



LIVERPOOL JOHN MOORES UNIVERSITY PARTICIPANT INFORMATION SHEET

Title of Project: *Arousal effects on time perception and timed behaviour*
Dr Ruth Ogden, School of Natural Sciences and Psychology

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part or not.

1. What is the purpose of the study?

Previous research suggests that the emotions that we experience may influence how long we think events lasts for. The purpose of this study is to understand how and why emotion may affect our ability to accurately judge duration. More specifically, the study aims to understand whether an individual's physiological arousal (measured by how much your skin is sweating, how quickly you are breathing and how fast your heart is beating) influences how they experience duration.

2. Who can take part?

People aged 18 – 35 years are invited to participate. You should not take part if you have a history of cardiac pathology.

3. Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights.

4. What will happen to me if I take part?

11 electrodes will be applied to your skin (two to your fingers, two to each side of your neck, two on each side of your upper hip and one to your ear), as well as a blood pressure cuff to measure blood pressure, heart rate and skin conductance of sweat. You are not required to remove clothing (e.g. tops or bottoms) for this. The electrodes will be used to record how your heart rate, breathing skin respond to pain and vibration. The electrodes are painless.

You will be asked to complete five verbal estimation tasks. In these tasks you will be shown images which have previously been judged to be 1) neutral (e.g. a picture of a fish), 2) negative (an image of an injured animal, a hurt person or a violent scene) or 3) positive (a mildly erotic image or an image of happiness). The images will be presented for 1 – 5 seconds and following each image or sound you will be asked to estimate how long the stimulus was presented for in seconds and milliseconds. During the verbal estimation tasks your skin conductance, heart rate and blood pressure will be recorded. Each verbal estimation task will take less than 10 minutes.

After each condition you will be asked to rate the images you have just been presented with. You will be first asked to rate arousal, from 1-9, with 1 being relaxed and 9 being stimulated. After this you will be asked to rate emotion, from 1-9, with 1 being negative and 9 being positive.

Before each verbal estimation task you will be asked to perform a reading task for 5 minutes whilst baseline measure of blood pressure, heart rate and skin conductance are taken.

Following completion of the baseline, verbal estimation, and image rating tasks the electrodes will be removed and your participation will be complete.

Total participation should take no longer than 1 hour 15 minutes.

5. Are there any risks / benefits involved?

RISKS: The images that you see have been selected because they are highly arousing. During the experiment you will be asked to view images depicting nudity and sexual activity (but no intercourse) and images of violence, death and injured humans/animals. This means that it is possible that you may be shocked, upset or embarrassed during participation. If at any point you wish to stop participating please inform the experimenter. If you would like to know more about the images, or see some examples, you will see before deciding to participate, please contact r.s.ogden@ljmu.ac.uk

If at any point you wish to stop participating, please inform the experimenter and they will end the testing session. You do not have to explain why you wish to stop participating and you will still be reimbursed £10 in Amazon vouchers for your time.

If you wish to speak to anybody about issues raised through participation, you can contact LJMU Counselling Service Email: studentwellbeing@ljmu.ac.uk Or call: 0151 231 3579 or 07929 999 366

BENEFITS: Participants will be offered £10 in Amazon vouchers to cover expenses. All participants will be rewarded/paid even if they do not complete the experiment.

6. Will my taking part in the study be kept confidential?

YES: Any information you provide will be kept strictly confidential. You do not have to provide a name on any questionnaires or information sheets and therefore the information you provide cannot be identified. You are requested to provide the researcher with a signed or initialled consent form. This will be kept by the researcher separate from any other information you provide.

Data will be stored for 5 years via the university under the stringent governing laws. The electronic data will be stored securely on an LJMU, password protected computer. Any hard copies of questionnaires and consent forms will be stored in filing cabinets on LJMU premises within the Natural Sciences and Psychology Dept. Confidential waste will then be used to destroy the data after a 5 year period.

This study has received ethical approval from LJMU's Research Ethics Committee (insert REC reference number and date of approval)

Contact Details of Researcher Dr Ruth Ogden r.s.ogden@ljmu.ac.uk 01519046342

If you any concerns regarding your involvement in this research, please discuss these with the researcher in the first instance. If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.