The Cognitive and Motor Performance of Children with Functional Articulation Disorders

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Abstract: Thirty children with functional articulation disorders (FAD) at the age of 4 to 8 years and age- and gender-matched typically-developing (TD) children were recruited to examine and compare their cognitive and motor performance. The Chinese versions of Peabody Picture Vocabulary Test and The Chinese versions of the Test of Nonverbal Intelligence-3rd edition were used for cognitive assessment and Bruininks-Oseretsky Test of Motor Proficiency, 2nd edition (BOT-2) and Movement Assessment Battery for Children (M-ABC) were used for motor assessment in the study. The results showed that children with FDA had significantly lower cognitive performance than TD children although their scores were all within the normal range. Children with FAD did not differ from TD children in the overall motor performance in either motor test. However, children with FAD showed worse performance than TD children in fine motor precision subtest. The performance of fine motor precision subtest was correlated with cognitive performance.

Keywords: Motor skill; Motor assessment; Functional articulation disorders; Developmental speech-language disorders