

PARTICIPANT INFORMATION SHEET

Study title: Problem-solving and the choice of learning strategies

Invitation Paragraph:

You are invited to take part in a research study named "Problem-solving and the choice of learning strategies". The objective of this research is to investigate the choice of different learning strategies in a problem-solving task. It will take approximately 10-15 minutes to complete this study.

You will be paid for your participation at the posted rate (provided that you complete the whole study).

Your participation in this research study is voluntary. At any point, you may refuse to participate further without penalty.

Your individual privacy will be maintained in all published and written data resulting from the study, and your identity will be kept confidential. The data collected from this study will be stored securely.

What is the purpose of the study?

The purpose of this study is to examine how different learning strategies are chosen in the context of a problem-solving task. For each trial, you will see a sequence of 0s and 1s. This represents your current solution. You can change or stick with this solution depending on your choice of learning strategy. Specifically, we are interested in three types of learning strategies: copying (where you get solutions to a problem from other participants), innovating (where you devise your own solutions), and maintaining (where you stick with the solution you already

have). Your goal is to try and find the best solution, i.e., the sequence of 0s and 1s with the highest score.

Why have I been invited to participate?

You have been invited to participate in this study because you are a registered user of Prolific Academic and a UK resident. Participants in this study must be 18 or older and residents of the UK. 400 participants will take part in this research.

Do I have to take part?

Participation in this study is entirely voluntary. Should you choose to participate, response data will be kept confidential, not shared with any third parties, and used solely for research purposes.

During the study, you are requested to carefully read the instructions and complete the task to the best of your ability. At any point, you may refuse to participate further and withdraw from the study without penalty. However, because no personal identifying data is collected in this study, once you have submitted your answers you will be unable to withdraw your data from the study.

If you decide to take part, you will be given the option to download this information sheet and you will be asked to sign a consent from. Your response data will be stored securely in a password protected device and kept anonymous.

What will happen to me if I take part?

If you choose to participate, you will take part in an online study that consists of 50 trials. At the start of the experiment, you will see a sequence of 0s and 1s that represent your current solution to a problem. The goal is to find the correct sequence of 0s and 1s using three possible options: to copy a different solution from other players, to innovate by modifying your existing solution or to maintain your current solution. Once you have selected an option, you will be

given feedback about the number of points you received on that trial as well as your total number of points.

Are there any lifestyle restrictions?

There are no specific lifestyle restrictions associated with participating in this study. You can continue with your normal activities and responsibilities.

What are the possible disadvantages and risks of taking part?

We do not anticipate any risks associated with your participation in this study. However, should any issues arise, you are free to exit the study at any time by closing your browser. Any recorded data that is incomplete will be deleted upon inspection by the researcher.

What are the possible benefits of taking part?

The main beneficiaries of your participation are the researchers running the study, who will analyse your data and use the results in the publication of a scientific journal article.

By participating in this study, you contribute to our understanding of how individuals use learning strategies to solve problems.

What if something goes wrong?

If you have any concerns or questions about the study, please feel free to contact the lead researcher, Dr James Winters (james.winters@brunel.ac.uk).

If you wish to make a complaint about how the research is being conducted, please contact the Chair of the Ethics Committee, Professor Louise Mansfield (louise.mansfield@brunel.ac.uk).

Will my taking part in this study be kept confidential?

Yes. Your participation will be kept strictly confidential. We are not collecting any identifying information during this research. All data collected will be anonymized and stored securely in a

password protected device. Only the researchers involved in the study will have access to the raw data, and any publications or reports resulting from the study will not contain personally identifiable information. The data will be stored according to the University Data Management policy.

With your permission, anonymous data will be stored and may be used in future research – you can indicate whether or not you give permission for this by way of the Consent Form. The procedures for handling, processing, storing, and destroying data are compliant with the Data Protection Act 1998. Data will be stored securely for at least 10 years on secure Brunel network servers.

Will I be recorded, and how will the recording be used?

No recordings will be made as part of this study.

What will happen to the results of the research study?

The results of the research study will be analysed and compiled into a research article and published in an academic journal. The findings may also be presented at academic conferences. If you wish to obtain the copy of the results, you can email the primary researcher at james.winters@brunel.ac.uk. In case of publication, the data will be retained according to the University Data Management policy and will be stored securely for 10 years.

Who is organising and funding the research?

The research is being organised by Dr James Winters in conjunction with Brunel University of London.

What are the indemnity arrangements?

Brunel University provides appropriate insurance cover for research that has received ethical approval.

Who has reviewed the study?

This study has been reviewed and approved by the research ethics committee (CREC) at Brunel University of London, ensuring that it meets the required ethical standards.

Research Integrity

Brunel University London is committed to compliance with the Universities UK Research

Integrity Concordat. You are entitled to expect the highest level of integrity from the researchers

during the course of this research.

Contact for further information and complaints

- Researcher name and details: Dr James Winters (james.winters@brunel.ac.uk)
- For complaints, Chair of the Research Ethics Committee: Professor Louise Mansfield (louise.mansfield@brunel.ac.uk)

Thank you for taking the time to read through this information.