

INFORMATION SHEET

Investigating Continuous Measures of Audience Engagement

Before you decide to take part in this study, it is important for you to understand why the research is being done and what it would involve. Please read the following information carefully. Take the time to decide whether you want to take part, and ask us if there is anything you do not understand or would like further information on.

Background

Constructing dynamic measures of audience engagement is key to understanding the psychological processes which underpin engagement, as well as developing better, more immersive media. Recently, heart rate, electroencephalography (EEG) and other physiological indicators have been outlined as potential measures of audience engagement. These measures allow us to look at engagement dynamically to see how it fluctuates across a viewing experience.

Here, we aim to validate these physiological measures against conventional engagement questionnaires, and to see if these measures are sensitive to changes in engagement across a short film (~25 minutes). **Please note, as this is a WIP production, participants must sign a non-disclosure agreement (NDA) in order to participate. This is a legally-binding contract which prohibits sharing confidential information about the production, recording/streaming/photographing or reproducing any portion of the production, or posting details about the production on social media, websites, blogs etc.**

Procedures

This experiment will take place in the Smart Cinema, at the MyWorld building (65-67 Avon St, Bristol, BS2 0QH). You will watch a short film while your neural activity and heart rate are recorded. Throughout the film, and immediately after, you may be asked questions about your experience. There will also be a two-week follow-up online questionnaire, sent via email, which will ask you additional questions.

Neural activity will be measured using electroencephalography (EEG), a non-invasive method of recording neuroelectric activity through the scalp using a wireless headset with 8 electrodes fitted into the plastic casing. Please see the accompanying document for more information on the procedure of EEG and check how best to prepare for the recording.

Heart-rate will be recorded using a Polar H10 device. This is an elasticated strap fitted with 2 electrodes for recording electrocardiogram (ECG) data worn around the lower ribs. The experimenter will show you how to put it on and you can fit it yourself in privacy. It is recommended that you wear a loose fitting top for the experiment to make fitting the ECG band easier.

All data are anonymous at point of collection. Depending on which viewing you are randomly assigned to, anonymised data will either be made Open Access (see below for a description of

what this entails), or analysed for production of a 'proof of concept' report used for the development of a prospective Universities of Bath and Bristol spinout company, current named "Audience Insights", University of Bristol number 3747.

As any records linking personal identity to data will be destroyed shortly after completion of the study, you may withdraw your data for up to **1 month** following your participation. Please be aware that after this date, we will not be able to identify your data and therefore cannot withdraw it from analysis.

The main session should take around **60 minutes** to complete, with the two-week follow-up taking around **20 minutes**. You will be reimbursed for your time upon completion of the follow-up questionnaire with a £20 Love2Shop voucher, which will be sent via email. If you withdraw from the study prior to the completion of the follow-up questionnaire, you will be reimbursed with a £15 Love2Shop voucher for completion of the film screening session.

What will happen to my data?

Your involvement in the study will remain confidential. Your study data will be anonymised. This means that it will be given an identification number and any identifying information about you will be removed. Therefore, it will not be possible to identify you by name from any aspect of documentation or reporting for this research study. At the end of the study your data may be made "Open Access". This means that it will be stored in an online database so that it is publicly available.

What is open access?

Open access means that data are made available, free of charge, to anyone interested in the research, or who wishes to conduct their own analysis of the data. We will therefore have no control over how these data are used. However, all data will be anonymised before they are made available and therefore there will be no way to identify you from the research data.

Why open access?

Open access of research data and findings is considered best scientific practice and is a requirement of many funding bodies and scientific journals. As this research is publicly funded, the outcomes of the research should be made publicly available. Sharing data helps to maximise the impact of investment through wider use, and encourages new avenues of research.

General notes

Your participation in this study is entirely voluntary. If you do decide to take part, you will be required to sign a consent form, but you are still able to withdraw from the study at any time, without giving a reason.

If you have any questions about the study, please contact Dr. Felix Carter: f.carter@bristol.ac.uk

If you have any concerns regarding your participation in this study, please direct them to the university Research Governance Team (RGT) via research-ethics@bristol.ac.uk.

Sign Up

To sign up for a session, please visit [this page](#)

