data Protection Officer of Aalto University: tel. +358 9 47001 (exchange), dpo@aalto.fi.

In this data request service, you can request the exercise of your rights under GDPR from Aalto University as the controller: <https://datarequest.aalto.fi/en-US/>.

If a participant of the research study feels that his or her personal data has been processed in violation of data protection legislation, the participant has the right to lodge a complaint with the supervisory authority, the Data Protection Ombudsman's office: <http://www.tietosuoja.fi>.