

AN ASSESSMENT OF INHIBITION IN THE SIMON TASK

Feng, Chuning

Dr. Jeffrey Rouder, Thesis Supervisor

ABSTRACT

Different from some other context tasks, the Simon task is featured with a congruency effect decreasing with increasing RT. Ridderinkhof proposed a two-route model to account for the negative slope of this congruency effect and attributed it to selective inhibition. Two experiments were conducted to test this theory. In experiment 1, each participant's inhibition level was manipulated by taxing working memory capacity to different degrees, but no differentiation of congruency effect slope was found. In experiment 2, increased perceptual difficulty of stimuli resulted in an increasing congruency effect in time course, which is beyond prediction based on any available explanations of the Simon task. In sum, no support for Ridderinkhof's theory was found.