UMASS-AMHERST
AAA DRIVER SIMULATOR STUDY
INFORMED CONSENT-ASSENT FORM

Principal Investigators: Siby Samuel, PhD, and Donald Fisher, PhD
Sponsor: American Automobile Association Foundation for Traffic Safety (AAA FTS)
Project Title: Driver Performance Study

1. WHAT IS THIS FORM?

This is an Informed Consent-Assent Form. It will give you information about this study so you can make an informed decision about participating. If you are under age 18, both you and a parent/guardian need to sign this form; your signature on this form says that you *assent* to participate in the study and your parent/guardian's signature on this form indicates that they *consent* to you participating. If you are 18 years old, you can *consent* to participating in this study yourself and no parent/guardian signature is needed.

2. WHO IS ELIGIBLE TO PARTICIPATE?

Individuals ages 16 to 18 and 25 to 34 years of age, who have a U.S. driver's license are eligible to participate in this study. Participants must not have vision problems that would prevent their participation in a simulator study. Drivers who experience motion sickness in a car as a passenger or as a driver should not participate in this study.

3. WHAT ARE THE PURPOSES OF THE STUDY?

The purposes of the study are to compare the driving behaviors of teens and older drivers, and to evaluate the effectiveness of a teen driver training program.

4. WHERE WILL THE STUDY TAKE PLACE AND HOW LONG WILL IT LAST?

The study is being conducted at the Arbella Human Performance Laboratory (HPL) located in the College of Engineering at the University of Massachusetts in Amherst, MA (UMass Engineering Lab 1, Room 302).

You will have two sessions in this study, approximately 2 months apart. The first session will last just over 2 to 2.5 hours. The second session will take 75-90 minutes. Overall, the study is expected to take up to 2 years, including data collection and analysis.

5. WHAT WILL I BE ASKED TO DO DURING MY FIRST SESSION?

i. Consent-assent form. At your first session, you will be given a copy of this consent-assent form and have the opportunity to read it and ask any questions before signing. As noted above, if you are under age 18, a parent/guardian will need to sign the consent-assent form as well.

ii. Questionnaire. Once the consent-assent form has been signed, you will be given a short (5 minute) questionnaire to gather information on your driving history (such as total miles driven per year, and when you obtained your driver's license, whether you wear glasses while driving) and demographic information (age, race, gender).

iii. Teen driver training program. You will be asked to do one of two computer-based driver training programs developed by the HPL. The program will take approximately 60 to 75 minutes to complete.

iv. Eye tracking calibration. You will also be fitted with a head-mounted eye tracking device that helps us better understand your eye movements during the experiment. The eye tracker is essentially a pair of safety glasses with two miniature cameras mounted on it. The glasses are connected by a small cable to a video recorder. There will then be an eye tracker calibration routine that will take place. The researcher will fit the glasses on you and then ask you to look at certain objects in your field of view. The calibration process will take approximately 5 minutes.

v. Simulator. Once the eye tracker has been calibrated, you will then sit in the HPL's driving simulator known as the "STI simulator", and be given a practice drive to become used to the driving simulator, and used to the eye tracker while operating the simulator. Once you feel comfortable with the simulator, you will drive the experimental drives. There will be 3 drives of approximately 15 minutes each. Drives will be broken up by 5-7 minute rest breaks. During the simulator drives, you should move through the simulated world as you would drive a regular car, including following the speed limit and standard rules of the road, and taking care while braking. If at any time during the drives you feel motion sickness, please notify the experimenter and the simulation will be stopped.

vi. Post-drives. After the simulator drives are completed, you will be asked to complete a payment voucher and then you receive the monetary compensation for your participation in the session.

6. WHAT WILL I BE ASKED TO DO DURING MY SECOND SESSION?

i. Simulator. At your second session, you will be asked to drive through the same simulator drives that you did at your first session. You will again be asked to wear the eye tracking glasses, and again will do a practice drive before doing the experimental drives. There will be 3 drives of approximately 15 minutes each. Drives will be broken up by 5-7 minute rest breaks.

ii. Post drives. After the simulator drives are completed, you will be asked to complete a brief (5 minute) post-training questionnaire, and a payment voucher and then you receive the monetary compensation for your participation in the session.

7. ARE THERE ANY RISKS OR BENEFITS ASSOCIATED WITH PARTICIPATION?

The main benefit to you of participating in this study is that it might help you learn to be a safer driver. The main risk is the possibility that you may become queasy while using the driving simulator. The research team has great experience with simulator studies and will take steps to minimize this risk, but it is still present. Because of this risk, any person who experiences motion sickness while in a real car should not participate in the experiment**.** If during the simulator drives, you feel any discomfort or nausea, you should inform the experimenter immediately so that the simulation can be stopped. Halting the simulation should quickly reduce the discomfort. If you do not feel better soon after the simulation is halted, we can arrange for someone to drive you home or help you seek medical care if necessary.

There are no known risks related to using the eye tracking device.

8. WHO WILL SEE THE RESULTS OF MY PERFORMANCE IN THE STUDY?

The results of this study may be published and submitted for presentation at professional society meetings. Published and presented results will be at the aggregate level, and no participants will ever be identifiable from any publication or presentation. Sometimes, eye video from your drives may be shown, but never in a way that your identity would be revealed.

No participant will be identifiable from the reports nor will any participant's name or initials be used in the reports. To maintain your confidentiality, the researchers will use a randomly assigned subject ID code, rather than your name, to identify all data collected on you through the study, via the questionnaire, through the eye tracker, and during your simulation drives. This data will be stored securely and will only be accessible by the principal investigators for this study and other approved researchers for this study.

It is possible that your research record, including sensitive information and/or identifying information, may be inspected and/or copied by the study sponsor (and/or its agents), or other federal or state government agencies, in the course of carrying out their duties. If your record is inspected by the study sponsor (and/or its agents), or by any of these agencies, your confidentiality will be maintained to the extent permissible by law.

9. WHO WILL SEE THE RESULTS OF MY PERFORMANCE IN THE STUDY?

You will receive $40 after completing your first study session, and $40 after completing your second session. If you decide to stop participating in the study at any time during either session, you will still receive partial compensation for your time.

10. WHAT IF I HAVE ANY QUESTIONS?

Should you have any questions about the experiment or any other matter relative to your participation in this project, you can contact lead researcher for this study, Siby Samuel, PhD, at ssamuel@umass.edu, or you can contact the other lead researcher and Director of the Arbella Human Performance Laboratory, Donald Fisher, PhD, at dfisher@acad.umass.edu, or 413-549-1734. If, during the study or later, you wish to discuss your participation or concerns regarding it with a person not directly involved in the research, you can contact the Human Subjects Administrator at humansubjects@ora.umass.edu or 413-545-3428.

11. WHAT IF I REFUSE TO GIVE OR WITHDRAW MY PERMISSION?

Your participation is completely voluntary and that you may refuse to participate or discontinue your participation in the study at any time without prejudice. If you wish to stop participating in the study, please let the researcher conducting your session know, and your session will be ended.

12. WHAT IF I AM INJURED?

The University of Massachusetts at Amherst does not have a program for compensating subjects for injury or complications related to human subjects' research but the study personnel will assist you in getting treatment.

13. SUBJECT STATEMENT OF VOLUNTARY CONSENT/ASSENT

By signing below, I, the participant, confirm that I have read and understand this Consent/Assent Form, including the purpose of the research, the study procedures that I will undergo and the possible risks and benefits that I may experience.

_____

Your name printed, including middle initial

_____ _____

Your signature **Date**

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14. PARENT STATEMENT OF VOLUNTARY CONSENT

Required for all participants under 18 years of age.

By signing below, I, a parent or legal guardian of the participant, indicate that I have read this Informed Consent/Assent Form and do hereby give permission for the above named participant to take part in this study:

_____

Printed name of parent or legal guardian

_____ _____

Signature of parent or legal guardian of participant (if under 18) **Date**

EXPERIMENTER SIGNATURE

By signing below, I, the experimenter, indicate that the participant has read and signed this Informed Consent Form.

_____ _____

Signature of experimenter **Date**