

## Experiment setup

Note that extra unsigned consent and debriefing forms can be found in the blue folder in room 201 B. It is often helpful to already have an unsigned consent form ready in the rooms before subjects show up.

- 1) After greeting subjects and taking them to an experiment room, have them sit down and start completing the consent form, based on the following example script:
  - “Here is the consent form to sign. If you have done these studies before, this is a very standard version. To summarize, the experiment is completely confidential (no way for us to link your name to the data), and voluntary (you will still receive SONA credit if you leave early). When you are ready, you can sign the final page.”
- 2) Navigate to the experiment folder. Open *Windows Explorer* on the task bar, then under *Libraries*, open the *Experiments* folder, then open the *kpotter* folder, and finally open the *Gabor\_priming\_variants\_2017\_v1* folder.
- 3) Double-click the *runexperiment.bat* file to start the experiment. A dialog box will open with several lines that need to be filled out. It is important that these numbers be typed in correctly, as they impact the experimental design:
  - ‘Please enter subject ID number’ - type in the current subject number (if in doubt, open the *Subjects* folder to see how many other subjects have been run).
  - ‘Please enter study type’ - type ‘1’ for priming.
  - ‘Please enter prime version’ - type ‘2’ for gabor.
  - ‘Please enter mode’ - type ‘0’ for normal.
  - ‘Please enter calibration type’ - type ‘2’ for Staircase.A new dialog box will appear asking you to confirm the file names - click ‘OK’ if everything looks correct.
- 4) A new dialog box will open. Tell subjects “You can now complete a brief demographics inventory using the mouse. Once you are done, I’ll read the experiment instructions out loud to you.” While the subject is completing the inventory, this can be a good time to sign the bottom part of the consent form.
- 5) When the subject finishes, the experiment will load, allowing you to then read out loud the onscreen instructions.

## **Instructions to be read out loud to participant**

These instructions (in abbreviated form) will also appear onscreen. Note there is a brief delay before any keypress is registered, so that the instructions cannot be skipped rapidly:

In this task, you will see a grid made by mixing together 2 sets of stripes, one set rotated to the left, and the other rotated to the right. Each set of stripes has a matching key on the keyboard.

*(Press any key to go to next screen)*

As practice, press the matching key for the next two sets of stripes currently shown.

*(Subject should press the matching key for the next two screens)*

The two sets of stripes will not be mixed together equally. One set of stripes will appear darker. For example, in the current example the set of stripes rotated to the left are darker, and stand out more in the grid. Your goal will be to indicate which set of stripes is darker.

*(Press any key to continue)*

However, to make the task harder, we add several extra parts to each trial. Here is an example.

*(Press any key to continue)*

First, you will see a set of horizontal lines. The amount of time these lines are shown will vary from trial to trial.

*(Press any key to continue)*

Next, you will see a set of stripes that can either match the angle of the darker stripes, match the angle of the lighter stripes, or be straight up and down. In other words, these stripes will sometimes tell you the correct answer, sometimes tell you the wrong answer, and sometimes tell you nothing at all.

*(Press any key to continue)*

Therefore, the most important thing is to pay attention to the grid when it is shown. It will be surrounded by dots and flash very quickly, so it is important to pay attention!

*(Press any key to continue)*

After the brief flash of the grid, you will see shifting static. This is when you should make a response with the keyboard, indicating which set of stripes in the grid you thought were darker. Again, just for practice, try making a response now.

*(Press any key to continue)*

As you can see, after you make a response, you will receive feedback on whether you were correct or not.

*(Press any key to continue)*

The experiment will consist of three blocks of training, a block of calibration trials, and the trials for the main study. I will remain in the room for the first training block. During the main study, at the end of each block a progress bar will appear, letting you know how close you are to finishing the study.

*(Press any key to continue)*

The task should take about 40 minutes. Try to be as fast and accurate as possible! The task can be dull, and it can get hard at times, but the data are very useful. We appreciate your effort!

*(Press any key to continue)*

You'll now complete 5 practice trials, that will start off a little slower and easier. Whenever you're ready, press any key to start.

*(Provide any advice to help the subject on the task)*

You'll now need to get 10 practice trials correct in a row. When you are done with the study, check in with me to receive your debriefing form. Thanks again for coming in!

## **Post-experiment**

When subjects finish the experiment, a final dialog box will appear. Subjects are not suppose to fill out this dialog box (though they might accidentally). Type in your initials and add any notes about the experimental session (e.g., if the subjects seemed to not understand the instructions, or if they reported eye-strain). Otherwise type something like 'Nothing to report'.

To give subjects credit, or mark an unexcused absence, log into my SONA account.

Username: kevinpotter

Password: perception

Click on 'My studies', then click on 'Visual identification'. Open the 'Study menu' pull-down options and click 'View/administer time slots'. Clicking the link under the 'Date' column will allow for the assigning of credit.

## **Troubleshooting**

If the experiment crashes or freezes, thank subjects for coming in and reassure them that they will still receive full SONA credit. Please let me know whenever an error or issue occurs with an experiment - a quick email describing the situation would be very helpful.

To exit an experiment prematurely, press SHIFT + 2 (It may take a few tries).

The experiment can end early if subjects do poorly enough during the second practice stage. In this case, thank them for coming in and let them know that they will receive full SONA credit.

Always keep an extra copy of a blank consent form and a debriefing form. If you start to run low on these forms, more can be photocopied using the lab copy code: 273502.