**Participant Information Sheet**

**Study Title**: The relationship between Interoception, Intolerance of Uncertainty, and emotional disorders in a non-clinical sample.

**Researcher**: Dr Jayne Morriss, Dr Gaby Pfeifer

**Students**: Lucy Snell, Katie Bannister, Rachel Runton, Yeetung Hong, Amber Davies

**ERGO number:** 89229

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others, but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

**What is the research about?**

The study is being organised by Drs Jayne Morriss and Gaby Pfeifer, two lecturers at the University of Southampton, and conducted by the above-named students. This study was designed to examine how interoception (our ability to detect internal bodily signals such as our heartbeat) is related to experiencing intolerance of uncertainty and emotional disorders. Ultimately, we are hoping that the findings from this study can be used to inform future diagnosis and treatment of mental health disorders.

**Why have I been asked to participate?**

We are hoping to collect a large pool of participants for this type of research (e.g., over 200 participants).

**What will happen to me if I take part?**

* You will be asked to fill in some questionnaires relating to demographics (e.g. age, sex, ethnicity), individual differences in negative dispositionality (e.g. Intolerance of Uncertainty, Anxiety Sensitivity Index, Trait Anxiety) and emotional disorders (e.g., obsessive-compulsive disorder, post-traumatic stress disorder, depression).
* Your interoceptive sensitivity will be assessed in the laboratory, using a test where you will focus on your heartbeat. This test includes two short tasks, each lasting around 15 minutes. First, in the *Heartbeat Counting Task,* you will be wearing a pulse oximeter on your index finger which will record your pulse continuously. While your pulse is being recorded, you will be asked to silently count your heartbeat without manually checking your pulse. There are six trials in this task and at the end of each trial, you will be asked to report how many heartbeats you counted. The second, *Heartbeat Discrimination Task,* will involve you listening to your own heartbeat whilst wearing headphones. The headphones will present auditory tones which will sometimes match to your heartbeat and on other times be slightly out of sync with your heartbeat. After each trial, you will be required to decide whether the tones presented were in or out of sync with your heartbeat. There are 20 trials in this task.

You will receive detailed explanations and if there are any questions or tasks asked of you that you decide you do not want to take part in or answer, please let the researcher know and you can be withdrawn from the study.

**Are there any benefits in my taking part?**

Participating in this study might help you to reflect, and better understand, the factors contributing to different emotional disorders. Your participation will help improve our current understanding of individual differences in affective processing, and its relevance to mental health disorders. For psychology students who sign up via SONA, you will gain further understanding as to how research in psychology is conducted.

To recompense you for your time and effort in participating, we shall give you 10 SONA credits or £5 for completing the study. An additional 2 SONA credits will be granted to psychology students at the University of Southampton for filling in the questionnaires.

**Are there any risks involved?**

We foresee few risks from the above procedures. Some participants may find filling out the questionnaires to be boring or tiresome, and there may be some feelings of psychological discomfort associated with sharing information about your personality and the ways that you manage or monitor your emotions. Also, some participants may find the repeated trials of the heartbeat perception tasks monotonous. You are free to stop your participation at any time and for any reason during the procedure.

Should you experience any discomfort or distress as a result of participating in this study, please contact the following support services:

* You can call the Samaritans for free 24 hours a day, 7 days a week on 116 123
* Students at University of Southampton can access advice on campus by visiting the wellbeing services on <https://sotonac.sharepoint.com/teams/StudentWellbeingSupport>
* The organisation ‘Mind’ provides helpful information around self-care for anxiety, which can be accessed on <https://www.mind.org.uk/information-support/types-of-mental-health-problems/anxiety-and-panic-attacks/self-care/>

In addition, if you have any remaining questions or feel upset by any emotions experienced during the study, you may contact Dr Jayne Morriss ([j.morriss@soton.ac.uk](mailto:j.morriss@soton.ac.uk)) or Dr Gaby Pfeifer ([g.pfeifer@soton.ac.uk](mailto:g.pfeifer@soton.ac.uk)).

**What data will be collected?**

Consent forms with identifying information (e.g. participant names) will be stored in a locked filing cabinet (stored in lead researchers office). All other GDPR special category data (e.g., demographics such as ethnicity, sexual orientation, etc), self-report and psychophysiology data will be anonymised via an ID number and will be stored on a password-protected University of Southampton server on OneDrive. At the end of the project, summary statistics of the GDPR special category data (for representation purposes only), self-report, and psychophysiology anonymised data will be reported in a scientific article. Furthermore, at the end of the project, only the self-report and psychophysiology anonymised data will be uploaded to an open access data repository. These types of anonymised data will only be shared with other researchers when written informed consent has been provided.

**Will my participation be confidential?**

Your participation and the information we collect about you during the course of the research will be kept strictly confidential. Participants will be referred to using a consistent ID number on all GDPR special category data, self-report, and psychophysiology data generated to allow confidentiality to be maintained.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

**Do I have to take part?**

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

**What happens if I change my mind?**

You have the right to change your mind and withdraw at any time before, during and after the experiment (up until the 26th of April 2023) without giving a reason and without your participant rights being affected.

You can have your data removed during the experiment and after the experiment (until the 26th of April 2023). However, once your data has been anonymised, we cannot remove these data as there is no way of knowing whose data belongs to who.

**What will happen to the results of the research?**

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent. At the end of the project, the anonymised data will be uploaded to an open access repository such as the Open Science Framework (<https://osf.io/>).

Data sharing is important for assessing the reliability and replicability of the study design, as well as for combining data for future meta- and mega- analyses. If you would like to discuss this further or file a complaint, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk)).

**Where can I get more information?**

If you would like further information, you may contact the research leads, Dr Jayne Morriss ([j.morriss@soton.ac.uk](mailto:j.morriss@soton.ac.uk)) or Dr Gaby Pfeifer ([g.pfeifer@soton.ac.uk](mailto:g.pfeifer@soton.ac.uk)).

**What happens if there is a problem?**

If you have a concern about any aspect of this study, you should speak to the research leads, Dr Jayne Morriss ([j.morriss@soton.ac.uk](mailto:j.morriss@soton.ac.uk)) or Dr Gaby Pfeifer ([g.pfeifer@soton.ac.uk](mailto:g.pfeifer@soton.ac.uk)), who will do their best to answer your questions.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk)).

**Data Protection Privacy Notice**

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, ‘Personal data’ means any information that relates to and is capable of identifying a living individual. The University’s data protection policy governing the use of personal data by the University can be found on its website (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at <http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf>

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University’s policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason (‘lawful basis’) to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the ‘Data Controller’ for this study, which means that we are responsible for looking after your information and using it properly. Sensitive and identifying information will be destroyed as soon as possible after the completion of the research, and only the anonymised data will be stored long-term.

**Thank you**