

Public Abstract

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Department:Psychology

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Title:An Assessment of Inhibition in The Simon Task

This research is an experimental study using a series of statistical analysis, including a novel data representation method called delta plot, to explore whether inhibition mechanism can account for some general reaction time patterns discovered in the past of a classical target detection task called Simon task. Specifically, it tests a dual-process theory proposed by a Dutch researcher Ridderinkhof. The results did not lend any support to this theory, and challenges the inhibition explanation.

Simon task is one the most widely adopted experiment paradigm in studies and tests of attention, which is one of the most important and fundamental field of psychology. The current study, although did not come to a final conclusion of the mechanism of the RT congruency effect patterns in Simon task, provided valuable evidences of the weakness of some currently popular theories. and may contribute to understanding of attention of researchers and practitioners in diverse fields from human factors design, pilot training, clinical psychological tests, to education application.