VisuoMotor Adaptation RA Instructions

Before the subject arrives

1. Set up the Room:

- This experiment requires the use of a tablet and a stylus. You will find both of those in a blue box on top of the cabinet in 202.
- Take the tablet, stylus, stylus holder and the USB cable out from the box and connect the tablet to one of the computers in any experiment rooms.
- You will need the keyboard only to enter the subject number. You can run the required bat file before the subject arrives and enter the subject number (don't start yet, just keep it entered) and keep the keyboard such that it doesn't come interfere with the subject hand movements. A good idea is to keep it behind the monitor.

2. Set up Consent Forms:

- The subject and you will have to sign two copies of the consent forms. These will be found in the bottom-most drawer in the cabinet in 202. Please keep them ready before the subject arrives to allow. You can potentially do things in parallel set up the room while the subject is reading these forms, for instance.
- More details on consent forms in the next section...

Welcome the subject

- 1. Ask them to leave their bags and phone in 202 a. In particular, make sure that they don't carry their phone into the experiment room!
- 2. Phones would be distracting during the study, particularly if they use a touch screen device it might interfere with the motor effects we are trying to observe. If the subject seems concerned, it would be enough to have them turn off their phone.

3. Sign In Sheet:

- Please enter the name of the subject along with the subject ID (starts from 100) and the time
 when they arrived (not when they started). If they arrive before you do and they are
 scheduled to arrive after you, enter the time when you first interact with them regarding the
 experiment.
- You will use this subject ID to start the experiment please take a note of it.
- Please remember to note the exit time when they leave.
- 4. Have them look over and sign two consent forms a. Forms are stored in the file cabinet in 202, in the drawer labelled "VisuoMotor Adaptation". The folder is "Blank Consents".
 - One copy is for our records, one is for the subject to keep.
 - Consent form should be left in the room here the subject is to be run so that they may look over it alone.
 - Sign consent form yourself when they bring it back to you and place it in the file cabinet folder labelled "Signed Consents".

Instructions for the Subject

Read the subject the instructions on the Intro Text form, stored in the corresponding cabinet folder.
 Give them a copy to keep. If the participant number is even, please look for the instructions that emphasize on speed (this is written in bold on instructions to spot easily) If the participant number

is odd, please look for instructions that emphasize on accuracy. These instruction sets are also kept in separate labelled folders.

- You don't have to read them out for each subject, just make sure the subject goes through them and ask if they have any questions
- State the following: a. "Make sure to try to focus your eyes on the dot marking the center of the screen throughout the experiment and keep both of your eyes open during the task."
- "Some people find this task monotonous and boring. To address this, you will be given periodic breaks which will be self-paced. Feel free to start the experiment whenever you are ready after the break. During the breaks, feel free to move around, but please restrain from using your phone or your laptop as that would affect the results we are trying to observe."
- "The Experiment doesn't end till you see the message, "Thank you for your participation!".
 The screen might restart a couple of times and that is a part of the experiment. Please continue till you see the thank you text"
- 2. Make sure that the chair is aligned with the blue tape
 - Encourage subjects to adjust the chair themselves. Just make sure that the computer monitor is about 2 feet away from where they're sitting and that the center of the screen in is the center of their visual field
 - For some subjects, this may require moving the tablet closer or farther away, or the monitor up/down.
 - If the tape is coming off and hard to see, let me know.
- 3. Make sure that the Screen brightness is not too high. Ask the subject if they are comfortable with the current brightness and if not, lower it.
- 4. Make sure that the pen is accessible to the subject and that the set up does not interfere with their hand movements.

Get the program running

- 1. Double-click on *VisuoMotor.bat* on the desktop to launch the program in Matlab.
 - You will be prompted to enter subject number as an ID, subject number will be determined by the list of subjects that have already participated in the experiment. Do so and press enter to start the program. (Please note that the subject IDs in this experiment start from 100)
- 2. The first block of the experiment has 8 practice trials. Please make sure that the participants go through those trials and get familiar with the task.
- 3. If the subject asks during the experiment that the pen is not doing what they want it to do, tell them that it is a part of the study and they should continue with it and try to figure out how to hit the target.

After subject finishes experiment

- 1. Ask subject what they thought of the experiment, make a note what they say about the experience. How well did they see things? Was it a hard task to do?
- 2. Give the subject a Debrief Form, found in the corresponding file cabinet folder.
- 3. Email me whenever a subject no-shows.
- 4. Please note their exit time in the sign in sheet
- 5. After the subject leaves, pack the tablet, the stylus, the stylus holder and the connecting wire and put it in the blue box and back on the top of the cabinet in 202.