Result Analysis

Group 5

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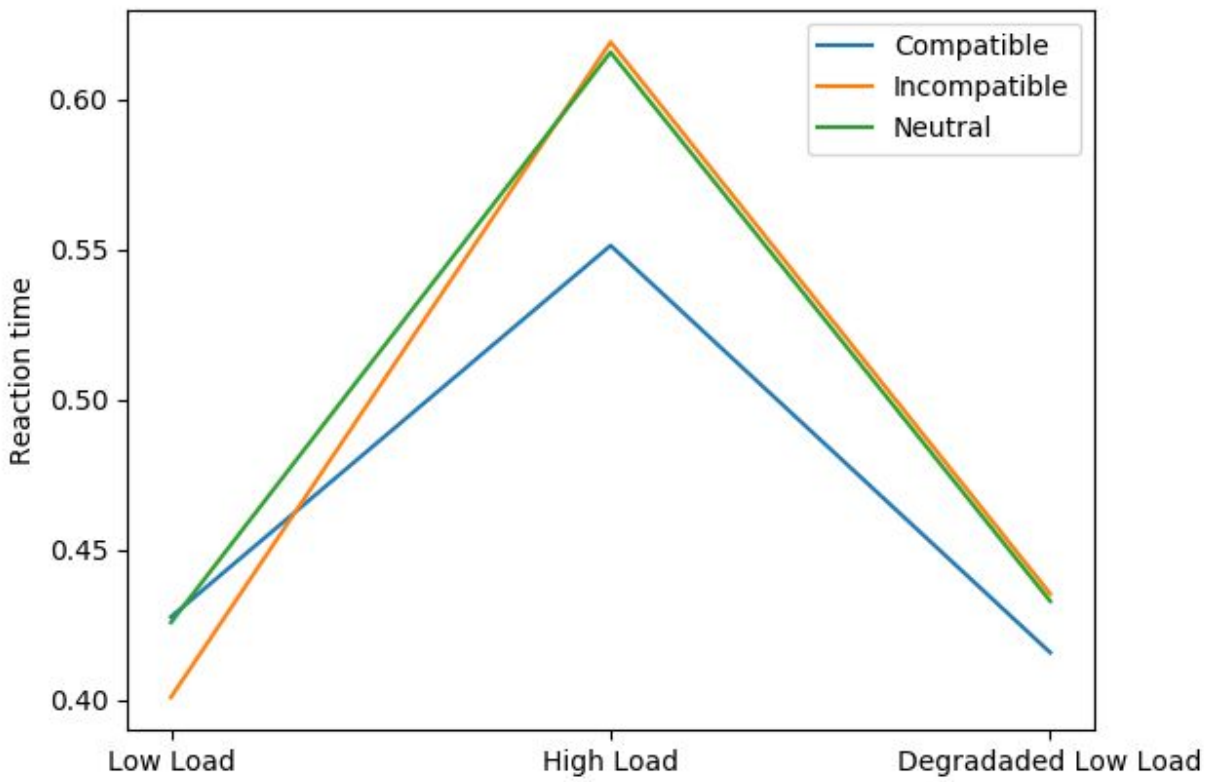
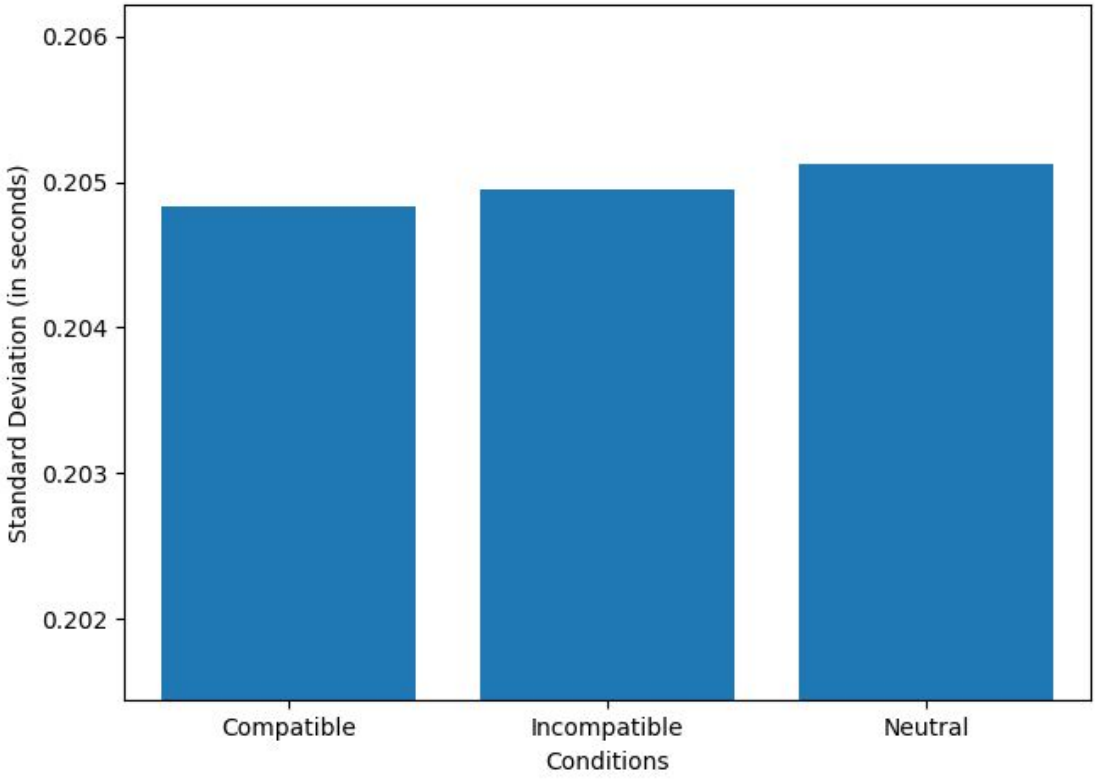
Effect of Memory Load on Selective Attention

Effect of Perceptual Load on Reaction Time

The data that we collected showed a significant increase in reaction time for high load condition as compared to the low load conditions. In the low load conditions, the degraded stimulus has a slightly higher reaction time. We also observe that compatible condition has a lower reaction time than neutral and incompatible conditions


Compatible
Incompatible
Neutral
0.60
0.55
0.50
0.45
0.40
Reaction time
Low Load
High Load
Degradaded Low Load

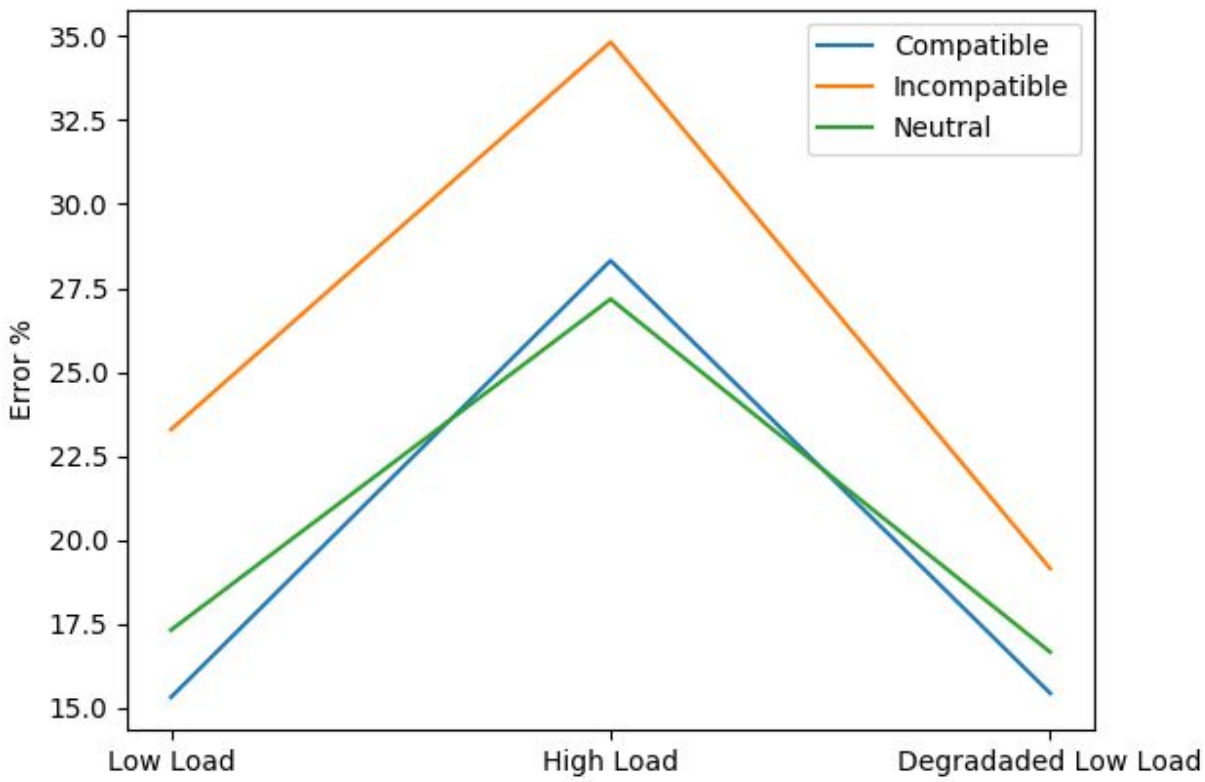
Standard Deviation in Different Conditions



Effect of Distractor Interference

There was a significant interaction between task condition and distractor compatibility. The error rate with incompatible distractor were significantly higher for all three conditions.

The compatible condition has the lowest error rate in both the low load conditions. However, it is more than the neutral condition in high load, which shows the reduced effect of the distractor.



Conclusion

Based on the analysis of our experiment, we concluded that high memory load condition has a greater impact on selective attention. People need more time to process information and also the number of errors increase. It was easier to focus in the high load condition which lead to the reduced effect of the distractor.

Scope for Improvement

We should have included some practice stimuli to get the participant used to the experiment. This would have given us a clearer result for low load condition, which was the stimuli block the participant was shown first.