

## WAIVER OF DOCUMENTATION OF CONSENT SCRIPT

### **Protocol Title: Understanding habit formation in complex tasks**

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#### KEY INFORMATION

This is a study exploring motor skill and adaptation in healthy adults.

Participants will be asked to press keys on a keyboard or move an external computer mouse.

Study duration and payment will vary.

The main risk is that you may become tired and uncomfortable from using your computer for the duration prescribed in the experiment. There is also a risk of hacking or downloading a virus as is with any usage of the internet and that information about you may become known to others. To minimize this risk, we use a trusted and certified online platform to protect your privacy and property.

You will not benefit directly from being in the study and there is no cost for participation.

#### PURPOSE

You are being asked to take part in a research study. The purpose of this study is to better understand how the brain is able to acquire new skills and adapt to changes in the environment. We are testing motor skills and adaptation in healthy subjects between the ages of 18 and 65.

#### PROCEDURES

During this experiment you will be asked to either press keys on your keyboard or move an external mouse in response to visual and auditory stimulation on your computer screen.

During the experiment, the software will record the timing of presentation of visual cues on your screen, as well as your responses. The software will additionally log the time and date at which you completed each experimental session. Once you complete a session, a copy of your data will be automatically uploaded to our remote servers.

We will collect information about you in this study (name, age, handedness).

\*Study duration will vary. Some may be conducted in a single 1 to 2-hour session, while others will require multiple sessions over several days/weeks, each lasting up to 1 hour. We will specify the amount of time per session and how many sessions are needed for each person's experiment.\*

#### RISKS/DISCOMFORTS

Possible adverse effects may be fatigue and discomfort associated with using your computer for the duration prescribed in the experiment.

There is also a risk of hacking or downloading a virus as is with any usage of the internet and that information about you may become known to people outside this study. To minimize this risk, we use a trusted and certified online platform to protect your privacy and property.

To protect your privacy, you will be assigned a code that will uniquely identify your data throughout the experiment. Your name, code, and demographic information will appear only in a single document maintained on a secure computer under password protection in the lab. All other computer files and data related to you will use only the numeric identifier.

### BENEFITS

There is no direct benefit to you from being in this study. Society will benefit from the knowledge obtained from the experiments and subsequent data analysis.

### VOLUNTARY PARTICIPATION

You do not have to agree to be in this study. If you do not join, your employment/education at Johns Hopkins will not be affected.

You can agree to be in this study now and change your mind later. You may stop the study at any time. Leaving this study will not adversely affect you.

### PAYMENT

You will be paid at a fixed rate of \$15 per hour. This payment will be prorated for each hour of participation and paid after completing the study. You will be compensated based on the time of participation, regardless of whether you choose to leave the study early.

### COST

There is no cost for you to participate in this study.

### IDENTIFIABLE INFORMATION IN FUTURE RESEARCH

We may use the information collected through this study for future research including research with external collaborators. Generally, when sharing information for future research we will take precautions to remove any information that could identify you (like your name) before sharing.

### OPEN ACCESS DATA SHARING

In addition to the types of data sharing that are described above, this study involves sharing of data via open access.

Open access data sharing includes the following:

- Removal of any personal information from the study data that could identify you (like name, birthdate, age, gender, address including zip code, medical record number, etc.). This is called de-identified data.
- Each participant's data will be assigned to a code number to distinguish one study participant from another.
- De-identified data from this study are made publicly available (e.g. on a website).
- Anyone can use the data for any purpose in the future.

Participation in this study requires that you agree to this open access data sharing.

**What risks and benefits are associated with open access data sharing?**

Any research data collected from you, excluding your personally identifiable information, could be included in the open data sharing. However, even with your identifiable information removed, there may be a risk of you being identified. Anybody in the world can have access to information in an open access database. If you tell other people that you participated in this study, you may increase the chance that someone will be able to link your data to you.

We do not know how likely it is that your identity could become re-connected with information shared through open access. As of today, we believe there is a low risk that most de-identified study data could be used to re-identify you. However, data that cannot be used to identify you today could be used to identify you in the future.

If you decide to withdraw from the study after consenting to open data sharing, we will not have any way to know who has already used your data before you withdrew and will not be able to prevent continued use of your data.

There is no direct benefit to you from placing your data in an open access database. If you agree to open data sharing, this will help a wider range of researchers make discoveries that may help others in the future.

**HIPAA DISCLOSURE**

We will collect information about you in this study. People at Johns Hopkins who are involved in the study or who need to make sure the study is being done correctly will see the information. The people who may request, receive, or use your private health information (in this case limited to your name and age) include the researchers and their staff who may be a part of Johns Hopkins Health System, Johns Hopkins University or the Johns Hopkins Applied Physics Laboratory. Your de-identified data will be made freely available after publication of results via the Johns Hopkins University Data Archive and will be linked to from the publication. People at Johns Hopkins may need to send your information to people outside of Johns Hopkins (for example, government groups like the Food and Drug Administration) who need to make sure the study is being done correctly. These people will use your information for the purpose of the study.

Your Authorization for the collection, use, and sharing of your information does not expire. We will continue to collect information about you until the end of the study unless you tell us that you have changed your mind. If you change your mind and do not want your information to be used for the study, you must contact the Principal Investigator by using the contact information provided in this document. Your cancellation will not affect information already collected in the study, or information that has already been shared with others before you cancelled your authorization.

We try to make sure that everyone who needs to see your information uses it only for the study and keeps it confidential - but, we cannot guarantee this.

**Do not use this form for consenting research participants unless the Johns Hopkins Medicine Logo appears here.**

Date: February 21, 2023  
Principal Investigator: Adrian Haith  
Application No.: IRB00336107

CONTACT INFORMATION:

If you have any questions about this study, please feel free to contact the Principal Investigator: Adrian Haith- [blamlab@jhmi.edu](mailto:blamlab@jhmi.edu)[mailto:](mailto:blamlab@jhmi.edu)

The IRB can help you if you have questions about your rights as a research participant or if you have other questions, concerns or complaints about this research study. You may contact the IRB at 410-502-2092 or [jhmeirb@jhmi.edu](mailto:jhmeirb@jhmi.edu).