



Participant Information Sheet/Consent Form

Title	An online test of detection performance
Chief Investigator/Senior Supervisor	Professor Stephen Robinson
Associate Investigator(s)/Associate Supervisor(s)	Professor Gerard Kennedy, Dr Alexander De Foe, Dr Russell Conduit, Mr Ashley Norman, Ms Kate Langtry, Mr Son Tran

What does my participation involve?

1 Introduction

You are invited to take part in this research project, which is called “An online test of detection performance”. You have been invited because you have replied to our advertisements calling for interested participants.

This Participant Information Sheet/Consent Form tells you about the research project. It explains the processes involved with taking part. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative or friend.

Participation in this research is voluntary. If you don’t wish to take part, you don’t have to.

If you decide you want to take part in the research project, you will have indicated that you have read this document and consent to participate by proceeding with the experiment online.

You may download a copy of this Participant Information Sheet to keep.

2 What is the purpose of this research?

Infrared imaging systems can be used to detect and identify objects at sea both during the day and at night. These systems are fitted to aircraft and ships to identify other small and large vessels, conduct search and rescue as well as monitor illegal activities. RMIT and the Australian Defence Science & Technology Group (DSTG) has an interest in understanding what the ideal search altitude and range is for detecting and identifying small objects. Human observer data collected in this study is critical to validate our modelling approach and assists with the training of our computer models.

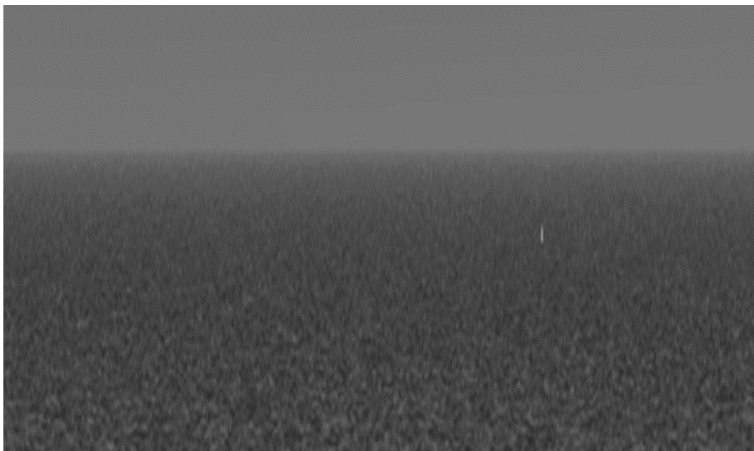
This research will be conducted by RMIT and funded by the DSTG.

3 What does participation in this research involve?

There are multiple parts to the online experiment. You will have the choice to complete as many modules as you wish as part of the experiment. You will first be asked to complete some screening and demographic questionnaires. You will then be asked to log-in to our online software to complete the main testing. Please note that your log-in ID is your e-mail address. We only store your e-mail details to ensure you can come back to the tests if you wish to complete them in more than one sitting and provide you with your gift card(s) if eligible. If you opt to, we will also offer to store your email address for the purposes of future research opportunities at the end of the testing. Please note that if you do not have a university (i.e., edu or edu.au) email address, we may request your postal address to validate your gift card – that data will be stored separately to your experimental data.

Module 1 (15-20 min)

An example of the main visual task is provided below; this is similar to what you will see in the experiment. We would expect you to identify the bright white vertical post to the right of centre, 90% of the way to the horizon. To move to the next image, you would click with your mouse cursor close to this object. You will also complete a find the 'odd one out' visual search task and a simple reaction time task where you respond via mouse click to a traffic light changing.



Module 2 (15-20 min)

You will also have the chance to complete some optional follow up testing, which includes a Change Detection task, some questions about your experience playing video games, and personality. The Change Detection Task requires participants to respond when they notice a change in a given scene. In the examples below you will see scenes like those you may be presented with in the actual experiment. Note the highlighted changes.



Module 3 (18-20 min)

In a further module you will optionally have the opportunity to complete some additional cognitive tasks named the Austin Maze and SCIT.

We anticipate that it will not take you more than 20 minutes to complete the first component of testing. If you choose to complete the optional additional components, this will take approximately an additional 40-50 minutes of your time.

All tests are done online from the convenience of your personal device.

You are under no obligation to continue the experiment once you start and may withdraw at any time.

Module 4 (35-45 min)

Participants meeting performance criteria on the previous 3 modules may be contacted via email to complete an additional battery of cognitive tasks named the Flanker Task, Object Working Memory Task, Spatial Working Memory Task, Wisconsin Card Sorting Test, and Multiple Object Tracking. These are all tasks of executive function assessing attentional control, working memory, and cognitive flexibility. Participation in this module is via invitation only and participation is voluntary. If you wish to be contacted to complete this additional battery of testing, please ensure you consent to being contacted about future projects when prompted during the main experiment.

Screening procedures

If you do not meet the below screening criteria, you will not be eligible to take part in the study:

- Are aged less than 18 years or are older than 60 years
- Are currently diagnosed with Schizophrenia, ADHD, ASD, Bipolar Disorder, or Narcolepsy
- Have a clinically diagnosed visual impairment unless corrected by glasses/lenses (e.g., blind in one or both eyes, severe cataracts)

Additional costs and reimbursement

There are no costs associated with participating in this research project; however, you will be reimbursed with a AUD25 gift card in gratitude for your time. Should you choose to complete additional blocks (up to 3 total), you will receive a further AUD25 gift card per block. Participants invited to complete subsequent modules will be reimbursed with a further AUD25 gift card per module upon completion.

Before receiving your gift card(s), your data will need to be validated in relation to effort and performance. Please try to perform at your best level because participants who do not perform above minimal threshold levels will not be eligible for a gift card. It is therefore recommended

you complete the experiment in a quiet room free of distraction. There will be opportunities throughout the experiment for breaks should you need.

4 Other relevant information about the research project

This project is being run by RMIT in collaboration with the DSTG. Approximately 600 people will participate in this research project over a period of three years. The experiment is being run entirely online.

5 Do I have to take part in this research project?

Participation in any research project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with the researchers or with RMIT University.

6 What are the possible benefits of taking part?

There are numerous direct and indirect benefits to participants who choose to take part. First, you will receive some limited feedback on your performance with certain tasks/tests. For instance, you will receive introspective feedback on your responses to the personality questionnaire, and you will also be given some details on how well you did at some of the visual (e.g., change detection) tests for your own reference. Aside from learning about your personality type and visual performance, you will be reimbursed with a Coles/Coles-Myer gift certificate(s).

Indirect benefits will include supporting DSTG efforts in developing more robust object identification tools, validation of a potentially more efficient and robust measure of change blindness, contribution to our understanding of the links between gaming experience, personality, and visual acuity in object recognition. Your contribution will also assist the research psychologists involved in the project to better understand variables which correlate with visual search, attentional, and perceptual processes.

7 What are the risks and disadvantages of taking part?

Risks associated with completing the detection tasks are expected to be minimal. Minimal discomfort is anticipated with this research. While there are evident harms associated with computer use, such as minor eye or wrist strain, these risks are not above and beyond those associated with everyday computer and technology use. To minimise risks associated with inconvenience, you have the option to complete the experiment either in a single sitting or in two sittings on separate occasions. Furthermore, you will be able to contact the researchers involved with the project at any time should you be concerned with the above factors and/or any other ethical issues arising from their participation.

With respect to the visual and questionnaire measures, please note that your performance data is not diagnostic and is only for personal interest. If you do have any concerns about your experience of the task(s) or do feel disheartened by your results for any reason, do not hesitate to reach out to the research team at any time. While we do not anticipate that any of the



personality or visual measures will cause participants any distress, if you have experienced any negative emotions or distress about the task(s) for any reason, please do not hesitate to contact one of the following telephone help lines:

- (1) Mental Health Emergency Response Line: 1300 555 788 (Metro) or 1800 552 002 (Country/Rurallink)
- (2) Lifeline: 13 11 14

Note: if you are an RMIT student, participation in this study will have no bearing on access to learning in this course or outcomes in your studies nor on your final grade.

Note about online surveys: This project will collect and analyse data in an electronic survey format via Gorilla. If you agree to participate in this survey, the responses you provide will be stored on password protected host servers. Apart from your email address and/or postal address if provided, no personal information will be collected in the survey and will not be stored as data. Once we have completed our data collection and analysis, the analysed data will be stored securely with DSTG and RMIT for 7 years.

8 What if I withdraw from this research project?

If you do consent to participate, you may withdraw at any time. If you decide to withdraw from the project, please notify a member of the research team. You have the right to have any unprocessed data withdrawn and destroyed during your participation, providing it can be reliably identified. After you have completed the study, your data will not be identifiable and will not be able to be destroyed.

9 What happens when the research project ends?

All data collected from this research project will be kept confidential and maintained by RMIT and DSTG.

How is the research project being conducted?

10 What will happen to information about me?

Any experimental data collected from you will be made anonymous by use of a code number, and your responses will be stored on password protected Gorilla and RMIT host servers. Your email address will only be retained for the aggregation of data and then discarded. If you opt to be contacted about future related studies, your email address and/or postal address if provided will be retained in a separate database and utilised only for these explicit purposes.

Any information obtained in connection with this research project that can identify you will remain confidential.

The results of this research project may be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot

be identified. At the conclusion of the study, you may request a results summary by emailing the Chief Investigator: Stephen.Robinson@rmit.edu.au.

In accordance with relevant Australian and/or Victorian privacy and other relevant laws, you have the right to request access to the information about you that is collected and stored by the research team providing it can be reliably identified. You also have the right to request that any information with which you disagree be corrected. Please inform the research team member named at the end of this document if you would like to access your information.

Any information that you provide can be disclosed only if (1) it is protect you or others from harm, (2) if specifically allowed by law, (3) you provide the researchers with written permission. Any information obtained for the purpose of this research project that can identify you will be treated as confidential and securely stored.

11 Who is organising and funding the research?

This research project is being conducted by Professor Stephen Robinson, Professor Gerard Kennedy, Dr Alexander De Foe, Dr Russell Conduit, Mr Ashley Norman and Ms Kate Langtry of RMIT University and is funded by the Australian Defence Science & Technology (DST) Group.

12 Who has reviewed the research project?

All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). This research project has been approved by the RMIT University HREC.

This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007). This statement has been developed to protect the interests of people who agree to participate in human research studies.

13 Further information and who to contact

If you want any further information concerning this project, you can contact the Research Officer on hodp@rmit.edu.au.

Research contact person

Name	Mr Ashley Norman
Position	Research Officer
Email	hodp@rmit.edu.au

14 Complaints



Should you have any concerns or questions about this research project, which you do not wish to discuss with the researchers listed in this document, then you may contact the Manager, Research Ethics and Governance:

Reviewing HREC name	RMIT University
HREC Secretary	Vivienne Moyle
Telephone	03 9925 5037
Email	human.ethics@rmit.edu.au
Mailing address	Research Ethics Co-ordinator Research Integrity Governance and Systems RMIT University GPO Box 2476 MELBOURNE VIC 3001