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Effect of practice versus information on the visual illusion

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Abstract

Objective: The Müller-Lyer illusion is a visual illusion in which a horizontal shaft with an inward-pointing chevron (fins-out) affixed to each end is perceived longer than a shaft with outward-pointing chevrons (fins-in). The goal of this study was to compare the effects of experience and knowledge about the Müller-Lyer illusion on participants' perceptual precision. Method: Participants were undergraduate students (n = 108) who were not familiar with the Müller-Lyer illusion prior to the experiment. The task of participants was to adjust one movable line to make it equal to the other in Müller-Lyer figure. They received ascending and descending Müller-Lyer trials in three blocks with 20 trials each. The Experimental Group received information about the Müller-Lyer illusion prior to the third block. Results: For the Experimental Group, the amount of departure in Block 3 was reduced significantly compared with previous blocks. Conclusion: Knowledge about the mechanisms underlying visual illusions may play an important role in helping individuals overcome them.

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Author keywords

Müller-Lyer; Perception; Visual illusion

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