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**PSY 310: Lab in Psychology**

**Experiment no. 3**

**Name of Experiment: Visual Search Experiment**

**Github Link:**

### **Introduction:**

#### **Q. 1 How does visual search help us study attention?**

**Ans:** Visual search experiment is used to find from amongst a large number of targets the targets searched for. All targets are introduced and attention becomes significant to locate that particular intention. This experiment also gives insights into how the brain operates or at least from the Attention's point of view.

#### **Q.2 How is visual search efficiency linked to attention?**

**Ans.** So in fact Visual search experiment depends on any two kinds of experiment during the experiment. First, we have preattentive processing; processing of objects before attention has been woken up. There is first the selection level and secondly, there is the post attentive processing, which occurs as targets flicker on the screen and you have that will help me to choose one particular target. In psychology, visuals always result in better responses within a shorter time relative to other approaches.

words and they assisted the participants in interacting with the contents offered within the experiment.

#### **Q.3 Explain the procedure of designing the experiment?**

**Ans.** Procedure of designing the experiment is as followed:

1. To add fixation in PsychoPy, follow these steps: Open the application. Change the name of the polygon to 'Fixation', set the start time to zero, stop duration to 'null' and shape to 'cross'. Do not close the polygon.
2. Choose the layout option and size is set to (w,h)=(0.1,0.1); position will be (0,0).
3. We will require the polygon to be placed and hung centrally on the screen. Click OK.
4. Add Text: Insert the description from the stimulus component here; Lname = Target; start = 0.0; stop = null;.

5. If you type nothing in (Leave it blank) with Text = T with 'constant', with Position [x,y] enter a value on Layout tab.
6. In the dialog box , type “(random()-0.5, random()-0.5) with every repeat’ and click OK.
7. Include Mouse click: In the components, choose the mouse’ from the answers, name = mouse, Start = 0.0, Stop: ‘null’- kept blank, End Routine on Press: Valid click.
7. Then, start the experiment. From many Various distractors, you have to click to and find ‘T’ in the experiment.
8. A visual search engine experiment calls for focus and identification of targets from an array of distractors.

Results:

**1. Calculate the mean RT of accurate trials.**

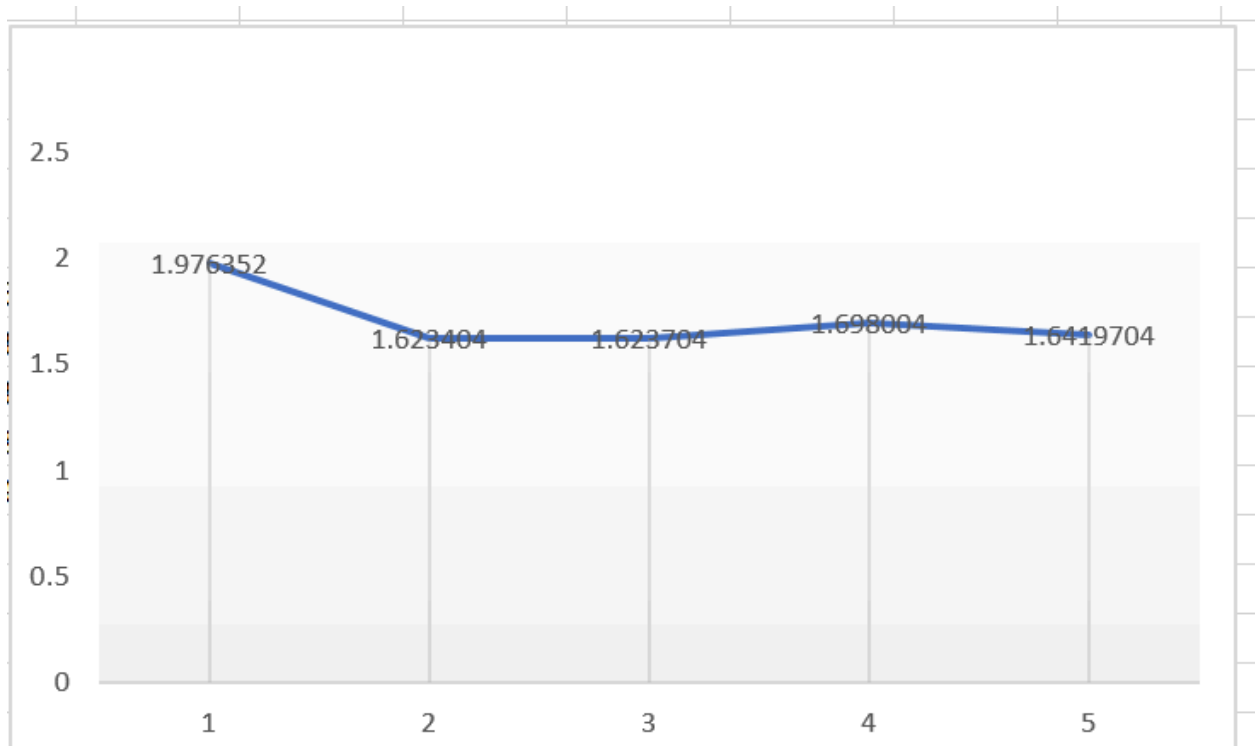
**Mean of 1st Participant:** 1.9450187

**Mean of 2nd Participant:** 1.6763452

**Mean of 3rd Participant:** 0.892675

**Mean of 4th Participant:** 1.97653198

**2. Create a plot comparing the mean RT of set sizes 5 and 10.**



**Graph represents the Set size of 5**

Mean of 10 set is 1.565432

**2. How is the slope of RT by set size function linked to attention?**

Ans. As we could see in the above graph, the situation is similar, as a positive slope is observed in The graph as the set 10 indicates the mean values of eye movement and the steadiness of hand. Specifically, the study found that hand movement on the mouse has great influence on the response. Also we could see that the participants comprehensively ignored most of these distractors and were even more looking forward to the target stimuli. When the less the participant's attention, the longer the reaction time and where the reaction time is shorter, the more attention a participant pays the more the participant is attentive.

References:

1. PsychopQ Application
2. Google Classroom

