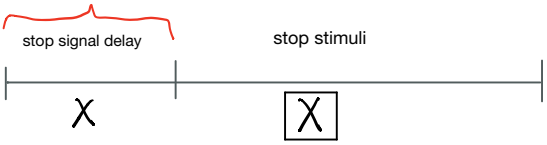
1. Questions about SST

- Practice block of 10 trials
  - Half X, half O (random presentation)
  - Max. response time 1000ms (display all stimuli for 1000ms regardless of participant response)
  - 25% stop signal trials (distributed across block at random with no stops in a row)
  - Set first stop signal delay at 250ms
  - Decrease stop signal delay by 50ms after each unsuccessful stopping and increase it by 50ms after each successful stopping
  - Provide instructional assistance on each trial (as per previous slides)
  - Provide feedback on each trial (as per previous slides)

Q1.

Question 1. There are 25% stop signal trials. 10×25% = 25. So, the stop signal numbers should be 2 or 3 in the practice block?

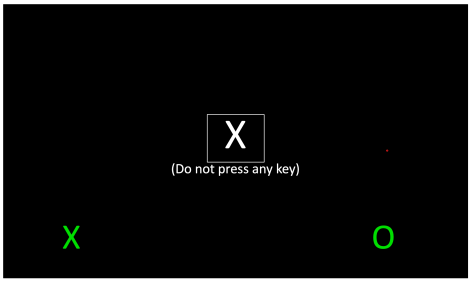
Q2. Press any button(X/O) in this period



Question 2. There is a stop signal delay each time a stop signal appears.

For example, if the stop signal is X, the normal signal X should appear first, and after the stop signal delay, the stop signal X appears. If the user press any button (X or O) in the stop signal delay period, is it unsuccessful stop?

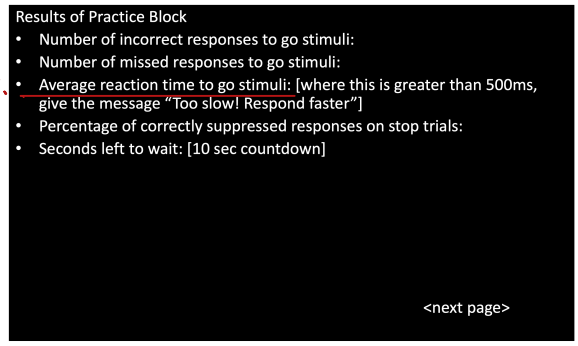
Q3. Display X/O stop stimuli for 1000ms (regardless of participant response)



Question 3. Display stop stimuli for 1000ms . Does this mean the stop signal delay and the stop stimuli are totally displayed 1000ms or just the stop stimuli is displayed 1000ms.

Display at end of practice block:

Q4.

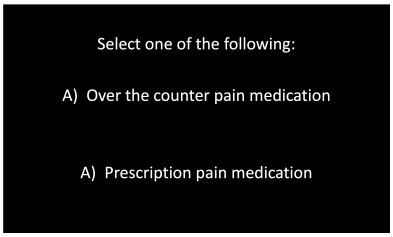


Question 4. How to compute the average reaction time?
I am not sure if the average reaction time only contains correct responses time or it contains both correct responses and incorrect responses time?

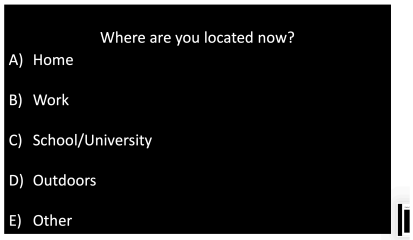
2. Questions about N-back

Question 1.

Display if 'YES' – (after this page, go to Display B)



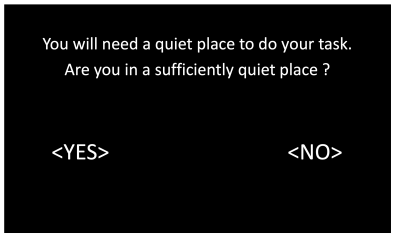
Display B (proceed to next page after this)



Question 1. Does it mean if the user select both the options it will go to Display B or the user select one of the options the system will remind the user to do the test later?

Question 2.

Display (after this page, proceed to Display C)



Question 2. If the user select <No>, the system will suggest the user to do the test later or just promote the user to do the test?

Question 3.

- Experimental block of 20 trials each for 1-back, 2-back, and 3-back (each trial interspersed with a blank screen, and a fixation cross). Each letter stimuli (any of the following 8: P, Q, L, K, W, C, V, Z) arranged in a randomised order.
  - Each trial displays a fixation cross for 500ms, then a letter stimuli for 500ms, and then a blank screen for 2500ms before presenting next letter stimuli.
  - Participants have the entire 3000ms to respond by pressing the yellow button, if they detect a target.
  - 33% of trials are targets (distributed across block at random) and 67% of trials are non-targets, as well as distractors (e.g., 2-back targets in a 3-trial block).

Question 3.
33% of trails are targets
20*3.3% = 6.6
So, the targets should be 6 or 7 in each experiment block?

Question 4 .

3-back

[W, V, L, W, Q, V, C, Q, V, C, Z, P, K, V, C, K, V, C, Q, Z]

[W, W, W, W, Z, W, Q, Z, W, P, L, W, Z, C, Z, Q, C, W, Q, P]

2-back

[Z, Q, Z, Q, P, V, Z, P, Q, P, Z, K, Q, K, L, K, C, K, C, L]

[P, P, W, C, L, C, Z, P, Z, P, P, C, K, W, K, W, L, P, L, P]

1-back

[W, W, V, V, W, K, K, V, W, Q, Q, Z, V, L, V, V, Z, Z, K, K]

[K, W, V, V, Z, K, K, L, L, K, K, L, L, K, K, Z, K, P, V, V]

Question 4,
we have write algorithms that
can generate n-back lists.
Could you help me to check
if the lists we generated are
correct or not?
The red characters in the lists are targets.