Audiovisual Rabbit Blind Spot Experient

Protocol

1. Complete the consent process and consent form
2. Ask the subject the questions on the first page of the Spatially Mapped Doubla Flash Experiment Questionnaire
3. Explain the experimental procedure
   1. For the following experiment, you will complete two tasks.
   2. We will perform each task separately for each eye, so four blocks total.
   3. Before we begin each task, we will walk you through the process and show you the demo.
   4. For now, you can adjust the positions of the chin rest and the chair to a comfortable position. Since you will be in here for some time, we want you to be as comfortable as possible.
   5. As we are doing the tasks separately for each eye, please put on this eye patch on your \_\_\_\_\_\_ eye. Make sure the flat part is at the top.
   6. For the first task, your job is to tell us whether you saw a flash or not. Flashes will appear at random locations on the screen but you should fixate on a cross at the center of the screen at all times.
   7. You will indicate your response by pressing the left or right arrow keys.
   8. \*enter demo\* \*show stuff\* \*IMPORTANT: only enter your response after the tone ends\*
   9. \*at last page\* There will be a break every 20 trials. You can take a rest, or press SPACE bar to continue. During the experiment at any time, if you need my help, you can ring the bell. At the end of the experiment, ring the bell to let me know you’re done. If I don’t come in immediately, there is a very high chance I couldn’t hear it. Smash it or shout (lol)
   10. Do you have any questions before I leave?

For AV task:

* 1. The next task is very similar to the one you just did. The only difference is you will hear beeps together with the flashes. Again, they will appear on random locations on the screen and you should fixate at the center at all times.
  2. Your task this time is to count the number of flashes you perceived. You will enter your response (0,1,2,3) using the number pad on the right.
  3. Some flashes may blink or seem to be partial flashes. These flashes should be reported as if they were full flashes.
  4. It is very important that you report what you perceive in each trial, and not what you may *think* is the “right” answer. In other words, don’t try to guess what the experiment is, or what it is designed to show
  5. \*enter demo\* \*show stuff\* \*IMPORTANT: only enter your response after the tone ends\*
  6. \*at last page\* There will be a break every 20 trials. You can take a rest, or press SPACE bar to continue. During the experiment at any time, if you need my help, you can ring the bell. At the end of the experiment, ring the bell to let me know you’re done. If I don’t come in immediately, there is a very high chance I couldn’t hear it. Smash it or shout (lol)
  7. Do you have any questions before I leave?

1. Leave the experiment station, close the curtain, close sliding door to just leave a gap
2. IMPORTANT: check in with participant after end of each block. How you doing?? Can I get you some water??? Are you cold??? (Sorry I can’t do anything but I am really sorry) Bored??? (Awww you got this sorry I can’t make it more fun I bored myself too lol) Bathroom break??? (Show them the way) etcetc
3. Run all blocks (details found next page)
4. Complete visual acuity tests, which should follow the last computer-based experiment.
5. Complete the payment forms, and pay the subject. (tell Ailene to come to lab when you are running your last block)

Post experiment wrap up

* Check data is saved
* Record subject details in Excel
* Give all documents to Ailene

Experiment block

Conditions to be tested:

Visual flash detection, left eye

Visual flash detection, right eye

AV rabbit, left eye

AV rabbit, right eye

Sloan D chart, left eye

Sloan D chart, right eye

Sloan N chart, left eye

Sloan N chart, right eye

* Sloan D chart: distance vision chart, at normal distance of 10 feet
* Sloan N chart: near vision chart, at normal distance of 16 inches

Important:

* Always start with visual flash detection tasks
* Randomize eye order for each participant
  + E.g. participant 1: flash detection left -> right, AV rabbit, left -> right
  + Participant 2: flash detection right -> left, AV rabbit, right -> left
  + Participant 3: flash detection right -> left, AV rabbit, right-> left
  + Etc

Experimental setup

Temporal accuracy

* audio\_time\_delay: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Computer settings

* Speaker audio level setting: MAX
* Computer audio level setting: 50 (30 if you are using python code)
* Monitor brightness: 75%
* Monitor contrast: 75%

Room configuration

* Lights off
* Curtains close
* Sliding closed but leave a small gap