

Abstract

Hayward and Burke (submitted) performed a series of experiments in which subjects were to find a target oblique line among vertical distractors. Search efficiency was found to reduce when lines were surrounded by circles, compared to when lines were placed outside on top of circles. They proposed that visual search was affected by perceptual processes integrating coherency among line segments.

In this paper, two experiments were designed as variations to the above experiments. The effect of change in size of circles and of using squares instead of circles on search efficiency was studied. Findings were discussed using the ideas of Hayward and Burke's proposal (submitted), of the Guided Search Model (Wolfe, 1994) and of local feature contrast (Nothdurft, 1992).