Title page

Cognition control

Article 1: Lavie, N. (2010). Attention, Distraction, and Cognitive Control Under Load. *Current Directions in Psychological Science* *, 19* (3), 143-148.

The article explains how distractions and level of attention influence cognition and learning of humans. The ability to focus is controlled by perceptual load and cognitive load. High perceptual load improves the ability to focus but high cognition load causes distractions. The article determines if attention impacts the perception of the distractor. People are unable to notice distractors when they have to focus on something. The findings also reveal that unattended distractors are ignored by the people. The article integrated the Load theory of cognition control for understanding the association between attention and cognition. Individuals who are capable of paying more attention to the things exhibit better cognition level. High perception load causes full engagement of capacity. Level of the load has a direct correlation with cognition control. Individuals who fail to identify distractors exhibits low cognition control.

The literary database is used for determining the relationship between chosen factors. Empirical evidence suggests a strong correlation between load and cognition. The experimental findings indicate that individual differences lead to varying levels of distractibility. The research study relied on primary survey technique in which respondents are asked to fill cognitive failure questions. The information collected from the questionnaire depicts that greater distractors have a negative relationship with attention. Existence of distractors makes it difficult for people to pay attention to things. modification of daily tasks was considered for determining its impact on perceptual load. The authors have incorporates adequate research articles and literature review that bridges the gap in the research of cognition control. Evidence from empirical studies is used for supporting the results of the article. The distractor recognition studies confirm that the prevalence of high perceptual load in case of people who fail to recognize distractors. Results also indicate that the cognition control and ability to focus declines with ageing. Brain activity in relation to high and low perceptual load has significant impacts on cognition control. It is thus important to consider the role of mental processes in cognition control and level of attention.

Article 2: Kane, M. J., & Engle, R. W. (2000). Working-Memory Capacity, Proactive Interference, and Divided Attention: Limits on Long-Term Memory Retrieval. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 26* (2), 336-358.

The uncovers the mental processes involved in attention and cognition control. Working memory directly impacts an individual's capacity to retain information. Proactive interference is used for suspecting the attention of humans. Loads have a significant influence on the capacity of attention and distraction. The research article has used empirical evidence obtained from a scholarly database aimed at determining the relationship between cognition control and perceptual load. It impacts an individual’s ability to control distractions. Individual differences in the capacity of working memory influence the capacity to respond to the susceptibility of proactive interference. Controlled processes allow individuals to exhibit a high attention level because they are aware of the distractors. Divided attention also influences the working memory of individuals. PI reaches a maximum level when information gains are accessed to working memory.

The study conducted an experiment for identifying the role of working memory on cognition control. The participants of the experiment were allowed to solve mathematical problems and they attempted to recall a list of unrelated words. One operation-work string was shown at a time containing six items in total. The sample included 192 graduates from the University of South Carolina. PI tasks were developed for testing the cognition control and working memory of the respondents. They needed to complete 40 sets of words in 12 stimuli. The majority of the participants committed no intrusion in the experiment. Span and load interactions were compared by considering the PI effects. High spans exhibited high increased PI and divided attention. High spans are used for controlling attention under normal conditions. The study has incorporated literature for bridging research gap and providing evidence for the results.

References

Kane, M. J., & Engle, R. W. (2000). Working-Memory Capacity, Proactive Interference, and Divided Attention: Limits on Long-Term Memory Retrieval. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 26* (2), 336-358.

Lavie, N. (2010). Attention, Distraction, and Cognitive Control Under Load. *Current Directions in Psychological Science* *, 19* (3), 143-148.