



Information Sheet for Participants

THE EFFECTS OF RELAXATION AND BREATHING TECHNIQUES ON ANXIETY AND BREATHING PERCEPTION

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Ngā mihi mahana (warm greetings) to you for showing an interest in this project. Please read this information sheet carefully. Take time to consider and, if you wish, talk with relatives or friends, before deciding whether or not to participate.

If you decide to participate, we thank you. If you decide not to take part, there will be no disadvantage to you, and we thank you for considering our request.

What is the aim of this research project?

The ability to perceive changes in our breathing (interoception), and one's corresponding confidence in such abilities (insight), have been shown to be impaired in individuals with anxiety. Here, we aim to investigate whether relaxation and breathing techniques that are commonly used in clinical practice to improve anxiety levels are also able to improve breathing-based interoception and insight in individuals with moderate levels of anxiety.

Who is funding this project?

The Department of Psychology and University of Otago are funding this project.

Who are we seeking to participate in the project?

We are seeking 63 volunteers from the general Dunedin community. You must be between the age of 18 and 45 years old, have a moderate level of anxiety. A pre-screening questionnaire will be provided to determine whether you meet this eligibility criteria, and individuals must not have any current or recent (6 months prior) use of medication for anxiety. Additionally, individuals must not have any prior or current experience in receiving psychological treatment for anxiety.

If you participate, what will you be asked to do?

Individuals who meet the criteria to participate will be asked to complete a set of questionnaires related to anxiety and mood states, and their corresponding symptoms. You will also complete a breathing-based task which will indicate the ability to perceive changes in breathing. The questionnaires and breathing task will be conducted twice, before and after one of three interventions: 1) Progressive muscle relaxation; 2) Breathing exercises; or 3) Quiet rest while listening to a podcast.

Participation should take approximately two to three hours over one experimental session to complete. To recognize the actual or reasonable costs involved with participating in this project, participants will be reimbursed \$50. Alternatively, if you are a University of Otago Psychology student, you may wish to participate for available University credits instead (allocated via Otago's Research Participant System, SONA).

Is there any risk of discomfort or harm from participation?

Participation does have a risk of potential physical discomfort due to some tasks involving small changes to your breathing. Additionally, the line of questioning for the questionnaires regarding anxiety and other mood states does introduce a risk of psychological discomfort.

However, if you do feel discomfort throughout any of the study, you may cease participation in the task and withdraw from the research without any disadvantage. Our Clinical Research Nurse is also available to provide support for any participants who would benefit from this.

What specimens, data or information will be collected, and how will they be used?

Basic demographic data will be collected (e.g. gender, age). Responses to the questionnaires about anxiety levels and symptoms, and other mood states will also be collected. Additionally, performance on the breathing-task and ratings of confidence in performance on the task will also be collected. Your information will be used for research purposes only, will be kept confidential, and only study members will have access to the data and personal information. Results produced by the collected data may be published in academic journals, and be accessible in the University of Otago database, but you will not be identified.

What about anonymity and confidentiality?

Data collected will be stored such that any personal information provided will be kept separate from the study data, which will be stored in a de-identified manner using a participant identification number. At that point, no responses will be traced back to you. Data obtained as the research of this research will also be retained for at least 10 years in secure storage.

If you agree to participate, can you withdraw later?

You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind while completing the experiment. You may also choose to withdraw from the study within 28 days of experiment completion, in which case your data will not be used for any analyses.

Any questions?

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

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*This study has been approved by the University of Otago Human Ethics Committee (Health).
If you have any concerns about the ethical conduct of the research you may contact the
Committee through the Human Ethics Committee Administrator (phone +64 3 479 8256 or
email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and
investigated and you will be informed of the outcome.*