UNIVERSITY OF OSLO

University of Oslo, Department of Psychology
Forskningsveien 3A, 0737 Oslo Norway

Participant information and consent for the research project

"Neural dynamics of processing scream vocalizations"

Dear participant,

This is an inquiry about participation in a research project investigating neural processes of social stimuli. This letter includes information about the purpose of the study and what your participation will involve.

1 **Selection of Participants:** Many people are asked to participate, and you fit criteria indicating you may be a good candidate. The sample is selected from the general population and will include healthy participants who meet the following criteria:
- to be an age between 18 and 40
- to speak English or one of the Scandinavian languages
- have normal or corrected-to-normal vision (glasses / contact lenses) and hearing
- not have CNS injury, disease, or neurological disorder (e.g., epilepsy, head injury, stroke)
- not to experience cognitive difficulties
- not to attend psychiatric treatment
- not to use medications for mental illness
- not to take blood pressure / heart medications

2 **Aim of the Study:** We will investigate how the human brain processes different human scream calls and the influence of different decision tasks on these processes.

3 **General information on the study:** You will hear and recognize human scream calls while we measure your brain activity using fMRI. You will also be asked to complete several questionnaires to measure individual factors. Humans express different emotions in screams, and other people listening to these screams usually perform different decisions on these screams that prepare their appropriate behavioral responses. One of these decisions is about the level of the alarmingness of a scream call (how urgent would a listener respond to the scream call), while another dimension is if a person would approach or avoid the screaming person.

The procedures are medically safe if you meet the necessary exclusion criteria and are used in many similar studies. The study is conducted in accordance with Norwegian law and internationally recognized principles.

4 **Voluntary Participation:** Your participation in the study is voluntary. You may withdraw your consent at any time without explanation. All information about you will be made anonymous. There will be no negative consequences if you choose to participate or later decide to withdraw. There are no special benefits for you to participate.

5 **Study Procedure:** To investigate how the brain responds to artificial social stimuli, it is necessary to use several methods. We will ask you to participate in the following:
   i. An MRI scanning session (structural and functional) at The Intervention Center (IVS) at Oslo University Hospital (Rikshospitalet), which will take 1pprox.. 70 minutes. During the scan, you will attentively listen to audio stimuli and respond to the task by pressing a button.
   ii. A behavioral response study, which will take 1pprox.. 30 minutes. You will listen attentively to audio stimuli and respond to the questions on a computer.
   iii. Online-based psychological assessments to analyze individual difference factors, which will take 1pprox.. 30 minutes. You will fill in an online survey including questions related to your personality traits.

The entire experimental process will take about 2 hours. However, the three tasks may be completed on separate days and in different locations.

6 **Participant Responsibilities:** As a participant in the study, you are obligated to:
- Follow the directions of the examiner as well as instructions presented on screen
- Let the examiner know of any (unlikely) discomfort during the experiment

7 **Potential Discomfort or Risks:** MRI procedures have no risk when strictly following the safety guidelines. There are some people who for various reasons cannot participate in MRI examinations. We will do a thorough investigation before deciding if you can participate. Therefore, you should not participate if you:
- have pacemakers or certain metal implants in the body
- are pregnant
- have anxiety in tight spaces (claustrophobia)

Keep in mind that if you experience discomfort while lying in the MRI scanner, we will cancel the procedure immediately. The scanner makes loud noises. To reduce the noise to an acceptable level, you will have hearing protection. During the MRI-scanning, you will be able to communicate with the experimenter at any time.

8 **Confidentiality:** We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act). In connection with the Department of Psychology at The University of Oslo (UiO) and the Intervention Center (IVS) at Oslo University Hospital (Rikshospitalet), Christine Skjegstad and other members of the Sascha Frühholz's lab will have access to the personal data. The data will be encrypted and stored on a secure server.

All information collected about you will be treated in complete confidence. Your name and contact details will be replaced with a code. As such, we will only use a code to identify you during the sessions. The list of names, contact details and respective codes will be stored in a database separately from the rest of the collected data. Data from participants will not be recognizable in publications. The anonymized data may be published in encrypted form on a publicly accessible repository for further scientific use. On the Consent Form, please indicate whether you agree with the encrypted publication of the data obtained from you.

Radiologists from IVS will briefly analyze the MRI to perform a routine medical check. On the Consent Form, you can explicitly indicate if you would like to be informed by the radiologists for follow-up if abnormalities or anomalies are seen. The UiO researchers will not be made aware of incidental findings or follow-up or have access to such medical information.

9 **Your rights:** So long as you can be identified in the data, you have the right to:
- access the registered information that is being processed about you
- request that your personal data is permanently deleted
- request that incorrect personal data about you is corrected
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

You have the right to access the registered information at any time, as well as the right to demand that it be permanently deleted if you withdraw from the project. You can also request that any incorrectly registered information will be corrected.

10 **Our right to process your personal data:** We will process personal data based on your consent. Based on an agreement with University of Oslo, Department of Psychology, Data Protection Services has assessed that the processing of personal data in this project is in accordance with data protection legislation. The project is approved by the Internal Ethics Committee.

11 **Compensation for Participants:** As a participant in the project, you will be compensated with a 200 NOK universal gift card.

12 **Involuntary Termination of Study:** The examiner can cancel your participation in the study for the following reasons:
- If you do not follow the directions, or
- If the examiner notices any side effects or other problems

13 **Contact:** If you have questions about the project, experience unexpected or undesirable events during or after the study that you wish to report, or want to exercise your rights, please contact:
- University of Oslo, Department of Psychology via
  - Christine Skjegstad, MPhil, MSc, by email (c.l.skjegstad@psykologi.uio.no) or by telephone: +47 40 55 31 48
  - Professor Sascha Frühholz, PhD, by email (sascha.fruhholz@psykologi.uio.no)
- Our Data Protection Officer: Roger Markgraf-Bye, by email (personvernombud@uio.no)
- Data Protection Services, by email (personverntjenester@sikt.no) or by telephone: +47 53 21 15 00.
- The Intervention Center at Oslo University Hospital, by email (mrasmus@ous-hf.no) or by telephone: +47 23 07 01 00

Written Declaration of Consent for Study Participation

Please read the following carefully and ask if you do not understand something or have a question:
- The undersigned researcher has informed me, both orally and in writing, about the goals and procedure of the study, the effects that can be expected, the possible benefits and drawbacks as well as the potential risks.
- I have read and understand the Participant Information Sheet concerning the above-mentioned study. My questions concerning participation in this study have been answered to my satisfaction. I can keep the Participant Information Sheet and will receive a copy of my Research Consent Form.
- I had enough time to make my decision.
- I understand that my personal data will only be passed on to external institutions in anonymous form and for research purposes.
- I am participating in this study voluntarily. I can withdraw my consent to participate at any time and without explanation.
- The researcher may terminate my participation at any time should he/she feel that it may be injurious to my health.

Participant information:

Full Name: ……...… Sex: ○ Male ○ Female

Telephone number: ……..… Date of Birth: ……

Email address: ……

I hereby give my consent:

- ☐ to participate in psychological assessments
- ☐ to participate in a behavioral response study
- ☐ to participate in an fMRI scanning session with audio stimuli and response task

Place, Date Participant Signature

Incidental findings

If an incidental finding requiring further evaluation is detected, I would like to be informed (please check one):

◯ YES, I want to be informed ◯ NO, I don't want to be informed

◯ I would like to leave the decision of whether I shall be informed to a trusted person:

Name and contact of the trusted person: …….

Place, Date Participant Signature

Consent on data sharing

Once data collection has been completed and the results obtained from this study have been published, the data collected may be published in encrypted form on publicly accessible repositories. Data collected from you will only be published on these databases with your explicit consent:

◯ YES, I consent ◯ NO, I do not consent

Place, Date Participant Signature

University of Oslo, Department of Psychology
Forskningsveien 3A, 0737 Oslo Norway

Future Contact

We would like to know if we may contact you to participate in future studies or if you are interested in receiving the eventual publication(s) of the study.

If so, please tick the following boxes:

- ☐ I am interested in being contacted for new studies
- ☐ I am interested in receiving the publication(s) of this study

I hereby certify that I have explained the nature, significance, and scope of the study to the participant. I declare that I have fulfilled all obligations related to this study. Should I learn at any time while conducting the study of issues that could affect the participant's willingness to participate in the study, I will inform him/her immediately.

Place, Date	Signature of the examiner