

Colour representations in the brain

Dear Participant

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

1. What is the purpose of the study?

In this study we are investigating how people process visual information and where this takes place in the brain. We are particularly interested in the regions of the brain that process colour information.

2. Why have I been chosen?

You have been chosen because you have indicated your interest in participating in this study.

3. Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. If you decide to withdraw, you will not be penalised in any way.

4. What will happen to me if I take part?

Screening:

First, you will complete a safety questionnaire to ensure you will be safe in the MRI scanner.

Scanning Session

You will need to attend one session (approximately 60-90 minutes) at the Clinical Imaging Science Centre (CISC) on University of Sussex Campus. You will first practice the task that you will carry out in the scanner. Before scanning, you may be asked to remove any clothing that contains large amounts of metal and change into MRI compatible clothing provided. You will be asked to remove all metal from your body (note that the radiographers may also ask you to remove your make-up). The radiographers will then position you in the brain scanner, so the experiment can begin.

The experiment itself will last for approximately 30 minutes. After completing the experiment we will ask you to remain in the scanner whilst we carry out an additional structural scan which will help us analyse the data (approximately 10 minutes).

After the end of the scanning session we will ask you some more questions about what you saw. You will also be able to ask any questions you may have about the scanning experience.

5. What do I have to do?

During the experiment we will present pictures to you on a screen. You will be asked to look out for “targets” and press a button whenever you see one. The target will be a square or circle presented at the same time as one of the pictures.

6. What are the side effects of any treatment received when taking part?

MRI is a technique that has been used for over 20 years in medicine and every year approximately 10 million people are scanned worldwide. There are no known side effects and MRI causes no pain or damage.

7. What are the other possible disadvantages and risks of taking part?

Unless you are afraid of small spaces or loud noises, there are none. Please note that the images that will be acquired are not for diagnostic purposes and that the examination should not be considered an alternative to a proper medical consultation. Very rarely something may be found in the images and an expert opinion sought. This is only done in the cases where it is believed there is a clear need and may require images and personal details being entered onto information systems owned and operated by BSUH. If there are any unexpected findings that need further tests, your GP will be contacted in the first instance. The GP will then contact you if further tests are required. This is why your GP details are required in the safety check form.

8. What are the possible benefits of taking part?

There are no immediate benefits to you in taking part, however you will be helping research involved in understanding how our brains work and how we see colour. The results can benefit clinical projects as well as be useful in educational applications.

9. What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. Please contact the researcher in the first instance (contact details in section 11).

10. Will my taking part in the study be kept confidential?

Yes. All the information about your participation in this study will be anonymised and kept confidential. We maintain strict levels of confidentiality with all collected data.

11. Contact Details:

Dr Researcher (email: a.researcher@sussex.ac.uk, telephone 01273 xxxxxx)

Dr Researcher 2 (email: a.researcher2@sussex.ac.uk, telephone 01273 xxxxxx)

Part 2

1. What can I expect in the MRI scanner?

The MRI examination is performed in a special room that houses the MR system or “scanner”. The scanner consists of a circular magnetic tunnel which contains the radio coils. During your scan you will lie on a padded bed, which will move slowly into the scanner.

In preparation for the MRI examination, you will be asked to wear headphones or earplugs to protect your hearing as the scanner produces loud noises. These loud noises are normal and should not worry you.

A number of scans will be taken with a pause in between so do not be alarmed if the scanner goes quiet. The most important thing is to relax and try to keep still. It is not dangerous if you move, but the resulting pictures may be blurred. Some minor movement of your body is possible between the scans. The radiographer will be able to hear and see you throughout the session and you will be provided with a call button to alert them if you have any concerns. The scanning session will take approximately 1 hour.



2. Complaints

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions (contact details are in part 1, section 11).

3. Harm

The University of Sussex has insurances in place to cover its legal liability should any harm arise from this study.

4. Will my taking part in this study be kept confidential?

You will be one of a larger group of volunteers to take part in the study. All data will be confidential and anonymous and we will NOT be looking at your individual performance but at the performance of the entire group of volunteers. All data regarding cognitive performances will be stored securely and only be accessed via a code identifier.

Only the named researchers will have access to these data, which will be held on record for 10 years.

5. What will happen to my MR Images?

The results gained during this experiment will be confidential and your scans will be stored in an anonymous form.

6. What will happen to the results of the research study?

The results of the research study will be written up and published in a scientific journal. The results will also be presented at academic conferences.

7. Who is organising and funding the research?

The research is funded by the School of Psychology, University of Sussex.

8. Who has reviewed the study?

This study was approved by the Research Ethics & Governance Committee, Brighton and Sussex Medical School, and by the Research Governance Committee of the School of Psychology, University of Sussex.

Thank you for taking the time to read this information sheet.