

Exploring the Interplay of Attention, Awareness, and Control: A Comprehensive Investigation

Authors : Venkateswar Pujari

Abstract : This study tries to investigate the complex interplay between control, awareness, and attention in human cognitive processes. The fundamental elements of cognitive functioning that play a significant role in influencing perception, decision-making, and behavior are attention, awareness, and control. Understanding how they interact can help us better understand how our minds work and may even increase our understanding of cognitive science and its therapeutic applications. The study uses an empirical methodology to examine the relationships between attention, awareness, and control by integrating different experimental paradigms and neuropsychological tests. To ensure the generalizability of findings, a wide sample of participants is chosen, including people with various cognitive profiles and ages. The study is structured into four primary parts, each of which focuses on one component of how attention, awareness, and control interact: 1. Evaluation of Attentional Capacity and Selectivity: In this stage, participants complete established attention tests, including the Stroop task and visual search tasks. 2. Evaluation of Awareness Degrees: In the second stage, participants' degrees of conscious and unconscious awareness are assessed using perceptual awareness tasks such as masked priming and binocular rivalry tasks. 3. Investigation of Cognitive Control Mechanisms: In the third phase, reaction inhibition, cognitive flexibility, and working memory capacity are investigated using exercises like the Wisconsin Card Sorting Test and the Go/No-Go paradigm. 4. Results Integration and Analysis: Data from all phases are integrated and analyzed in the final phase. To investigate potential links and prediction correlations between attention, awareness, and control, correlational and regression analyses are carried out. The study's conclusions shed light on the intricate relationships that exist between control, awareness, and attention throughout cognitive function. The findings may have consequences for cognitive psychology, neuroscience, and clinical psychology by providing new understandings of cognitive dysfunctions linked to deficiencies in attention, awareness, and control systems.

Keywords : attention, awareness, control, cognitive functioning, neuropsychological assessment

Conference Title : ICCN 2024 : International Conference on Cognitive Neuroscience

Conference Location : Tokyo, Japan

Conference Dates : April 22-23, 2024