Instructions for Salience Attribution Test (SAT)

The instructions for the SAT are delivered through an online tutorial, with built-in practice sessions. The test administrator only needs to interact with the participant at a few points in the training procedure. Words in normal type below describe what happens during the tutorial; words in **bold type** are instructions for the test administrator to deliver to the participant; words in *italic type* are the instructions that appear on the screen during the tutorial. If the participant seems to be stuck on a particular screen of the tutorial, the test administrator should check that they understand the instructions, and then prompt them to proceed using the space bar.

The test administrator loads the test and instructs the participant to place their left index finger on the space bar and their right index finger on the right shift key. They say to the participant:

'This tutorial explains how the game works. Everything should be self-explanatory, but you can ask me if you don't understand something. Put your left index finger on the space bar and your right index finger on the right shift key.'

If necessary, the test administrator points to the two keys on the keyboard and makes sure the participant has their fingers resting on them. The test administrator continues:

'You will use the space bar to read each new screen of instructions and the right shift key to make responses. The tutorial will call this key the 'right button'. Now, make your way through the tutorial using the space bar. The tutorial has some practice sessions built in before the main game begins, to get you used to the set-up.'

The following instructions are then displayed, with accompanying screen-shots, approximately three sentences per screen:

Please complete this tutorial at your own speed. Whenever you have finished reading a page, press the space bar to continue. This test has two stages. The first one is a practice session. You will do the practice session twice. During the practice session first you will see a cross in the middle of the screen. Then a white box will appear where the cross was. You need to press the right button as soon as the box appears. Then the white box will disappear. Make sure you press the right button before the box disappears. Then the computer will tell you if you managed to respond in time or if you responded too late or too early. Now let's have a go at that. Remember, respond as fast as you can. Get your finger ready on the right button. Press the space bar when you're ready to start.

At this point, the participant attempts one practice trial. The trial repeats until the participant makes a good response (i.e. one that is not premature or an omission [> 2000 ms)].

Now you're going to do that for 20 trials. Remember you need to respond as quickly as you can. Get your finger ready on the right button. Press the space bar to continue.

The participant then performs a block of 20 practice trials. If the participant does not appear to be responding as quickly as they can, the test administrator should encourage them to respond more quickly:

'Keep responding as quickly as you can.'

The test carries straight on to the next part of the tutorial. If necessary, the administrator reminds the participant to use the space bar to proceed through the tutorial. The following instructions are then displayed, approximately three sentences per screen:

Well done! Now you're going to do that again but this time it's going to be more difficult. The box will disappear more quickly so respond as fast as you can. Don't worry if you miss some; it's supposed to be difficult! Get your finger ready on the right button. Press the space bar when you're ready.

The participant then performs a second block of 20 practice trials. It is very important that the participant responds as quickly as they can to ensure the main game is of the appropriate difficulty. If the participant does not appear to be responding as quickly as they can, the test administrator should encourage them to respond more quickly:

'Keep responding as quickly as you can.'

If the participant has not made 10 valid responses [i.e. responses that are not premature or omissions (> 2000 ms)], the practice blocks will repeat until they have made sufficient valid responses. N.B. If the participant attempts to respond to the box, responds too late, but is still quicker than 2000 ms, the response is considered valid.

The test carries straight on to the next part of the tutorial. If necessary, the administrator reminds the participant to use the space bar to proceed through the tutorial. The following instructions are then displayed, with accompanying screen-shots, approximately three sentences per screen:

Well done! In the real game it will be more interesting. On some goes money is available. You won't get money every go. Whether you get any money or not has nothing to do with how well you respond. The computer will decide whether you get any money or not. If you do get money you'll hear a beep from the computer. If there is no money available the computer won't make a noise and it will tell you that there was no money available. The likelihood that any money is available on a go is determined by a picture that will appear just before the white box comes on screen. There are four different types of pictures: Blue animals; Red animals; Blue household objects; Red household objects. Whether money is available is related to what type of picture appears.

Just like in the practice session, first you will see a cross in the middle of the screen. Then one of the four pictures will appear at the left and right of the screen. For this tutorial we'll just use a pink circle. Then the box will appear. Remember to respond quickly! After the box disappears the computer will tell you if money was available, and how much you got if it was available. You will get money more often following some types of pictures than others. As the game goes on you should try to work out which pictures you are more or less likely to get money after. If there is no money available on a go, the computer will tell you that there was no money available after you respond. No beep will sound. But if there is money available on a go how much you get will depend on how well you respond. If you win money you will hear a beep. If there is money available but you respond too late or too early then you will only get 5 pence. A low beep will sound. If you respond before the box disappears you will get at least 10 pence, and the faster you respond the more money you will get! A higher beep will sound. If you respond really quickly you could win up to one pound! A high beep will sound.

Now let's have a go at that. You're going to do four trials. Sometimes you'll get money but sometimes none is available. Remember respond as fast as you can. Get your finger ready on the right button and remember to respond quickly. In the real test you'll see the four different types of pictures but for the tutorial we'll just use the pink circle. See if you can work out how much of the time the pink circle gives you money.

The participant then performs four trials where the pink circles appear for the duration of the trial. On the first, third and fourth trials, money is available and participants are reinforced after the trials. Following these four trials, participants perform a practice visual analogue scale (VAS) on the computer. The test administrator delivers the following instructions, substituting (xxxx) as appropriate, depending on the participant's responses:

'OK, so you had four goes there. On the first go you responded (xxxx) and you got (xxxx). On the second go you responded (xxxx) but no money was available. On the third go you responded (xxxx) and you got (xxxx). On the fourth go you responded (xxxx) and you got (xxxx). So, the pink circles meant that money was available on three out of four goes, or 75% of the time. Now I'd like you to mark that on this line, using the arrow keys to move left and right. Press the down arrow to make the rating.'

The participant moves the marker on the VAS. If they do not understand how to complete the VAS, the test administrator repeats the instructions. Once the participant makes the rating, the test administrator says:

'You see that the marker went white when you made the rating. If you wanted to change your mind you could press the up arrow' (test administrator presses the up arrow) **'and the marker goes red again and you can move it around. Press the down arrow twice now, and use the space bar to make your way through the last few screens of the tutorial.'**

The following instructions are then displayed, approximately three sentences per screen:

The pink circle meant that money was available 75% of the time. However the pink circle is just for the tutorial. In the real game you'll see blue animals, red animals, blue household objects and red household objects. Remember whether you get money has nothing to do with how well you respond. But if money is available the better you respond the more you will get. The relationship between the type of picture and the chance of getting any money is the same all the way through the game. Last but not least, it is very important to keep looking at the middle of the screen for the whole time you are playing the game. Good luck on the game!

Two blocks of the game then run automatically; following each of the games the VAS run automatically. If the test administrator notices that the participant is not making a response, they should encourage them to respond on every trial.

During the VAS, if the participant appears to be trying to make the four ratings add up to 100%, the test administrator should tell them that each rating is independent of the others. The test administrator should remind the participant that picture category could be rated anywhere from 0% to 100%, and that the ratings do not have to add up to 100%.