

Study Title: Cognitive and affective predictors of wayfinding in a virtual maze

Researcher: Karoline Greve Grouleff (Trainee Clinical Psychologist)

Research Supervisors: Dr Dennis Golm (PhD, Lecturer in Psychology, University of Southampton), Dr Lyn Ellett (Associate Professor of Clinical Psychology, University of Southampton), Professor Matthew Garner (BSc, PhD, Professor of Psychology & Affective Neuroscience, Head of Psychology, University of Southampton)

ERGO number: 79657

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others, but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

My name is Karoline Greve Grouleff, and I am a Trainee Clinical Psychologist conducting research as part of my doctorate training in Clinical Psychology at University of Southampton.

This study examines individual differences and their association with maze navigation, and how maze characteristics modulate maze navigation. The study will be written up as my doctorate thesis.

Why have I been asked to participate?

We aim to recruit adults aged 18 or over. Exclusion criteria include individuals under the age of 18.

What will happen to me if I take part?

If you would like to take part in this study, you will be asked to give consent to take part. You will then be invited to complete an online survey which will ask you some demographic questions (i.e., your gender, age and ethnicity), questions about your life history when growing up and your current mental health. Afterwards, you will be asked to complete two different online tasks. In the first task, we will test your reaction time and attention. In the second task, we will test your spatial navigation skills in different virtual mazes. All participation will be online, and you will not have to attend any part of this study in person. The total estimated time for participation is approximately 30 minutes. Upon completion of the maze tasks, a written debrief form will be provided.

The research project is estimated to last until May 2024 when the doctorate thesis is submitted.

Are there any benefits in my taking part?

Your participation will help improve our current understanding of how different life experiences impact on spatial navigation and information processing. We hope that our research can inform future research in this field.

Participants recruited from Prolific will be paid £5 for their participation upon completion of the maze tasks.

Are there any risks involved?

Completing questionnaires asking about past life experiences, and current mental health may cause some level of psychological discomfort or distress for some participants. Distressed participants will be able to use any of the signposting services listed at the bottom of the information sheet and on the written debrief form, which include an extensive list of organisations offering mental health support.

What data will be collected?

We will collect information about your demographics (i.e., ethnicity), your experiences when growing up, your mental health and behavioural data from the online tasks such as reaction times.

Data is anonymised to protect participant confidentiality. Data will be collected and stored digitally in a password protected folder and backed up on a secure server.

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential. Following submission of the thesis, anonymised data will be uploaded onto data repository. This will enable other researchers to use the data for future projects. The deposited data will not include your prolific id or your ethnicity. Instead of your real age in years, age bands will be used.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to give online consent to show that you have agreed to take part.

What happens if I change my mind?

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights being affected. If you wish to withdraw from the study, please contact Karoline Greve Grouleff on k.g.grouleff@soton.ac.uk

You can withdraw from the study up until four weeks after data collection as the data will be processed then. You will be reimbursed upon completion of the study.

If you wish to withdraw from this study after four weeks, we will keep the information about you that we have already obtained for the purposes of achieving the objectives of the study only. Withdrawn data will not be uploaded to a data repository.

What will happen to the results of the research?

Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

The project will be written up as part of a doctorate thesis and published in a scientific journal. Following submission of the doctoral thesis, the data will be uploaded onto data repository. The University of Southampton is responsible for holding the data. The data might be used for future studies to help develop the research field further. Use and access restrictions will apply to the data in the future and will exclude commercial use. If you remain unhappy or have a complaint about this, please contact the University of Southampton

Research Integrity and Governance Manager on Tel: 023 8059 5058 or email:

rgoinfo@soton.ac.uk

Where can I get more information?

Potential participants can contact Karoline Greve Grouleff (k.g.grouleff@soton.ac.uk) in the research team with any questions they may have after reading this information sheet.

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.

Researcher: Karoline Greve Grouleff (k.g.grouleff@soton.ac.uk)

Research Supervisors: Dr Dennis Golm (d.golm@soton.ac.uk), Dr Lyn Ellett (l.a.ellettsoton.ac.uk), Professor Matthew Garner (m.j.garner@soton.ac.uk)

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk).

If you experience any discomfort or distress during this study, you can contact any of the following organisations for support:

- Your General Practitioner (GP)
- Samaritans: To talk about anything that is upsetting you, you can contact Samaritans 24 hours a day, 365 days a year on tel:116 123 or email jo@samaritans.org
- SANEline: If you are experiencing a mental health problem or supporting someone else, you can contact SANEline on Tel: 0300 304 7000 from 4.30pm–10.30pm every day.

- Campaign Against Living Miserably (CALM): If you are struggling and need to talk, you can contact CALM on Tel: 0800 58 58 58 (5pm–midnight every day) or use the CALM webchat service if you prefer not to speak on the phone.
- Shout: If you would prefer not to talk but want some mental health support, you can text SHOUT to 85258. Shout offers a confidential 24/7 text service providing support if you are in crisis and need immediate help.
- Papyrus HOPELINEUK. If you're under 35 and struggling with suicidal feelings or concerned about a young person who might be struggling, you can call Papyrus HOPELINEUK on Tel: 0800 068 4141 (weekdays 10am-10pm, weekends 2pm-10pm and bank holidays 2pm–10pm), or email pat@papyrus-uk.org or text 07786 209 697.
- Switchboard. If you identify as gay, lesbian, bisexual or transgender, you can call Switchboard on 0300 330 0630 (10am–10pm every day), email chris@switchboard.lgbt or use their webchat service. Phone operators all identify as LGBT+.

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, ‘Personal data’ means any information that relates to and is capable of identifying a living individual. The University’s data protection policy governing the use of personal data by the University can be found on its website (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at

<http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf>

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 10 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Thank you.

Thank you for taking the time to read the information sheet and considering taking part in the research study.