

How does neurological illness affect higher cognitive function? Assessing a comparison group of healthy participants

INFORMATION SHEET FOR PARTICIPANTS

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

Who is conducting this research?

My name is Dr. Carolyn Wilshire, and I am an academic staff member in the School of Psychology at Victoria University of Wellington. I head a research team that includes Dr. Josh Faulkner from the School of Psychology at VUW, and Mr. Andrew Parker from the Department of Neurosurgery at Wellington Hospital. Several postgraduate students will also be working on this project.

What is the aim of the project?

The ultimate aim of this project is to learn more about how various neurological conditions (e.g., stroke, brain tumour) and their treatments impact on mental functioning. We are interested in sophisticated human skills, like the ability to make plans, to remember to do things in the future, to solve complex problems, to make good decisions when there is uncertainty.

However, before we can address these questions in neurological patients, we first need to find out how healthy people perform on the tasks we have designed. By taking part in this research, you will help us to gather this information.

This research has been approved by the Victoria University of Wellington Human Ethics Committee: Ethics Committee application number 29263.

How can you help?

If you agree to take part, you will be asked to complete 2-4 different tasks, which will be randomly selected from a list of eight possible tasks. Some tasks involve viewing images on a computer such as shapes or pictures and making judgements about them, solving computer-based puzzles, or playing computer-based card games. In some tasks, you may be asked to "multitask" (perform one basic task, but also remember to attend to another task from time to time). Other tasks involve saying words aloud, or generating designs using sticks, blocks, or with pen and paper, or even just conversing generally with the researcher. The entire session is designed to be completed in about one hour.

Prior to the tasks, we will ask you to complete some brief health questions:, about whether you have ever experienced a neurological illness or head injury or if you have a heart condition and are taking any regular heart medication.

We will audio record each session and also keep a record of your button press responses to the computer tasks. For some tasks, we will also record physiological changes in your body during the task, by measuring your heart rate and the amount of perspiration you produce on your hands. For these tasks, you will be asked to place some velcro straps around your fingers (to collect information about perspiration) and also stickers containing electrodes on your hands, arms, ankles or collarbone (to collect

heart rate information). You can secure all these yourself, without the researcher needing to touch you, but we can help adjust hand and foot attachments if you wish us to. As part of the set-up, we might ask you to place your hand on a medical ice pack for a few seconds.

You can stop the session at any time without giving a reason, by letting the researcher know.

You can participate at the University, or we can visit you in your home – you don't need any equipment!

Are there any risks or discomforts?

Some of the tasks will be challenging, and possibly quite tiring. Remember, you are free to stop the session at any time. The velcro straps and stickers used to measure physiological changes should not cause you any discomfort. The electrodes will record electrical changes associated with your heart activity, but this is a painless and non-invasive process: you will not receive any electrical stimulation.

What will happen to the information you give?

This research is confidential. This means that only members of the research team will be aware of your identity. In publicly available written reports and presentations, your identity will not be revealed. Any material that is linked to your identity will be kept securely and destroyed on or before 19/12/2024. This includes any audio recordings that might identify you.

What will the project produce?

The information from this research may appear in academic publications, postgraduate research theses, and in presentations at academic conferences. Summaries of the data may be made available on open science repositories, but these summaries will not include any information that could be used to identify you.

If you accept this invitation, what are your rights as a research participant?

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- stop the test session at any time;
- ask for the recording device or other apparatus to be turned off at any time;
- ask any questions about the study at any time;
- read the final report of this research (by providing your contact details).

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact me:

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Human Ethics Committee information

If you have any concerns about the ethical conduct of the research you may contact the Victoria University of Wellington HEC Convenor: Associate Professor Judith Loveridge. Email hec@vuw.ac.nz or telephone +64-4-463 6028.