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**DEMOKRITUS UNIVERSITY OF THRACE Department of Hellenic Philology**  
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**Motor difficulties screening through bilateral coordination and balance  
assessment**

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## **MOTOR DIFFICULTIES SCREENING THROUGH BILATERAL COORDINATION AND BALANCE ASSESSMENT**

### **Abstract**

The purpose of this research was to investigate whether the BOT-2 (Bruininks & Bruininks, 2005) subtests of bilateral coordination and balance can be used to detect possible motor difficulties in preschool children. The study included 48 children (22 boys and 26 girls) 49-73 months old ( $M= 60.53$  months) from Athens, which were sorted into four groups based on their motor competence (MC) (very low, low, moderate and high MC), as assessed by the physical education teacher of the school where this research took place. The results of the t-tests that were applied on the total subtests scores showed that the boys and girls performance was similar ( $p> .05$ ). Moreover, according to the correlation analysis the BMI of the participants was not statistically significantly associated with either of the two subtests. However, according to the (M)ANOVAs applied on the total subtests scores and individuals item score, statistically significant differences were observed among children with different MC levels. Specifically, the very low MC group presented the lowest performance, while the high MC group recorded the highest performance. The findings of this study have shown that the BOT-2(Bruininks & Bruininks, 2005) bilateral coordination and balance subtests can be applied to detect possible motor problems in pre-school children.

**Key words:** motor competence, BOT-2, motor difficulties screening, bilateral coordination, balance

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