

School of Psychology,
Science Centre Level 2, Building 302,
23 Symonds Street,
Auckland Central.

EEG Participant Information Sheet

Project title: Mapping Social Closeness: Investigating the Neural Mechanisms of Person Networks

The research is conducted by Alicja Nowacka, who is attached to the Department of Psychology at the University of Auckland and is under the supervision of Professor Paul Corballis, Associate Professor Eileen Lueders and Associate Professor Katie Douglas from the University of Otago.

You are invited to participate in a research project

You are invited to participate in our research which explores neural mechanisms underlying how we perceive, evaluate, and assign emotional closeness to others. This study aims to uncover how our attention can influence decision-making processes responsible for attaching various social bonds. Please read through this information before agreeing to participate (if you wish to).

Your Role

We invite you to participate in an experiment that involves evaluating personal photographs you have brought with you. During the study, these images will be displayed on a computer monitor, and you will be asked to answer questions related to them. Your responses will be recorded using button presses on a computer keyboard. At the beginning of each task, you will receive detailed instructions on how to proceed. Throughout the experiment, your brain activity will be monitored using an electroencephalogram (EEG), which involves wearing a cap fitted with electrodes to measure your brain waves. This process is non-invasive and painless. For EEG, the electrodes will be placed on the surface of your scalp by means of an cap. You will be given brief rest breaks every few minutes during the experiment. Please ask the experimenter any questions that may arise while you are doing the task(s). We require a total of two hours of your time for this experiment. If you feel any discomfort during the session, please inform the experimenter immediately.

What to Bring to the Experiment

Before your session, you will be emailed and asked to bring photographs of of **two individuals**.

- 1. A person you feel close to and have a meaningful connection with.
- 2. An person who is familiar to you but feel less close to in comparison to person one.

Guidelines for Selecting Photographs:

- Bring **at least three images** of each person. If you have more, feel free to bring them along.
- If you can bring in photographs that share similar framing, cropping and image quality this will help with consistency of the experiment.
- Please choose images of individuals you have personally met and interacted with.
- The study focuses on **real-world social connections**. Please **do not** include celebrities, politicians, or influencers you have never met.

Additionally, you will be sent a link to a **brief questionnaire via Qualtrics**, where you will be briefly asked to rate your personal closeness to the selected individuals and asked a couple of questions outlining your choice behind selecting these individuals and why you consider them as significant. If you have any questions or need clarification, please feel free to reach out before your scheduled session.

Criteria for Participating in the EEG

To take part in the study you must:

- a) Be between 18 and 65 years of age
- b) Have normal or corrected-to-normal vision
- c) Not have a history of epilepsy or migraine
- d) No internal electrical medical device fitted or any metal item in your head
- e) no diagnosed neurological or psychological condition
- f) Not currently taking psychoactive drugs
- g) Provide us with photographs of people who are deemed as familiar and/or close. Please refer to guidelines for selecting photographs.

Māori Cultural Considerations

We recognise and understand the importance of tikanga and tapu related to the head and hair, and their implications for EEG research. We acknowledge these methods potentially compromise the tapu of the head and hair and this can be understood to impact health outcomes. We also acknowledge the importance of the participation of our diverse Aotearoa population to not compromise the applicability of research outcomes to Māori. We encourage Māori engagement with our research and have in place culturally relevant research protocols that recognise tikanga, the significance of the head and brain connection, and how this links to our cultural identity, mana, hapū, and iwi. As the process of EEG reports signals from the surface of the scalp, the data are no longer solely located with the sovereign person. Depending how the material is utilised or reported, this could potentially compromise the mana of the person. In recognition of this, and to respect the mana of the participant and ensure the wairua is continuous from beginning to end, we are able to facilitate karakia before the EEG net application. We also have available a bathroom in the EEG lab where you are welcome to wash your hair or sprinkle water upon yourself. You are encouraged to consult with your whānau, hapū or iwi about participating in the project. In order for us to satisfy health and safety protocols, please advise us if you would like to have a kaumātua present for the EEG or if you would like us to facilitate any other culturally relevant procedures.

Risks

There are no known risks involved with this experiment beyond those encountered in everyday life. The electrodes and the device used to record your EEG are electrically isolated, so there is no possibility of shock in the unlikely event of an electrical fault in the equipment. The electrode cap is disinfected after each use to prevent the possibility of biological contamination.

Right to Withdraw

You can choose to stop participation at any time without giving a reason. You also have the right to withdraw your data from the research for up to a month after your participation without providing a reason.

SONA

You may have been invited to participate in this study because you are a student at the University of Auckland and are enrolled in PSYCH 108, PSYCH 109, PSYCH 200 and/or PSYCH 204 and/or COMMS 100. If so, you are participating in this study in exchange for 2 units of your Experiential Learning Component requirement for either PSYCH 108, PSYCH 109 or PSYCH 200 or PSYCH 204 or COMMS 100.

Benefits

Your involvement is crucial in deepening our understanding of social connection and the neural mechanisms that influence our evaluation of closeness. This research will shed light on how the brain processes social bonds, informing future studies on emotional relationships, and interpersonal reliance. You'll also have a valuable opportunity to share your insights on what could help others better understand this experience, all within a supportive, safe environment. As a token of our appreciation, you'll receive a \$20 voucher for your time and contribution. If you decide to withdraw early, you will still receive compensation for the time you've already committed to the study.

Confidentiality and Security of Data

Your name will not appear in transcripts, data analyses, or publications. All data will be presented anonymously. Questionnaire responses and other data will be securely stored, and any identifying information will remain confidential. Only the attached Consent Form will include your name, linked to an identification number used throughout the study.

Data will be stored in a secure, password-protected University of Auckland computer in the School of Psychology. The consent forms will be stored separately in a locked filing cabinet in the same area and destroyed by shredding after six years. Only those researchers named in this document will have access to this data.

The study is scheduled to be completed within three years. After the completion of the study, a copy of the results can be provided to you via email. Please indicate this on the consent form if you want to receive it. Your EEG and behaviour data will be merged with other participants responses, and the information will be written for conference and journal articles.

With your consent, the photographs you provide will be used exclusively for the experiment. We assure you that all images will remain confidential and will not be shared publicly, including in publications or conference presentations.

Assurance

If you are a student of the academic lead (Professor Paul Corballis) or researcher (Alicja Nowacka), we assure you that your participation or non-participation in this study will have no effect on your grades or your relationship with the university. You may contact your academic head if you feel this assurance has not been met.

Next Steps

If you would like to be involved in this research, please fill out the attached consent form and email it to Alicja Nowacka(alicja.nowacka@auckland.ac.nz). If any questions arise before the study begins, please feel free to email Alicja Nowacka at the address provided above. Thank you for considering this request.

Contact details

For any questions regarding this project, please contact Alicja Nowacka (details below).

Our address is School of Psychology, Science Centre Level 2, Building 302, 23 Symonds Street, Auckland Central, New Zealand. The Head of the School of Psychology is Niki Harré, ph.+6493737599 Ext.88512

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If you would like to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone: 0800 555 050

Fax: 0800 2 SUPPORT (0800 2787 7678)

Email: advocacy@advocacy.org.nz

For Health support at the University of Auckland, contact:

Phone: 0800 698 427

Email: uhsinfo@auckland.ac.nz

AHREC Chair contact details:

For any concerns regarding ethical issues, you may contact the University of Auckland Human Health Research Ethics Committee Chair at the University of Auckland Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711. Email: ahrec@auckland.ac.nz

If answering any of the questions during the EEG session have raised any concerns about your mental or physical health or have made you feel distressed, some free mental health service helplines may be worth exploring.

Helplines:

Need to talk? Free call or text $\underline{1737}$ any time for support from a trained counsellor.

<u>Lifeline</u> – 0800 543 354 (0800 LIFELINE) or free text 4357 (HELP).

<u>Youthline</u> – 0800 376 633, free text 234 or email talk@youthline.co.nz or online chat.

Samaritans - 0800 726 666

Suicide Crisis Helpline - 0508 828 865 (0508 TAUTOKO).

Healthline - 0800 611 116

<u>Depression Helpline</u> – 0800 111 757 or free text 4202 (to talk to a trained counsellor about your feelings or to ask any questions).

Anxiety NZ - 0800 269 4389 (0800 ANXIETY).

University of Auckland (Only available for University of Auckland Students)

Health and Counselling Services

The University of Auckland operates the City Campus Counselling Service on Level 3 of the Student Commons building.

Phone: 0800 698 427 - 0800 MY UHCS, Email: uhsinfo@auckland.ac.nz

Puāwaitanga Counselling

It is a service run by trained counsellors and available to all students, providing support with feelings of anxiety, relationships, grief, addiction and more. Phone: 0800 782 999 Email: support@puawaitanga.nz

Approved by the Auckland Health Research Ethics Committee on 03/06/2025 for three years. Reference number AH29384