

## FACES1 SPECIFICATIONS

(updated 04/25/2007)

Is testing with feedback more beneficial than conventional study for face recognition?

### **Task:**

Learn to recognize a face through testing + feedback vs. restudying.

### **Stimuli:**

Stimuli are 45 color photographs of males with neutral expressions. Each of the 45 photographs has 5 different views, for a total of 225 photographs. All 225 photographs can be found in Tara → Shana → Face1 → pic\_45.

Randomly select 10 faces to be target faces, 5 for the Quiz Method and 5 for the Study Method. For both Quiz and Study Methods, all faces are presented in frontal view.

### **Introductory Instructions:**

In this experiment, we are going to teach you to recognize faces. We will show you a photograph of a face, like the one you see below.



You will learn several target faces by using one of two different methods. In the **Study Method**, we will show you the target face (i.e., the one you must remember) for about 45 seconds, and we would like you to concentrate on learning it.

For the **Quiz Method**, first we will show you the target face, then we will take it away and ask you to try and remember what it looked like. Before we ask you to remember the target face, we will show you pictures of other faces. After you try to remember what the target face looked like, we will show you the target face again, so you can see how accurate your memory was.

You will learn 5 target faces through the Study Method, and 5 through the Quiz method. Later on, you will be asked to recognize all of the target faces. We will show you the target faces, along with some new faces that you have never seen before. Your goal is to identify which faces are the target faces.






If you do a good job on the test later on, we will give you a cash bonus. Specifically, if you perform within the top 1/3 of all subjects who are doing this experiment, we will give you \$10.

If you have any questions, ask the experimenter now.

Click here to begin.

### **Quiz Method:**

Present the target face for 6 seconds, followed by 2 randomly selected distracter faces, each presented for 2 seconds. Then instruct the subject to mentally form an image of the target face, followed by another presentation of the target face (see below). All faces presented in frontal view.

<b>1.</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>	<b>5.</b>
<p>This is a target face. Please study it for 6 seconds.</p> 	<p>This is a new face. Please study it for 2 seconds.</p> 	<p>This is a new face. Please study it for 2 seconds.</p> 	<p>Do you remember what the target face looks like? Try to form a clear image of that face in your mind.</p>  <p>Once you have formed this image, press the spacebar.</p>	<p>Here is the picture of the target face again. Study the picture for 4 seconds.</p> 

Allow six seconds for Step 1, two seconds for Steps 2 and 3, five seconds for Step 4, and four seconds for Step 5. After Step 5, repeat Steps 2 through 5 two more times. Upon each repetition, use the same target face, and randomly select two new distracter faces.

After Steps 2 through 5 have been repeated two times, start over at Step 1 with a new target face. Always randomly select new distracter faces so that the same distracter face has never been presented twice.






Continue until all 5 target faces have been learned.

### **Instructions in-between Quiz and Study Method:**

You are now finished learning one group of faces. Press the spacebar to learn the second group.

### **Study Method:**

Present the 5 target faces, one at a time, each for 45 seconds. All faces presented in frontal view.

<p>This is a target face. Please study it for 45 seconds.</p> 	<p>This is a target face. Please study it for 45 seconds.</p> 	<p>This is a target face. Please study it for 45 seconds.</p> 	<p>This is a target face. Please study it for 45 seconds.</p> 	<p>This is a target face. Please study it for 45 seconds.</p> 
---	---	---	---	---

### **Instructions after the end of the Quiz and Study Methods:**

You are now finished learning both groups of faces. Please return in one week to complete the second phase of the experiment.

**Final Test:** 1 week after Quiz and Study Methods.

**Final Test Instructions:**


Now we are going to test your memory for the faces you learned one week ago. Beginning on the next screen, you will see several faces, presented one at a time, and you must decide whether each one is one of the target faces that you learned last week. The faces you are about to see will be presented in many different views (e.g., some faces may be looking straight ahead, whereas others may be looking to the left, right, etc.). For each face you see, please try to remember if that face was one of the target faces you learned last week. If it is, please press the “Y” key for “yes.” If it is not, please press the “N” key for “no.”

Remember, if you perform within the top 1/3 of all subjects, we will give you \$10, so please try your best.

Press the spacebar to begin.


Randomly select one view out of the five possible views for each of the 10 target faces. Randomly select 10 new faces that were never presented before. For each of these 20 faces, randomly select one view out of the five possible views.

Is this one of the target faces you learned last week?




Press “Y” for “Yes” or “N” for “No”

Is this one of the target faces you learned last week?



Press “Y” for “Yes” or “N” for “No”

Is this one of the target faces you learned last week?



Press “Y” for “Yes” or “N” for “No”

**Instructions after Final Test:**

You have completed the experiment. Thank you for your participation!

The purpose of this experiment was to see whether people recognize faces better by: a) studying the face for a certain amount of time, or b) trying to recall the face. You learned some of the faces by studying them, and you learned other faces by trying to recall them after seeing other faces. We tested your recognition of all faces after 1 week to see if you remember some of them better than others.

**Counterbalancing conditions: (allow condition picker in Session 1)**

Assign subjects to 1 of the 2 counterbalancing conditions, in sequential order (subject 1 in condition 1, subject 2 in condition 2, subject 3 in condition 1, subject 4 in condition 2, subject 5 in condition 1, subject 6 in condition 2, etc).

Order of presentation	Counterbalancing Conditions	
	1	2
1	Quiz	Study
2	Study	Quiz

**Data:**

Record the following data during the final test for each subject:

1. What button was pressed for each of the 20 faces on the final test
2. Accuracy of response to Yes/No question
3. Response time
4. Counterbalancing condition (1, 2)