



Request to participate in medical research:

Pirate Memory and Mental Health

Dear participant,

We are asking you if you would be willing to participate in our research project.

Participation in this study is voluntary. The data that is collected in this research project is subject to strict data protection regulations.

This research project is being conducted by Dr David Philip Morgan. If you are interested, we will be happy to inform you about the results of this research project.

In this information sheet, we will explain the most important points about this research project to you and answer your questions by email, should any arise.

Department of Clinical Psychology

Head:

Prof. Dr. Peter Kirsch

RG Psychology and Neurobiology of Sleep
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Head:

Dr. Gordon Feld

Postdoktorand:

Dr David Philip Morgan

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Why are we carrying out this research project?

- With this experiment, we aim to better understand how memory works. Specifically, we want to know why some things are more memorable than others and how this varies between individuals based on their mental health.

What do I have to do when I participate? - What happens to me when I participate?

- If you agree to participate, you will complete the entire study online in your browser.
- You will be asked to answer a short questionnaire about yourself, your demographic information and your mental health and you will study various landscape pictures and you will be tested on your memory for them in two sessions.
- You will complete the experiment in two-sessions separated by 22-26 hours.
- You will be reminded to come back to the second session of the experiment via Prolific using the Prolific messaging service via your Prolific ID.

What are the benefits and risks involved in this research project?

- Other than the compensation you receive, there is no direct benefit to you from participating in this study. The investigator, however, may learn more about human memory, so you are contributing to scientific progress and society may benefit from the knowledge that is acquired in this experiment.
- Participation in this study is not associated with any risks. However, you may experience discomforts, e.g. frustration, boredom and/or fatigue while participating in our study. But if you experience any discomfort you may withdraw from the experiment at any time by closing the browser.



By providing your signature at the end of this document, you attest that you are participating voluntarily and that you have understood the contents of the entire document.



Detailed Information

1. Aim and Selection

This experiment is referred to as a research project throughout. If you participate in this research project, you are a participant.

In this research project, we want to investigate why some things are more memorable than others and how this might vary between individuals based on their mental health. We are asking you to participate in this project because anyone aged 18-45 can participate.

2. General Information

Although the relationship between memory and mental health has often been researched, studies rarely take into account how your mental health can impact which types of information you remember. We suspect that your mental health has an impact of the types of information you remember and would therefore like to find out how that influences your memory performance, so that this can be considered in future studies. When you take part in this research project you will be shown images of various locations for which your memory will be tested. All participants will undergo the same experiment.

This research project is being conducted in line with regulations and laws. We also follow all internationally recognised guidelines and the responsible ethics committee has reviewed and evaluated this research project.

3. Procedure

The procedure is the same for all participants. You will first answer some questions about yourself including demographic information and your mental health and then complete a short reaction time task. Next you will be shown some images and complete a second reaction time task. Your memory will be tested immediately afterwards and a second time approximately 22-26 hours later. Therefore, this research project will occur over two sessions.

The first session will last no longer, than 40 minutes and the second session will last no longer than 20 minutes.

4. Benefits

Other than the compensation you receive, there is no direct benefit to you from participating this study. The investigator, however, may learn more about human memory, so you are contributing to scientific progress and society may benefit from the knowledge that is acquired in this experiment.

5. Voluntary Participation and Obligations

You are participating voluntarily. If you do not wish to participate in this research project or wish to withdraw your participation later you may do so without justification. If you participate in this experiment, you are asked to adhere to the specifications and requirements of the research project throughout.

6. Risks and Burdens

The research project does not expose you to any risks.



7. Results

If you are interested, we can inform you about the overall results once the research project has finished.

8. Confidentiality of data

8.1. Data processing and encryption

The legal basis for processing your data is provided by your voluntary consent to participate in this research project (Art. 6(1)(c) DSGVO). This research project is hosted on a secure internet connection (with a https certificate) and data are stored on a DGVSO compliant server under the administration of the IT department at the Central Institute of Mental Health.

In this research project, Dr David Philip Morgan, david.morgan@zi-mannheim.de, is responsible for data processing.

In this research project, data about you will be collected and processing, partly in automated form. During data collection, your data will be encrypted. Encryption means that no information that could be used to identify you is stored (name, date of birth, etc.) and you will only be known by a code (= pseudo-anonymised) and your Prolific ID (<https://researcher-help.prolific.co/hc/en-gb/articles/360018895214-Prolific-Practices-and-Security-Systems>). The personal data that you may provide (e.g., your personal email address due to contacting us via email instead of the anonymised Prolific messaging system) will be securely and temporarily stored during any correspondence on a password protected email account hosted at the Central Institute of Mental Health under the administration of IT, which is DGVSO compliant. Once any correspondence is completed, the correspondence alongside your email address will be deleted. People who do not have access to the data cannot identify you. The list of anonymised participants always remains in the Department of Clinical Psychology, ZI, Mannheim.

Only very few professionals will see your encrypted data, and only in order to perform tasks necessary within the research project. For example, your Prolific ID will be used to award payment for completing the experiment. These persons are subject to the duty of confidentiality. As a participant, you have the right to inspect and correct your data. The data will be stored permanently after the research project has ended or been discontinued. They are secured against unauthorised access and are anonymised as soon as the research purposes permit it. In addition, the anonymised data is made available to other researchers in an internet-based research data bank called PsychArchives (Leibniz Institute of Psychology (ZPID), <https://leibniz-psychology.org/angebote/archivieren/>, the servers are located in Germany). In doing so, we follow the recommendations of the German Research Foundation (DFG), which recommends that all anonymised data collected in this study be made available to the public. This is important to ensure quality assurance in terms of verifiability and reproducibility of scientific results (e.g., results in publications) and to allow re-use of the data. Reproducibility means that other researchers can check whether the results are correct and whether they would arrive at identical results.

8.2. Data Protection

All data protection requirements are strictly adhered to. It is possible that your data may have to be transferred in anonymised form to countries outside the EU, for example for publication, and may be made available to other researchers. The same level of data protection cannot be



guaranteed abroad as in the EU. However, the data passed on is anonymised and can no longer be linked to your person.

9. Withdrawal from the Research Project

You can revoke your consent in writing or verbally at any time without giving reasons and without incurring any disadvantage. If you revoke your consent, no further data will be collected. However, the data processing that took place until the revocation remains lawful.

In the event of revocation, you can also request the deletion of your data. Please note that this is only possible if the list of Prolific IDs has not yet been destroyed, as we will no longer be able to allocate your data from this point on.

After the evaluation, your data will be further anonymised. The Prolific ID is destroyed so that afterwards no one can find out that the data originally came from you. This is primarily for additional data protection purposes.

If you have any concerns about data processing and compliance with data protection requirements, you can also contact the following data protection officer:

Dr. Jur. Regina Mathes & Ms. Kremena Toteva,
Central Institute of Mental Health, J5,
68159 Mannheim,

e-mail: Datenschutz@zi-mannheim.de

You have the right to complain to any data protection supervisory authority. You can find a list of the supervisory authorities in Germany at

https://www.bfdi.bund.de/DE/Infothek/Anschriften_Links/anschriften_links-node.html

10. Compensation for your time

If you complete both the first and second sessions of this research project you will be compensated £7.50. In addition, you can receive extra payment depending on your score in the task: All 360 participants will be ranked according to their score (gems won in the task).

Participants ranked 1-4 receive £25, participants ranked 5-8 receive £20, rank 9-12 receive £15 and rank 13-50 receive £7.50.

11. Funding

This study is mainly funded by the Central Institute of Mental Health, Mannheim, Germany.

12. Contact Person(s)

You may ask questions about project participation at any time via the Prolific messaging service. In addition, if you have any uncertainties that arise during the research project or afterwards, please contact:

Dr. David Morgan

Central Institute of Mental Health, Department of Clinical Psychology, J5, 68159 Mannheim

E-Mail: david.morgan@zi-mannheim.de

+49 621 1703-6527



Declaration of Consent

Written declaration of consent to participate in a research project

Please read this form carefully. Please ask if there is anything you do not understand or would like to know. Your written consent is required for participation.

EK-II Application number: (after submission)	2021-641
Title of the research project (scientific and lay language):	Pirate memory and mental health The influence of mental health on memory
Responsible institution (Project management with address):	Central Institute of Mental Health, Department of Clinical Psychology, J5, 68159 Mannheim, Germany
Place of implementation:	Central Institute of Mental Health, Mannheim
Head of the research project at the place of study: Surname and first name in block capitals:	DR DAVID PHILIP MORGAN
Participant: Surname and first name in block capitals: Date of birth:	

- I have been informed in writing about the purpose, the procedure of the research project, possible advantages and disadvantages as well as possible risks.
- I am taking part in this research project voluntarily and accept the content of the written information given on the above-mentioned research project. I have had sufficient time to make my decision.
- My questions in connection with participation in this research project have been answered. I can save the written information on my computer.
- I agree that the competent experts of the project management and the ethics committee responsible for this research project may process my personal data in the way described above (e.g., if you contact us via email, instead of using your Prolific ID, to answer any questions you might have about the experiment we will securely store your correspondence and email address and delete it immediately after correspondence has ended or when no further responses are required.) in strict compliance with confidentiality.
- I know that my personal data can only be passed on in encrypted form for research purposes for this research project, including abroad. Data protection according to EU standards cannot be guaranteed abroad. However, your data will only be passed on in anonymised form, so that no assignment to your person is possible.
- I can withdraw from participation at any time and without giving reasons. The data and samples collected up to that point will still be used for the evaluation of the research project.
- I agree that my data may continue to be used in anonymised form if I withdraw my consent.



I consent to the participation and processing of the above data.

I have received a copy of the information leaflet and the consent form. One copy will remain at the trial centre.

Place, Date	Signature of participant
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Confirmation by the investigator: I hereby confirm that I have explained the nature, significance and scope of the research project to this participant. I affirm that I will fulfil all obligations in connection with this research project in accordance with applicable law. If, during the course of the research project, I learn of any issues that may affect the participant's willingness to participate in the research project, I will inform him/her immediately.

Place, Date	Surname and first name of the inspector in block capitals
	Signature of the inspector