Below is the Participant Information Sheet which participants were provided. As the study was conducted online there was no consent sheet and consent was obtained via participants selecting the option “I have read and understood the Participant Information Sheet and I agree to participate in this study”, which is placed at the end of this sheet. All experiments reported in this research were granted ethical approval by the Ethics Committee at the University of Southampton (ERGO number: 48677).

**Participant Information Sheet**

**Study Title**: The impact of multiple-choice testing on learning.

**Researcher**: Aeshah Alamri

**ERGO number: 48677**

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 please tick the box at the end of this information.

**What is the research about?**

We are a team of researchers including Aeshah Alamri (PhD candidate) and Philip Higham (supervisor) at the University of Southampton. We are conducting this study to investigate the impact of multiple-choice testing on learning, and to what extent this type of testing can be used as powerful learning tool.

**Why have I been asked to participate?**

You have been asked to participate so that can we collect data to help us in gaining a better understanding of using multiple-choice testing and how to improve the learning outcomes.

**What will happen to me if I take part?**

The study will involve answering some general-knowledge questions which cover a wide range of topics (e.g. mythology, sports, literature, science, history, geography). Specifically, the experiment will include three main parts. Firstly, you will answer 22 multiple-choice questions with each question displayed for at least 15 seconds. After that, you will have about 4 minutes to answer some basic maths questions. Finally, you will answer the final test consisting of 33 questions that comes either in multiple-choice or short-answer formats.

**Are there any benefits in my taking part?**

There are no direct benefits to your participation, however, we hope that your data will help us to enhance our knowledge of multiple-choice testing and how effective they are for human learning.

**You will receive $2 to thank you for participating in this study.**

**Are there any risks involved?**

As the study will involve some of the learning strategies such as testing and solving problems that you might have encountered before, we are hoping that you will not be at any risk. However, in case you feel discomfort you can withdraw from the experiment. Moreover, if you have any questions or need any help please do not hesitate to ask the researcher.

**What data will be collected?**

We are aiming to measure your learning performance, more specifically, how do you select an alternative when you answer a multiple-choice question, and to what extent would that affect your final performance. Therefore, no personal data will be collected and all the collected data will be stored on password-protected computers on the University of Southampton file storage system. Moreover, collected data will be only accessible to members of the research team.

**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.

**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 confirm your consent by ticking the box at the bottom to show 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 rightsbeing affected.

Because of the anonymous nature of your participation, it will not be possible to remove your already completed response. However, data from those who withdraw from the experiment before completing it will not be included in analyses.

**Mechanical Turk:**

Please note that at the end of the study you will be provided with a completion code that can be entered on Mechanical Turk to verify your participation and will allow you to receive financial reimbursement. Therefore, participants who withdraw from the study prior to completion will not receive financial reimbursement for their participation.

**What will happen to the results of the research?**

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

**Where can I get more information?**

If you have any questions please contact me Aeshah Alamri via email: [A.Alamri@soton.ac.uk](mailto:A.Alamri@soton.ac.uk).

**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.

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](mailto:rgoinfo@soton.ac.uk)).

**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](mailto:data.protection@soton.ac.uk)).

**Thank you.**

**I have read and understood the Participant Information Sheet and I agree to participate in this study**