Abstract

The impact of attentional range on the detection of unexpected stimuli.

This work can be seen as consisting of two main parts. The specific goal of this work is to determine how the interaction between different ranges of visual attention (broad-narrow) and cognitive load affect the detection of unexpected stimuli. To achieve this, a study is conducted in which participants watch several short videos containing magic tricks, in which a critical event of dropping or moving an object is clearly visible. The study manipulates the range of attention (narrow, neutral, broad) and introduces a cognitive load procedure based on memorizing an eight-digit number sequence. Based on the obtained results, it can be concluded that a broad range of visual attention increases the likelihood of detecting target objects, while a narrow range decreases such likelihood. It also demonstrates that cognitive load affects task performance deterioration in both broad and narrow ranges of attention. The overall goal of this work, however, is to relate the obtained results to the discussion of the relationship between consciousness and attention. In this part, I attempt to show that visual attention is a necessary condition for the existence of perceptual consciousness and that reference to different ranges of attention may be crucial for understanding certain aspects of phenomenal consciousness - its structural and incremental character.

Key words: range of attention, cognitive load, phenomenal consciousness, magic tricks

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