

## Abstract

The Tower of London (TOL) Test is a measure of planning and problem solving. Variations in administration and scoring, and lack of normative data has led to difficulties in interpreting performances on the task. Previous studies mainly employed a 3-disk TOL in their research to measure the planning ability of participants. This study aims to use a 4-disk TOL to study the age differences in children's TOL test performance. Increasing the number of disks not only makes the 4-disk TOL more difficult than the 3-disk TOL, but also enhances the discriminative power of 4-disk TOL so to differentiate the planning ability of participants' in different ages. On top of the TOL test, the Block Design test of WISC-R, and Raven's Standard Progressive Matrices were also administered. The research results identified age trends, with older children exhibiting better TOL performance and more items correct. The planning time was not significantly related to age. Moderate correlations were detected among TOL, Block Design test, and Raven's Matrices. There was no gender differences in all the three tests. The research findings indicated ongoing development of executive function throughout childhood, which was consistent with theoretical perspectives from developmental psychology and neurophysiological evidence showing maturation during these ages.