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**PSY 310: Lab in psychology**

**Lab report no. 1**

**Experiment Name: Adaptive Staircase Procedure**

Introduction:

1. **What is a staircase procedure? When is it used? What are the alternative methods to find the stimulus threshold?**

Answer: Staircase procedure can be defined as to find out the threshold value with the help of blocks of trials. It is a kind of psychophysical method which helps us to find out the determination of perceptual threshold or discrimination abilities. It is used to find out an individual's threshold by adjusting stimulus.

Alternative methods to find out stimulus threshold is two*-****alternative*** forced-choice. (2AFC) **procedure** and Full field stimulus threshold.

2. **Explain the procedure of designing the experiment.**

Answer: Procedure for designing the experiment is as followed:

1. We used a psychoPy application to design this experiment.
2. Firstly we made Fixation, in which duration was kept as 0.5.
3. Then we designed Grafting in which time was keeped as 0. 5 seconds
4. In the beginning a static component is included to aid in adding a stimulus in between trials.
5. Use the keyword of left and Right to move the experiment.
6. To run the experiment we need to save the file into our desktop
7. We need to add codes so that the experiment should work in a proper way.

**Results: - Report the threshold value you obtained after the experiment run. Add plots and give a brief summary of the results.**

Answer: After running the experiment, the absolute threshold was the average of all the trials in the tilt section. We need to take the last 10 values from the tilt section and need to calculate the Average of that value.

According to my Excel sheet and experiment, the absolute Threshold was 19.75.

Discussion: - **What are the limitations of the staircase procedure?**

Ans: Limitation of the Staircase procedure is this experiment is very time consuming because it requires repeated trials with multiple trials and on the other hand it also creates Participant fatigue because it requires lots of responses. This experiment creates threshold estimation as it doesn’t provide detailed and proper information about cognitives processes.

**References**:

Material provided on google Classroom