

Abstract

Children with attention-deficit/hyperactivity disorder (ADHD) are impaired in learning and delayed memory, which adversely affect their academic performance. This may be associated with the failure to apply appropriate learning strategy that is effortful. However, studies in the research field are limited and inconsistent findings are generated. The objective of the present study was to examine the use of semantic clustering and its relation to delayed free recall in a group of children with ADHD. Thirty-seven children with ADHD were assessed with the *Hong Kong List Learning Test 2nd Edition*. The performances were standardized and compared to the age-specific normative data that was derived from a standardization sample composed of typically developing children. The results showed that children with ADHD scored significantly lower than the normative test means in acquisition, free delayed memory and semantic clustering, but did not differ from the typically developing children in recognition. In addition, the semantic clustering index explained 50% of the variance in the final learning trial and 32% of the variance in long delay free recall performance. The present findings suggest that children with ADHD are less likely to employ effortful learning strategy spontaneously than their typically developing peers and this failure to apply organizational strategy would lead to impaired learning and memory. Future research is needed to explore the factors underlying the impaired use of strategy.

Keywords: Attention-deficit/hyperactivity disorder, semantic clustering, recall, learning, memory