HZ MATLAB Experiment HOW-TO

Set-up:

* Start Matlab as administrator (someone with an admin password needs to do this)
* Navigate to the folder called “Admin Files” (C://Users/DRL User/Desktop/STEPH HZ/Admin Files)
* Type into the console: “HZet\_Jan24”
* Hit enter
* Type subject number (starting from 1; don’t skip numbers if at all possible) and hit enter (or click “OK”)

The first thing that will happen is the eye-tracking calibration. Follow the instructions on the EyeTracking HowTo sheet.

The instructions are built into the code. There is a comprehension question at the beginning; the correct answer is B. If participants get it wrong twice, then they’ll have to ask you for help. Once they understand the study, then you can hit the “P” key on the display computer to let them start the study.

The participant will continue the experiment. Halfway through, there will be a recalibration. Follow the calibration process as before.

If, at any point, you need to recalibrate, hit the “q” key on the display computer. After calibrating, the participant will go back to the exact same trial that they were on.

Payment:

* The screen will tell the participant that they’re finished with the study.
* If they hit the space bar once, it’ll tell them whether they were randomly selected for a bonus.
* If they were selected for a bonus, then you can hit the space bar one more time and it’ll tell you how much they earned (and when).
* If you accidentally miss this last screen, the info will get printed out in MATLAB. (You might have to scroll up a little in the console to find it – it’ll tell you the amount they earned: “chosenamount” and how far in the future they’ll get the payment “chosendelay”.)

TROUBLESHOOTING:

**Problem:** When you type the name of the script into Matlab and enter the subject number and hit okay, Matlab freaks out and gives you a weird error before the participant even gets to start!

**Solution:** Don’t freak out. Try again. Retype the name of the experiment and re-enter the same subject number. If it happens again, quit Matlab and re-open it. (Or restart the computer completely.)

**Worst case scenario:** If you can’t get it to work, pay them the show-up fee (whatever that is) and let me know ASAP.

**Problem:** Matlab crashes in the middle of the experiment

**Solution:** Read the error message that shows up and assess the situation. I haven’t had this happen yet (knock on wood), so I’m not sure what would cause it. If I’m around, please come get me and I’ll try to fix it.

**Worst case scenario:** I’m not around and Rachael doesn’t know what to do. Fill out a receipt and pay the subject for the time that they’ve been there.

**Problem:** The participant is going really slowly through the eye tracking part (you see them staring at the (almost) center of the screen for extended periods of time.)

**Solution:** Every once in a while, the participant might move enough that the calibration is no longer accurate. All you have to do is recalibrate:

* Tell the participant that you’ve noticed that the experiment is moving slowly, so you’re going to do a quick recalibration (you can tell them that they’ll go right back to where they are in the experiment
* Hit the “q” key on the DESKTOP computer keyboard
  + This will bring up the calibration screen and you can Calibrate and Validate them just like you did before
  + Once you get the (green) GOOD sign after validation, click “Record” on the LAPTOP computer keyboard and the participant will go right back to the point where they left off

**Problem:** You need to quit the experiment for some reason (the participant has to leave, the fire alarm goes off, apocalypse happens, etc.).

**Solution:** Two options.

Option 1: (preferred)

Hit “w” to send the participant to the end of the experiment.

Option 2: (if Option 1 doesn’t work)

Hit Escape

Option 3: (if Options 1-2 don’t work)

Hit Ctrl+C

Type sca and hit enter

Option 4: (if Options 1-3 don’t work)

Hit Ctrl+Alt+Delete

Click “Start Task Manager”

Click “PTB onScreen window”

Click “End task”

Note: Option 3 occasionally makes Matlab freak out and quit – don’t worry, that isn’t your fault!

**Worst case scenario:** None of these options work. If you don’t have another participant coming soon, leave it as is, take a picture, and send the picture to me. If you have another participant coming soon, you can shut off/restart the computer manually, and pay the participant for the time they’ve been there.