Abstract

This study assessed visual working memory through Memonum computerized test in schoolchildren. The effects of three exposure times (1, 4 and 8 seconds) have been evaluated, and the presentation of a distractor on the mnemonic performance in the test Memonum in 72 children from a college in the metropolitan area of Bucaramanga, Colombia, aged between 8 and 11 in grades third, fourth and fifth grade. It has been found significant difference regarding the exposure time in the variables number of hits and successes accumulated, showing a better mnemonic performance in participants who took the test during 8 seconds compared to children who took the test during 1 second; in addition, the presence of a distractor showed a significant difference regarding the strengths and successes accumulated. Such distractor is considered a stimulus generator interference that disrupts the storage capacity of working memory in children. Additionally, a significant difference was found with respect to the use of mental rehearsal strategy, indicating that participants who took the test in 4 and 8 seconds, respectively, assigned higher scores than children who took the test in 1 second. A long exposure time to stimuli during Memonum test increases the holding capacity. Also, the use of a distractor affects the storage capacity and this, at the same time, increases the school progression due to the use of mnemonic strategies that children use to ensure the memory of the numerical series.

Keywords

Working memory, Memonum computerized test, exhibition intervals, distracter, child neuropsychology.