attention towards the cued location, as it would be an accurate predictor for the majority of the time, giving rise to quicker target detection and response.

When we attend to a location, even without directly looking at it, it facilitates processing and decreases the time we need to respond to information occurring in that given space. This results in decreased reaction times in Posner's spatial cueing task for validly cued targets, and slower reaction times in response to invalidly cued targets: “Detection latencies are reduced when subjects receive a cue that indicates where in the visual field the signal will occur” (Posner, Snyder & Davidson, 1980).

Covert shifts of attention do not only decrease reaction time. They also result in more intense processing of stimuli, and increase the probability of an individual detecting a near threshold event occurring in the periphery (such as a slight lighting up of a box in the periphery, that may not have been noticed had attention been elsewhere).

SOA (Stimulus Onset Asynchronies)

The time interval in between the onset of the cue and the onset of the target is defined as the stimulus onset asynchrony (SOA). Previous studies using this spatial cueing task found that in addition to cue validity, behavioural reactions were also affected by SOA. The effect of the SOA varies depending on whether a central or peripheral cue is used.

3. No. of subjects/group & details of subject population

12 subjects (7 Male & 5 Female) were recruited from IIIT Hyderabad aged between 21-30 years having normal to corrected vision.

4. Number of trails per subject

There were 100 trails per subject for both Endogenous & Exogenous Cues. A 5 min break was provided after 100 trails to the participants.

5. Difference in design with respect to original paper

A) The original paper uses EOG to monitor the eye movements however we are interested in only learning that the cue orients visual attention, which enhances processing at that cued (attended) location. An analogous interpretation of our learning is that visual attention has limited resources that can be allocated at one of the locations. When the resources are allocated at the cued location, a performance benefit at the attended location arises.

B) In this experiment we are incorporating use of traditional computer system for visual cue task which was different from paper task of Posner experiment.

6. Nature of Measurements

The data is measured based on timestamp when the subject is shown the cue, what is the reaction time and differences in reaction time to a stimulus at expected and unexpected positions in the visual field as a measure of the efficiency of detection due to turning attention toward the expected position.

7. Statistical Analysis Procedures

1. Linear Regression Analysis: