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Do Verbal Labels Enhance Detection of Visual Targets?

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Abstract

Cognitive penetrability describes cognition and perception as interconnected, with cognition impacting the process of perception rather than just the interpretation. The current study addresses this claim in the domain of language, asking if language helps people detect nearly-invisible stimuli. Two experiments were adapted from Lupyan and Spivey (2010), where auditory cues were found to be more beneficial than visual cues in recognizing letters. Participants reported the presence of a target letter that was either preceded by an auditory or visual cue (e.g., cues were either hearing emm or seeing M, followed by a visual M as a target). Detection sensitivity was calculated and compared within cue presentation type. Neither visual nor auditory cues helped participants recognize target letters more than the no-cue condition. These results differ from previous work demonstrating linguistic facilitation and indicated that neither linguistic nor visual information aid in perceiving a matching item.