

Information Sheet

Thank you for considering participating in this study!

Please read the following information carefully.

1. What's the aim of the study?

The purpose of this study is to investigate the relationship between information processing, sequences of images and different types of memory.

2. Do I have to take part?

Taking part in this study is entirely voluntary. If you begin the experiment and decide you want to stop at any point, you are completely free to do so with no questions asked.

The same applies to if you finish the experiment and decide that you want to withdraw your data. All you need to do is email the lead researcher at daniel.matkin@shu.ac.uk with your unique alphanumeric code that you will be given on the next page, indicating that you want your data withdrawn and the data will be destroyed with no questions asked. Once the experiment is over, you'll receive all these details again, so there's no need to worry about remembering them right now.

3. What do I have to do?

There are 4 different procedures in this experiment and you'll only have to complete one of them. Depending on which one you complete, the experiment will last around 10-20 minutes. Which test you complete will be decided randomly. If you're assigned to the control condition you'll be asked to view some comic strips and answer questions about them. If you're assigned to an experimental condition, there will be two sections. In the first section you'll complete a working memory task, and in the second section you'll complete the same working memory tasks, and view the comic strips. In each section there will be an explanation of the tasks that you will be asked to complete and a practice trial. You'll also get the opportunity to ask any questions that you may have before the procedures begin properly.

4. Will my data be confidential?

The data that you provide here will be kept completely confidential. The only identifying features on the data will be the randomly generated alphanumeric code that will you be provided with on the next page. Only you will know your code, meaning that it will

be impossible for anyone else to ever be trace your data back to you. The only reason that the data will be accessed during the data collection period will be to remove data if requested.

On the next page you will also be asked to provide an email address to which a copy of this information will be sent, as well as any follow up information that you may request. These email addresses will be stored in an encrypted file separate to the file containing the data.

Once you have completed the experiment, the data will be written automatically into a symmetrically encrypted, password protected spreadsheet that only the lead researcher and Director of Studies has the access key to.

After the data collection period has finished, the alphanumeric IDs and separate email addresses file will be permanently erased, anonymising the data in line with the UK GDPR best practice principles. Please note, that should you wish to withdraw your data from the study, you should contact the researcher about removing your data before this date: 24/04/22.

5. Has this study been ethically appraised?

The Sheffield Hallam University Ethics board has given approval for this study to go ahead and determined that there are no significant risks associated with participating in this research.

6. General Data Protection Regulation

The GDPR governs the way in which organisations use your personal data. Personal data is information relating to an identifiable living individual. Transparency is a key element of the GDPR and before consenting to this research you should understand:

- How and why your data is being used for research
- What your rights are under GDPR
- How to contact us if you have questions or concerns about the use of your personal data.

The University undertakes research as part of its function for the community under the legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest.

A full statement of your rights can be found at:

<https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notice/privacy-notice-for-research>

However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by the Research Ethics Working Group of the Department of Psychology, Sociology and Politics.

7. Contact Details

For questions on how the University uses your data or if you would like to complain about data usage then you should contact the Data Protection Officer at DPO@shu.ac.uk.

If you have any other concerns you should contact in the first instance you should contact any of my supervisory team:

Dr Paul Aleixo (Director of Studies)
dspa5@exchange.shu.ac.uk

Dr Jane Morgan
ssljlm@exchange.shu.ac.uk

Dr Diarmuid Verrier
dsdv@exchange.shu.ac.uk

If you have any questions at all, please take the opportunity to ask them now.

Consent Checks

1. I have read the Information Sheet for this study and have had details of the study explained to me.
2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
5. I wish to participate in the study under the conditions set out in the Information Sheet.
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.

Debrief Information

Thank you for taking the time to complete this experiment!

Your participation is greatly appreciated.

1. Further Information about the study

In this experiment you completed two tasks if you were in the experimental condition and one task if you were in the control condition. The first task was a span test, in which you either saw a grid of blocks and had to fill in the patterns, some randomly placed blocks which you had to click in order, or a sequence of digits which you had to remember in order. The second task was a pre-load experiment in which you completed the same type of memory task but with the addition of viewing a comic strip in between seeing and recalling the memory task. If you were in the control condition, you only did the second task, and without any memory pre-load.

Everyone has a limited capacity span of attention. As well as this, research in Psychology indicates that there are different types of memory. The main channels of information processing and memory that we are interested in here are the Phonological Channel, that deals mainly with auditory but also textual information, and the Visuo-Spatial Channel which deals with visual and spatial memory and processing. As comics use both of these channels, we are interested in what they can tell us about how these two channels interact and what this tells us about our information processing capacity.

The first task you completed, the span task, was intended to measure your capacity to maintain information in what psychological research has named, 'working memory'. 'Working memory' essentially describes a type of memory where you are actively maintaining information to either use in some procedure or that is being processed to be stored. In the second task, you were asked to complete the same kind of 'working memory' task as well as viewing a comic. The working memory task in this scenario is to 'pre-load' the specific channel of working memory that the task deals with. This will then naturally interfere with how you process the comic.

The main research question of this experiment then is simply to what degree are different working memory channels associated with processing sequential images. We can test this by comparing the results of the recall tests that you completed in the second part of the 'pre-load' task.

2. Contact Details

If you would like any further information about any part of the experiment, feel free to contact the lead researcher on:

Daniel Matkin,
daniel.matkin@shu.ac.uk

If you have any concerns, complaints, or other issues with the research then in the first instance you should email any of my supervisors on:

Dr Paul Aleixo,
(Director of Studies)
dspa5@exchange.shu.ac.uk

Dr Jane Morgan
ssljl@exchange.shu.ac.uk

Dr Diarmuid Verrier
dsdv@exchange.shu.ac.uk

Alternatively you should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

Or you should contact the Head of Research Ethics if:

- you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk