**Department of Psychology**

**Participant Information Sheet**

Visual processing and stimulus responses

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: [www.lancaster.ac.uk/research/data-protection](http://www.lancaster.ac.uk/research/data-protection)

For further information about how Lancaster University processes personal data for research

purposes and your data rights please visit our webpage:

www.lancaster.ac.uk/research/data

-

protection

For further information about how Lancaster University processes personal data for research

purposes and your data rights please visit our webpage:

www.lancaster.ac.uk/research/data

-

protection

Principle Investigator: Dr. Tom Beesley  
t.beesley@lancaster.ac.uk   
   
You are invited to take part in the research study described below. Before you agree to participate, please take time to read the following information carefully and decide whether or not you wish to take part. The researcher will explain the project with you in detail and will be happy to answer any questions.   
   
**What is the purpose of this study?**  
The purpose of this study is to explore visual behaviour in a simple computer task. This will help us to understand how humans process stimuli in the world and how this affects eye-movements and attention.

**What is the procedure of the experiment?**

The experiment will last approximately 30 minutes for which you will be compensated with £4/ SONA credits. Should you choose to participate, you will be asked to confirm that you have normal or corrected-to-normal vision. Next you will be given a quick practice trial that is identical to the procedure of the experiment. This study uses a task with visual cue stimuli that will be presented on a screen. You will be asked to make a series of responses on each of the trials. Performance feedback will be provided after each trial. The researcher will discuss the experimental procedure with you in more detail and answer any questions you may have. The task may involve eye-tracking, and if so, we will calibrate the eye-tracker so that we can record your eye-movements. You will be given regular breaks during the task.

**Confidentiality**

You will be asked to provide some personal information about yourself such as age and gender which will not be identifiable from your data and is only used to understand the demographics of who has taken part in the study. Personal information will be kept in a locked filing cabinet and collected data will be stored on a password protected computer. The collected data is for research purposes only and may be used to write a research article or present at scientific conference presentations. For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: www.lancaster.ac.uk/research/data-protection

**Do I have to take part?**  
Your participation is entirely voluntary. Once you have read this information sheet, you will be asked to give consent in order to continue. You are free to withdraw at any time during the study. Once you have left the experiment the data will have been anonymised and withdrawal will no longer be possible. Whether or not you provide your consent for participation will have no effect on your current or future relationship with Lancaster University and will not incur any penalty.

**Who can I contact if I have any questions or concerns?**  
If you have any questions or concerns regarding this project, please do not hesitate to contact the principle investigator, Dr. Tom Beesley (t.beesley@lancaster.ac.uk). If you wish to speak to someone unaffiliated with the study, please contact the Head of the Psychology Department ([*psychology.hod@lancaster.ac.uk*](mailto:psychology.hod@lancaster.ac.uk)). See full contact details below.

**CONSENT FORM**

**Department of Psychology**

Visual processing and stimulus responses

Name: \_\_\_\_\_\_\_\_\_\_\_

Age: \_\_\_\_\_\_\_\_\_\_\_

Gender:

Female Male Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (please specify)

Please indicate your visual ability:

Normal Corrected (glasses or contact lenses)

Please indicate your handedness (e.g. which hand do you write with):

Right Left

Please read and tick the following statements and sign below to acknowledge and agree:

I agree to participate in this eye-tracking experiment.

I understand my participation is completely voluntary.

I have been given the opportunity to ask any questions at any time.

I understand I have the right to withdraw from the study at any time during or at the end of the study without giving a reason and with no adverse consequences.

I have been given full information about what the study entails.

I have been given contact information for the research team.

I understand my responses will be fully anonymized.

I agree to participate in the study on learning the predictive value of cues as described. I understand that my responses will be treated confidentially and that I have the option to withdraw from the study.

Signature: ……………………………………………… Date: ……………….

If you have any questions as a result of reading this consent form, please do not hesitate to ask.

If you have any questions about the study after it ends, the research team would be happy to answer your queries. If you have any concerns regarding the study and wish to speak to someone unaffiliated with the study, you may also contact the Head of Department (please see contact details below).

**Department of Psychology**

**Participant Debrief Sheet**

Visual processing and stimulus responses

Thank you for your participation in this study.

This study is part of a series of experiments that are designed to investigate attentional processes underlying human learning. Specifically, we aim to explore the extent to which we have conscious control over which stimuli we attend to.

Once a cue is associated with a meaningful outcome (i.e., a response and/or a reward) an attentional bias towards this cue is established. The learnt predictive value of the cue leads to more overt attention being allocated towards it, which increases how much we learn about that cue in the future.

This experiment examines whether our attention is always automatically directed at cues that previously predicted correct responses or whether this attentional bias can be controlled.

Findings from this experiment will contribute to our understanding of processes underlying the interaction between attention and learning, which can also enhance our understanding of maladaptive mechanisms. For example, if attention is found to be automatically directed to previously predictive cues then this would indicate that conscious efforts to change behaviour are ineffective on their own. As such, cognitive retraining may be necessary to reverse maladaptive attentional biases that automatically associate harmful stimuli (e.g. drugs) with reward.

If you do not wish for your data to be included in this study, please inform the researcher before leaving the experiment. Once you have left, your data will be fully anonymized and will no longer be identifiable as belonging to you.

If you wish to read more about research surrounding this study, please read:

Le Pelley, M. E., Beesley, T., & Griffiths, O. (2011). Overt attention and predictiveness in human contingency learning. Journal of Experimental Psychology: Animal Behavior Processes, 37(2), 220.

If you have any questions regarding the study, please feel free to contact a member of the research team. If you would like to discuss your concerns with someone unaffiliated with the study, you may also contact the Head of Department, Prof. Charlie Lewis (see contact details below).