IBC Project: Visual Search and Working Memory Protocol

In this experiment, we are interested in your ability to identify a target item in a set of multiple items. There are two types of tasks – visual search and working memory search, and they will appear in an interleaved fashion.

In the visual search tasks:

1. An asterisk will be shown to mark the beginning of the trial.

Step 1: Onset



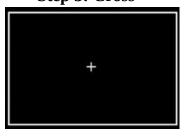
2. Then, an item will be shown for a short duration.

Step 2: Single item



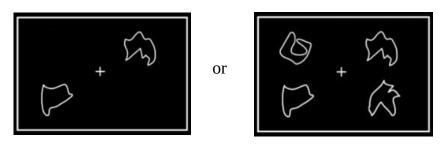
3. After this, a cross will appear on the screen for a few seconds. Maintain your focus on this cross.

Step 3: Cross



4. Then, a set of 2 or 4 items will appear on the screen. Your task now is to say whether or not the item shown in Step 2 is present in this set of items.

Step 4: Set of (two or four) items

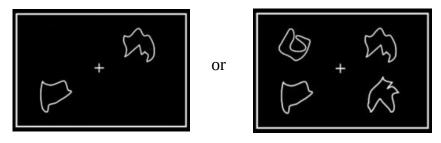


5. Press the button under your index finger of your right hand to indicate "present" and the one under your middle finger of the same hand for "absent". In practice sessions, use J key for "present" and K key for "absent". Make sure to respond as soon as you see the image in step 4 – **late responses will not be registered.**

In working memory search tasks:

- 1. Again, an asterisk would mark the beginning of the trial.
- 2. This time, a set 2 or 4 items will appear first on the screen for a short duration. Try to remember all of these items.

Step 2: Set of (two or four) items



- 3. Similar to the first type, a fixation cross will now appear on the screen for a few seconds.
- 4. But now, one single item will appear. Your task here is to say whether or not this item was present in the set of items shown in Step 2.

Step 4: Single item



5. Press the button under your index finger of your right hand to indicate "present" and the one under your middle finger of the same hand for "absent". In practice sessions, use J key for "present" and K key for "absent". Make sure to respond as soon as you see the image in step 4 – **late responses will not be registered.**

As mentioned earlier, the two trial types will be presented in an interleaved fashion. In each trial, the items would be presented for a **very short duration**. So do the best you can in each trial and move on to the next one.