Supplementary Materials

Verbatim instructions provided to participants for Experiment 1:

"The task you will be doing today involves responding to sequences of items being presented on the computer screen. Each sequence will consist of three items presented one after the other. Your job is to identify a target item from the sequence based on a couple of rules. (Show the rules)

These are the two rules. They are in the form of trees. Each tree has a number at the top and associated with each number are a pair of items. 11 goes with the letters A and G. 53 goes with the symbols, • (dot) and π (pi). You need to memorize these relationships.

Now, the sequences that you will see will consist of 1 item from this pair (point to the letters pair), 1 item from this pair (point to the symbols pair), and 1 of the two numbers. For example, you might see the sequence A-Pi-11. Or the sequence might be 53- Dot -G. Your job is to identify the target item. The target item is always the item in the sequence that is associated with the number in the sequence.

(Show first example trial.) So, in the sequence A- π -11 – the target item would be A and not Pi, because A is associated with 11, while π is not. Similarly, in the sequence 53 – Dot - G, the target would be Dot. So, the number tells you which of the other two items is the target. Is that clear? (If not, repeat and clarify).

At the end of the sequence, just below the last item in the sequence, you will see a response panel. The response panel will have two items on the left and two items on the right. You have to look for the target item you have identified in this panel. If the target item that you have identified occurs as part of the left pair, you should press button 1. If the target item occurs as part of the right pair, you should press button 2. You should use the first two fingers of your right hand to make your response. You should make your response as quickly as possible without making errors.

The order in which the items are presented in the sequence is not important. Sometimes, the number might appear at the beginning of the sequence and sometimes it might appear at the end. Either way, the rules apply in exactly the same way. The target is always the item that goes with the number.

The items in the sequence each appear for a very short duration. The items will also be presented fairly quickly one after the other. So it is very important that you be alert and pay attention at all times. You will be doing a total of 2 blocks. It is important that you maintain a level of high alertness throughout the entire experiment.

Each block will begin with the rules being presented to you. You can review them for as long as you want. Once you are ready, press space bar to begin the block. There is no feedback, so make sure that you know the rules before you start the block. The rules are the same across all the blocks.

We will begin now. Remember to response as quickly as possible while being accurate."