



EMOTION RECOGNITION: A STATISTICAL LEARNING APPROACH

Participant Information Sheet

Before you decide whether you would like to participate in our research entitled 'Learning Emotions', please read the following information carefully.

If you have any questions at any time, please do not hesitate to ask us.

What is the research about?

This research explores whether the ability to recognise emotions and the ability to recognise and learn patterns are related through a series of studies.

What does the research involve?

In all of the studies, you will be asked to do one or more of the following:

- Make judgments about images and/or audio/video recordings
- Complete questionnaires about your experiences
- Remember and recall sounds/items/events
- Produce spoken sentences or sing songs
- Take part in a formal interview with a trained researcher, which may be video recorded

Some studies consist of only one session whereas others may involve multiple sessions, which can be scheduled based on your availability.

The research is conducted at the School of Psychology and Clinical Language Sciences (SPCLS) at the University of Reading. Some studies will be performed in a Magnetic Resonance Imaging (MRI) scanner at the Centre of Integrative Neuroscience and Neurodynamics (CINN) at the University of Reading. Commonly used in neuroscience research, MRI scanning is a safe, painless, and non-invasive method to generate images of your brain.

Who can participate?

We are looking for individuals aged between 16 and 60 years old, with and without autism spectrum disorder (ASD) to take part in this research.

Travel and expenses

You will receive £7.50 per hour (pro-rated in increments of 15 minutes) or 1 SONA credit per hour (pro-rated in increments of 15 minutes) for your participation. You will be paid for any travel expenses incurred from your visit to our lab and we will provide you with refreshments and snacks.

What are the possible benefits of taking part in this research?

While there is no direct benefit to you for taking part in this research, findings from this research will help us better understand how we recognise emotions; why some individuals have more difficulties recognising emotions than others; and autism. The findings may help develop effective intervention programs for those who may struggle with recognising emotions.

What are the possible risks/harms of taking part in this research?

There are only minimal risks, if any, associated with this research. One possible risk is fatigue. To minimise this, you can complete the tasks in multiple sessions and/or take as many breaks as necessary during the tasks. You can also choose to withdraw from the research at any time.

For studies involving MRI scanning, the risks, too, are low. MRI is safe for most people (participants would need to pass a screening test first in order to be eligible to be scanned). Some participants may experience discomfort due to the noise generated by the scanner and/or anxiety due to being in a small enclosed space in the scanner. To minimise this, ear plugs will be provided, and you may choose to terminate the study at any time.

During your participation, we may observe some unexpected findings that potentially have clinical significance (these are loosely termed 'incidental findings'). For example, we may find that a participant may be well above the normal range of hearing threshold for their age group or an abnormality may be detected from their MRI scans. The significance of these incidental findings would not be immediately clear and would need to be followed up by medical professionals. You may choose to give consent to be informed of incidental findings from this research in the consent form. Note that to participate in the MRI studies in this project, you must provide consent for us to contact your GP in the event of incidental findings.

Do I have to take part?

No. You should only take part in this research if you want to. If you choose not to participate, you will not be penalized in any way. If you decide to take part, please retain a copy of this information sheet and consent form. You may also withdraw from the study at any time during your participation.

What data will be collected from me?

When you take part, we collect data about you and what you did in the tasks. Your personal and health information we may use or share for this research includes:

- Name
- Address
- Telephone number and/or e-mail address
- Age
- Gender
- Medical history, including history of learning disability and attention deficits if applicable
- Information related to your speech, language, music, and hearing abilities, and current and past treatment/habilitation/rehabilitation enrolment

- Current and past medications or therapies
- Information from past or recent audiological evaluations or screenings.

If you sign the consent form, you are giving permission to the following group of people to give information about you (described above) to the researchers for this study:

- All current and previous health care providers.

Once we have the health information listed above, we may share it with:

- Authorized members of the University of Reading workforce, who may need to see your information, such as members of the University of Reading Research Ethics Committee (a committee which is responsible for the ethical oversight of the study).
- Study monitors and auditors who make sure that the study is being done properly.

What will happen to my data?

All data will be handled according to the UK Data Protection Act 2018 and the EU General Data Protection Regulation (GDPR) 2016.

Data such as responses you make in tasks and questionnaires, your age, language, and musical background are kept in our lab database, indefinitely unless you request to have the data withdrawn/deleted. In this database, your identity is protected by using a code instead of your name. Your name and address are not stored anywhere in the lab database. As part of the Open Research Data Pilot (ORD Pilot) of Horizon 2020, our funding source, we would like to allow other researchers in the world to access and reuse the pseudonymised data from this study and future studies. This means that your pseudonymised data will reach more people and have a greater impact for science and society.

With your permission, we may want to use the audio recording we make in some of the speech or music tasks you perform for research, teaching, conferences, presentations, publications, and/or thesis work. These materials will be managed under the described data retention and destruction policy, and they will not be used in any way that will violate your confidentiality and privacy.

Video recording of some testing sessions may be required for behavioural analysis. Video data can never be fully anonymised because a person's face is visible. You can say no to video but still take part in all the other parts of the study. After a study is complete, video will be stored in an encrypted format on a password protected computer in a locked office. It will never be shared outside the lab, even with collaborators.

If you give permission, we would also like to store your name and contact details in our secure contact list file. This file is kept separate to the lab database and is fully encrypted. Access to this personal data is strictly limited to individuals within the lab (and our collaborators if you give permission) and security of this data is strictly maintained. Note that your name will NOT be linked to your task responses. The reason we store your contact details is so we can contact you again if there are future studies you might like to take part in.

If you are not yet on the ASD research database in the Centre for Autism at the University of Reading, we will ask your permission to join the database so researchers from other groups in the Centre may also contact you for future studies.

We store signed consent forms which include your name and signature, to allow auditing of ethical approval. These are kept in a locked filing cabinet and are not linked to your task responses.

If you have taken part in previous studies with the lab or other groups at the University of Reading, it is helpful if we can link the data from this visit to previous visits. You can give permission for this on the consent form.

Finally, if your participation involves a formal interview (i.e., the Autism Diagnostic Observation Schedule, Second Edition; ADOS-2) with a trained researcher, everything you say and that we observe is confidential, unless you make us aware of risk to yourself or another person. If you share information that makes us concerned about your wellbeing or the wellbeing of others, then we will give you information about further help that you may find useful. In the very unlikely event that we are worried about serious risks to you or another person, then we will make sure that the right services are involved to keep everyone safe, making the appropriate referrals as needed. In these circumstances, we have a duty of care to pass information to the appropriate authority, such as the Police, Social Services or your GP. We will try to tell you about the decision before the information is disclosed and we will always inform you about what information has been disclosed and to whom.

What if I want to withdraw from the study?

If you would like to withdraw from the study while the study is ongoing, please inform the researcher. There is no penalty for withdrawing from the study.

If you wish to withdraw your data, after completing the study, please contact Dr Jia Hoong Ong (jiahoong.ong@reading.ac.uk). Note, however, that if the pseudonymised data has been shared (e.g., as part of the ORD Pilot of Horizon 2020) prior to your withdrawal, there is still a risk of your pseudonymised data being used by other researchers.

The organisation responsible for protection of your personal information is the University of Reading (the Data Controller). Queries regarding data protection and your rights should be directed to the University Data Protection Officer at imps@reading.ac.uk, or in writing to: Information Management & Policy Services, University of Reading, Whiteknights, P O Box 217, Reading, RG6 6AH.

The University of Reading collects, analyses, uses, shares and retains personal data for the purposes of research in the public interest. Under data protection law we are required to inform you that this use of the personal data we may hold about you is on the lawful basis of being a public task in the public interest and where it is necessary for scientific or historical research purposes. If you withdraw from a research study, which processes your personal data, dependant on the stage of withdrawal, we may still rely on this lawful basis to continue using your data if your withdrawal would be of significant detriment to the research study aims. We will always have in place appropriate safeguards to protect your personal data.

If we have included any additional requests for use of your data, for example adding you to a registration list for the purposes of inviting you to take part in future studies, this will be done only with your consent where you have provided it to us and should you wish to be removed from the register at a later date, you should contact Dr Jia Hoong Ong (jiahoong.ong@reading.ac.uk).

You have certain rights under data protection law which are:

- Withdraw your consent, for example if you opted in to be added to a participant register
- Access your personal data or ask for a copy
- Rectify inaccuracies in personal data that we hold about you
- Be forgotten, that is your details to be removed from systems that we use to process your personal data
- Restrict uses of your data
- Object to uses of your data, for example retention after you have withdrawn from a study

Some restrictions apply to the above rights where data is collected and used for research purposes.

You can find out more about your rights on the website of the Information Commissioners Office (ICO) at <https://ico.org.uk>. You also have a right to complain the ICO if you are unhappy with how your data has been handled. Please contact the University Data Protection Officer in the first instance.

Will you contact me again?

If you agree, we will keep your name and contact details in our secure contact list, as well as on the ASD research database in the Centre for Autism at the University of Reading. This means that we will be able to contact you if we are conducting future studies which might interest you. We will also be able to link data from your past visits to Reading and this visit to future visits, if you agree. This means that each visit can be shorter and we can use the data we have better. Note that this is completely optional, and you may choose to participate in the present study while refusing to be contacted for future studies.

Information on Research Ethics

This research is supported by European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 887283 awarded to Dr Jia Hoong Ong.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. This application has been reviewed by the University Research Ethics Committee and has been given a favourable ethical opinion for conduct.

All investigators on this project have obtained criminal record clearances through enhanced DBS (Disclosure and Barring Service) checks that cover vulnerable adults and children, and they have also been approved by the School to work with children.

If you have any comments or concerns about this study, you should discuss these with Dr Jia Hoong Ong (jiahoong.ong@reading.ac.uk). For more information about the ASD research database in the Centre for Autism at the University of Reading (<http://www.reading.ac.uk/autism/>),

If you want to speak with someone who is not directly involved in this research, or have questions about your rights as a research participant, please contact the University Research Ethics Committee at the University of Reading (<http://www.reading.ac.uk/internal/res/ResearchEthics/reas-REethicshomepage.aspx>).

What should I do now?

- If you wish to take part in this lab-based study, then please complete the attached consent form
- If you do not wish to take part, you do not need to do anything. We will not contact you about this study again.
- If you have any questions or concerns, please contact Dr Jia Hoong Ong (jiahoong.ong@reading.ac.uk).