REACTION TIMES IN VISUAL SEARCH TASKS

Abstract

Visual detection of an object can be automatic or can require attention. The reaction time varies depending on the type of search task being performed. In this visual search experiment, 3 independent variables were tested: type of search, number of distracters, and presence or absence of a target. A feature search contains distracters notably different from the target, while a conjunctive search contains distracters with features similar to the target. For this experiment, 14 Carthage College students participated in a setting of their choice. A green circle was the target. During the feature search, reaction times were similar regardless of the number of distracters and the presence or absence of the target. In the conjunctive search, the number of distracters and the presence or absence of the target affected reaction times. This visual search experiment supports the idea that feature searches are automatic and conjunctive searches require attention from the viewer.

Keywords: visual search, cognition, feature search, conjunctive search

2 Shortened title and page number on every page.

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