

Abstract

In two experiments, attentional capture by task-irrelevant multiple onset distractors was examined in a non-singleton search paradigm. Yantis and Johnson (1990) suggested a priority tag mechanism proposing that multiple onset have conditional priority over no-onset stimuli in non-singleton search. However, with single and dual distractions examined, Experiment 1 revealed that the mechanism was not applicable to task-irrelevant onsets. Experiment 2 was conducted for replicating Experiment 1 as well as investigating the effect of two additional distractors. However, no significant attentional capture by single and multiple onsets was found, compared to no-onset conditions. A significant trial type x onset conditions interaction was found for single distraction and dual distraction. Possible explanations and relevant theories are elaborated in the discussion session.