

InformationAndConsent

INFORMATION SHEET

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Take time to decide whether you wish to take part or not. Please contact the experimenter if you have any questions about the study or would like more details.

Purpose of the study?

Haptic feedback has many advantages compared to the more widely known and used visual and audio feedback, most pronounced in situations with high visual and auditory demands or distractions. One of these haptic modalities is electro-tactile feedback, where a tactile sensation on the skin is triggered by sending very light electrical currents to electrodes in contact with the skin. The experience of the feedback differs and can be manipulated by tweaking the parameters of the electricity sent towards the electrodes. It is not yet well understood, if holding an object changes the experience and sensibility and if it is the same for both hands.

This study aims to collect feedback on the experience of electro-tactile feedback on each hand and while holding an object.

Why have you been chosen?

You have been chosen because you are an adult and have no sensory impairments in your hands.

Do I have to take part?

Participation in the study is voluntary. You may decide whether to take part or not. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part, you are still free to withdraw at any time and without giving a reason.

What will happen to me if I take part?

You will be asked to come to the University of Glasgow and some demographic data will be captured. Electrodes will then be attached to the palm of one of your hands. The experimenter will then run through a calibration process of three parameters (volume, pulse width and frequency) on that hand, starting from very low values and stopping as soon as the

experience becomes uncomfortable. When the calibration process is completed, you will be presented with three cues, one after the other with short breaks in between. The cues will differ in values of one of the parameters and you are asked to order the cues from lowest to highest by reporting the corresponding order to the experimenter. The experimenter will input your responds into the system. This ordering task will be repeated several times with all the parameters, and then repeated on the same hand while holding an object (smartphone) in that hand.

The whole process of calibration, ordering task with empty hand and ordering task while holding an object (tablet) will then be repeated with both hands at the same time. (The order of single and both hand presentation might be switched)

What are the possible disadvantages and risks of taking part?

You could experience mild discomfort from the presentation of the electro-tactile feedback. The experimenter can stop the presentation of the stimulus at any time, so please report any discomfort immediately. The experiment will be conducted while seated, which could become uncomfortable. There will be breaks throughout the experiment. However, please inform the experimenter if you would like to break at other times as well.

What are the benefits of taking part?

You will be paid with a £10 Amazon voucher for about an 90min of your time. You will be contributing to research which could lead to the introduction of a new modality to everyday haptic feedback.

Will my taking part in this study be kept confidential?

All information collected, or responses provided, during the experiment will be kept strictly confidential. You will be identified by an ID number which in no way will be connected to you. Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm, or risk of serious harm, is uncovered. In such cases, the University may be obliged to contact relevant statutory bodies/agencies.

What will happen to the results of the research study?

The results will be held by the researcher and the University of Glasgow and might be used for publication. The results can be outlined to the participants whenever they become available. The participants will not be identified in any report or publication. Anonymised data might be made available for open and replicable research.

Who is organising and funding the research?

This research is funded by the School of Computing Science, University of Glasgow.

Who has reviewed the study?

The project has been reviewed by the College Ethics Committee (Application Number 300200266).

Contact for Further Information:

You can contact the researcher of this study,

Patrizia Di Campli San Vito, via the following methods:

Email: Patrizia.DiCampliSanVito@glasgow.ac.uk

Line manager details: Professor Stephen Brewster, Stephen.Brewster@glasgow.ac.uk ,
0141-330-4966

Please read the following statements carefully and tick them to show your consent:

- ☐ I confirm that I have read and understood the Information Sheet provided to me for this survey and I have had the opportunity to ask questions.
- ☐ The study has been explained to me, and I understand the explanation given and what my participation will involve.
- ☐ I understand that during the study the experimenter will give additional instructions concerning the experiment and that the purpose of some instructions will only be explained at the end of the study.
- ☐ I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason.
- ☐ I understand that the research data may be published anonymously, but that my personal data will be kept confidential in accordance with data protection guidelines.
- ☐ I volunteer to take part in the study.

Start Practical Part

You can now start with the practical part of the study.

Please let the experimenter know that you have finished.

Payment**Participant Payment List**

I confirm that I have received an Amazon voucher over 10£ for participating in the study:

E-Both-Tac: Electro-Tactile Feedback on each Hand with and without Holding an Object

Name

Date

Email

I would like to be added to the computing science experiment participant list (You can unsubscribe anytime).

As a member of that list you will received email invitation to our experiments, to which you can respond if you are interested.

- ☐ Yes
- ☐ No

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