

## **HUMAN HABIT LEARNING – Replication of the behavioral study in Tricomi et al., (2009). Experimenter instructions script**

### **Participant arrival:**

Hi, are you *[name of the participant]*? I'm *[name of the experimenter]* nice to meet you. Did you have difficulties finding the place? You can leave your backpack/purse/jacket here and take a seat at this desk.

Before we start, we need to go through some paper work. The first thing to do is signing the consent form. It's the same document I send you by e-mail. Do you have questions about it?

The consent form contains a lot of information, so let me underline the most important aspects:

- 1) First of all you have the right to interrupting the experiment at any point, if you do not feel comfortable. If you decide to do so, you will be paid a ratio of *[amount per hour]* dollars an hour until the moment you decided to stop. Your wellbeing during this experiment is the most important thing to us.
- 2) No substantial risks are incurred by you when taking part in this study.
- 3) For the remuneration for your time and effort you will be paid XY dollars cash at the very end of the experiment. *[Specify on the last day, if it is part of the three-day group]*
- 4) In this experiment, we will be using food stimuli. At the beginning of the experiment you will taste different kind of snacks and we will select the ones that you like the most. So you will be eating only snacks that you find pleasant.

### **After consent form is signed**

Next I will need you to do is to fill out some questionnaires: the first one is just a general demographic questionnaire, the most important thing here is to report if you have any kind of food allergies or restrictions. The second one is just a questionnaire about your alimentary attitude, if you have questions about them you can ask me.

### **After the questionnaires are filled in**

Now we need to find the snack that you like the most. Before we start with this, may I ask you to sanitize your hands?

On your right, you will find three salty options and on your left you will find three sweet options and a glass of water. We put labels on each jar so that if you see something you already know you really dislike, you do not need to taste it. Otherwise please taste each sample. Choose the one sweet and the one salty snack you liked the most and feel like eating during this experiment.

### **After snacks have been selected**

During the experiment, you will be asked several times to say how/report how pleasant the snack is for you. We are asking this question several times, because we are not interested in how pleasant you find the snack in general, but more on how pleasant you find that particular piece of snack in that particular moment. We can move to the computer now.

(Have you ever participated to a cognitive study before?) You will see, that for this study we need to repeat the same sequence many times. An active effort will be required on your part to stay engaged in the task for its entire duration.

All the instructions for this task will appear on the computer screen. You just need to place your fingers on the keyboard in this way (show d → left middle finger, f → left index, j → right index k → right middle finger). It's important not to change this order, so please use the same finger for the same key throughout the whole experiment. I'm going to let you go through the instructions and a practical session first, if you have questions or doubts please do not hesitate to ask me. Before the real experiment starts, I will switch off the lights so you can stay focused during the experiment.

### **After the practice session**

Are the instructions clear to you? Now you have the chance to ask and clarify any questions. Once the main task starts, there will be no time for that.

Just let me stress an important point: the food pictures you will see during the task correspond to the actual food you will be eating at the end of the task. The relationship between the amount of food images you will see and the amount of food reward you will get is not exactly one to one but it is proportional. You can press the button as often or as little as you like during the presentation of the fractal: If you do not want any more of your favorite salty or sweet snack, you do not have to continue pressing. Otherwise you should try to earn as much reward as possible.

*(Switch off lights. Make sure that fingers are placed correctly on the keyboard)*

### **After the earnings slide appears**

Well done, this is the moment where we take a break and you can eat what you won during the task. As mention in the beginning in the task instructions is not exactly 1:1, but is proportional. Here you go. You can take a break and eat and call me when you are ready, I'm right behind you, getting things for the next part ready.

### **After the break ends**

Ok we can continue with the computer task, again you can follow the instructions on the screen and if you have any question, just let me know.

### **After the bonus slide appears**

For this next part you will not be in front of the computer screen. What you will be doing now is eating one of the snack foods until you feel full and it is no longer

pleasant. I will give you this bowl and I'll ask you to eat until you absolutely do not feel like having another piece anymore and you no longer find this snack pleasant. Some people will need a very large amount of food to reach that point, whereas others may reach this point more with less food. The size of this bowl is completely arbitrary. The only thing that matters here is that you feel full and feel like not having another piece anymore. (Usually people need several bowls. Comment: does not apply to our size of bowl)

### **After the participant is done eating**

Are you sure? Usually people need a large amount/several bowls – you need to eat the food until you absolutely do not feel like having another piece anymore. [If the participant hesitates or indicates that they might be able to manage a bit more, encourage them to continue with eating]. Ok then great, then let's go back to the computer and continue with the rest of the task. Again, you can simply follow the instructions on the screen.

If the participant asks whether they will still receive the snacks, or whether they still have to press the buttons, simply answer: "The same rules of the previous sessions apply to the current session", without giving any further details.

*(press space to continue with the task, after the devaluation process)*

\*\*\*\*\* TO BE ADDED IF PROTOCOL IS ACCEPTED\*\*\*\*\*

### **Before handling the personality questionnaires**

Add text here

### **Before administrating the working memory task**

\*\*\*\*\* TO BE ADDED IF PROTOCOL IS ACCEPTED\*\*\*\*\*

### **At the end of the experimental procedure**

Great, so we are done with the experiment, there is a last thing to do before the end and it's signing this receipt for the remuneration: This (the money) is for you and this (the receipt) will be for me. I just need you to fill out the required information. If you have any questions about the experiment you just did I'm more than happy to answer.