

Participant Information Sheet

Password Security Gamification

You are being invited to take part in a research project. Before you decide whether or not to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

1. What is the project's purpose?

The project is aimed at teaching people modern day vulnerabilities of passwords. As we grow older we become more informed with the pitfalls of bad passwords yet those that are younger are yet to realise the insecurities. For this reason, the project will be primarily aimed at those most in jeopardy of being attacked; students in their GCSE years. Given the circumstances surrounding the COVID-19 pandemic, the scope of primary participants has since been changed to **anyone who wishes to take part**, regardless of age or occupation due to decreased accessibility.

2. Why have I been chosen?

You have been chosen to take part because the primary objective of this research, is to increase password security and awareness ~~within the younger demographic~~ to anyone who wishes to take part.

3. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form) and you can still withdraw at any time without any negative consequences. You do not have to give a reason. If you wish to withdraw from the research, please contact Theo Koorehpaz via email: tkoorehpaz1@sheffield.ac.uk.

4. What will happen to me if I take part? What do I have to do?

If you wish to take part in the research, you will be required to answer two questionnaires as well as play a password cracking game. One of the questionnaires will need to be completed before and the other one after playing the game. The purpose of the pre-game questionnaire will be to grasp your current understanding of password security, and the post-game questionnaire will be used to identify any increased understanding of password security as well as collect general user experience. This information will then be used to determine whether the research has been successful in fulfilling its objective. You are not required to complete the game and can invest as much time as you desire playing it. You may also keep the game once the research is completed.

5. What are the possible disadvantages and risks of taking part?

The only potential harm would be the injuries that are associated with prolonged use of a computer, such as RSI, eye strain or bad posture.

6. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will improve ones understanding of the vulnerabilities of weak passwords through a fun and engaging medium.

7. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential and will only be accessible to members of the research team. You will not be able to be identified

in any reports or publications unless you have given your explicit consent for this. If you agree to us sharing the information you provide with other researchers (e.g. by making it available in a data archive) then your personal details will not be included unless you explicitly request this.

8. What is the legal basis for processing my personal data?

According to data protection legislation, we are required to inform you that the legal basis we are applying in order to process your personal data is that 'processing is necessary for the performance of a task carried out in the public interest' (Article 6(1)(e)). Further information can be found in the University's Privacy Notice <https://www.sheffield.ac.uk/govern/data-protection/privacy/general>.

9. What will happen to the data collected, and the results of the research project?

Due to the nature of this research it is very likely that other researchers may find the data collected to be useful in answering future research questions. We will ask for your explicit consent for your data to be shared in this way.

10. Who is organising and funding the research?

The University of Sheffield.

11. Who is the Data Controller?

The University of Sheffield will act as the Data Controller for this study. This means that the University is responsible for looking after your information and using it properly.

12. Who has ethically reviewed the project?

This project has been ethically approved via the University of Sheffield's Ethics Review Procedure, as administered by the Computer Science department.

13. What if something goes wrong and I wish to complain about the research?

For complaints regarding the treatment by the researcher, please contact the project supervisor Ramsay Taylor (r.g.taylor@sheffield.ac.uk). If you feel like the complaint has not been handled to your satisfaction, contact the Head of Department Guy Brown (g.j.brown@sheffield.ac.uk) who will then escalate the complaint through the appropriate channels. If the complaint relates to how your personal data has been handled, information about how to raise a complaint can be found in the University's Privacy Notice: <https://www.sheffield.ac.uk/govern/data-protection/privacy/general>.

14. Contact for further information

If you wish to obtain further information about the project, please feel free to contact either the Lead Researcher or Supervisor:

- Lead Researcher: Theo Koorehpaz | tkoorehpaz1@sheffield.ac.uk
- Supervisor: Ramsay Taylor | r.g.taylor@sheffield.ac.uk

You will be given a copy of this information sheet along with a signed consent form to keep.

Thank you.