MEG CONSENT FORM (non-paid subjects)

Introduction

You have been invited to take part in a study to learn more about how people see and feel by measuring responses to visual and tactile stimuli using magnetoencephalography (MEG). If you agree to be in this study, you will be asked to do the following:

- You will be asked to enter a special magnetically shielded room that contains the MEG instrument.
- Lie still throughout your time in the MEG (up to 1.5 hours);
- Make responses with a button box to indicate judgments about visual, tactile or auditory stimuli

Participation in this study will involve one or more MEG sessions (1.5 hours or less) and no more than 5.5 hours total. There are no known risks associated with your participation in this research beyond those of everyday life. Although you will receive no direct benefits, this research may help the investigator understand how visual and tactile stimuli are encoded in the human brain, and how this encoding supports perception.

Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. Please read the rest of this consent form for more information about the study.

Procedure

This study will be conducted by Jonathan Winawer of the Department of Psychology in the Faculty of Arts and Sciences at New York University, or by a designated member of his research staff working under the supervision of Professor Winawer.

If you agree to take part in the study, you will be asked to do the following:

1. In preparation for MEG, you will be asked to remove any metal jewelry and clothing containing metal. If you have a removable denture or retainer, you may also be asked to temporarily remove this for the study.
2. Three to five very small marker coils will be attached to your head.

3. EEG/EOG may be recorded simultaneously with MEG. If so, between 3 and 23 electrodes will be placed on your head prior to the experiment. These electrodes will either be taped to the skin or held to the scalp in a fitted cap. In order to optimize signal detection, the skin underneath each electrode will be cleaned and gel will be applied. Electrical signals collected by the electrodes will be recorded for the duration of the MEG scan. Once the scan is over, the areas where the electrodes were placed will be thoroughly cleaned with water and shampoo and the cap and electrodes will be disinfected.

4. You will be asked to sit very still with your head supported while a 3-D spatial digitizing machine records the positions of these marker coils and certain landmarks on your head. A computer stylus will be moved around your head to digitize and record the shape of your head. The entire setup time will last up to 60 minutes.

5. You will be asked to enter a special magnetically shielded room that contains the MEG instrument. This room allows for free communication with the experimenters, who generally remain outside the room during the actual scanning. Your brain activity will be recorded while you lie on your back. Your head will rest on a thermos containing liquid helium and magnetic sensor electronics. These sensors will measure the magnetic field that is created by the electrical activity in your brain during the experiment. Visual stimuli will be projected onto a screen above your head and auditory stimuli will be played through earphones which you will be asked to wear. Tactile stimuli will be presented by a vibrotactile stimulator. You will be asked to rest your fingers on a set of response buttons.

6. You will be presented with simple visual images and/or sounds and/or finger vibrations.

7. You will be asked to make simple decisions about these visual images and/or sounds and/or vibrations.

8. You will be asked to allow a special video camera to record your eye movements and blinking during the scan.

Participation in this study will take about 2 hours.

Risks

There are no known health risks associated with MEG or EEG recording. These procedures do not involve injections or radiation exposure. The EEG electrodes and MEG channels only record activity and do not produce any sensation. You may, however, experience feelings of claustrophobia or other discomfort during the procedure. Marker coils, and possibly EEG electrodes, will be attached to your head using surgical tape, and you may need to wear an EEG cap with gel between the cap and your scalp; these procedures may cause discomfort for some participants. There may be other side effects that are not known and have not been anticipated by the experimenters. In the event of a severe earthquake, the Dewar flask filled with liquid helium that contains the MEG sensor electronics has a risk of shattering.
Benefits

Although you will receive no direct benefits, this research may help the investigator understand how visual and tactile stimuli are encoded in the human brain, and how this encoding supports perception.

Cost and Compensation

You will not be paid for participation in this study. You are not required to participate in this study and your participation is entirely voluntary. There will be no cost to you associated with participation in this study.

If you earn (or if you are compensated) in excess of $600 from New York University, within any calendar year, for participation as a research subject, you will need to report the earnings/payments as income on your taxes, as NYU will be required to report the payments to the IRS as other income and will issue you a 1099 form.

Rights

Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. Nonparticipation or withdrawal will not affect your grades or academic standing.

If there is anything about the study or your participation that is unclear or that you do not understand, or if you have questions or wish to report a research-related problem, you may contact Jonathan Winawer at

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6 Washington Place, 9th floor
New York, NY 10003-6634
Phone: (212) 998-7922
Email: jonathan.winawer@nyu.edu

For more information or questions about your rights as a research participant, or if you are not satisfied with the manner in which this study is being carried out, you may contact the University Committee on Activities Involving Human Subjects (UCAIHS), 665 Broadway, Suite 804, New York University, (212) 998-4808 or ask.humansubjects@nyu.edu.

Confidentiality

Confidentiality of your research records will be strictly maintained. Information will be stored in the investigator’s file and will be identified by a code number. The code key connecting your name to specific information about you will be kept in a separate, secure location. Information not containing identifiers may be used in future research or shared with other researchers without your additional consent.

The results of this study may be published in a book or journal or used for teaching purposes. However, your name or other identifiers which could identify you will not be used in any publication or teaching materials without your specific permission, which will be requested in writing. However, the MEG
images of your brain may be shared anonymously (that is, without any way of identifying who the scan is of) for research or teaching purposes, or displayed at scientific conferences or in publications.

This research is covered by a Certificate of Confidentiality from the National Institutes of Health. Researchers with this Certificate will not disclose or use information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other action, suit, or proceeding, even if there is a court subpoena.

Exceptions include:

- A federal, state, or local law requires disclosure.
- Your explicit approval for the researchers to release your name and/or personally identifiable information.

**Agreement to Participate**

YOUR SIGNATURE INDICATES THAT YOU HAVE READ THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, THAT YOU ARE 18 YEARS OF AGE OR OLDER, AND THAT A COPY OF THIS CONSENT DOCUMENT HAS BEEN GIVEN TO YOU TO KEEP.

________________________________________________________________________

Participant’s Signature Date

________________________________________________________________________

Participant’s Printed Name

I certify that I have presented the above information to the subject and secured his or her consent.

________________________________________________________________________

Experimenter’s Signature Date

New York University IRB-FY2016-363 Approved on 10-23-2019