

**‘Specialization in ICTs and Special Education: Psychopedagogy of Integration’
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DEMOKRITUS UNIVERSITY OF THRACE Department of Hellenic Philology
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Motor difficulties screening through fine motor skills assessemnt

MILONA IOANNA

POSTGRADUATE
THESIS

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ABSTRACT

The purpose of this study was to detect pre – school children’s motor difficulties by assessing their fine motor skills. The participants in the study were 55 typically developing children (29 boys and 26 girls) aged 49 – 73 months, attending typical schools in the southern suburbs of Attica. Initially, the Physical Education Teacher of each school assessed participants’ motor competence (MC) according to a Likert scale. Based on this, children were classified into groups of moderate, high and very high MC. Then, Fine Motor Precision and Fine Motor Integration subsets of the Bruininks- Oseretsky Test of Motor Proficiency – Second Edition (BOT-2; Bruininks & Bruininks, 2005) were administered to the participants. In order to detect how the participants’ gender and MC were related to their performance in the two BOT-2 subtests, analyses of covariance were applied to the total scores of the two subtests, whereas multivariate analyses of covariance were computed on the individual items of each subtest, defining age as a covariate. The results revealed there were no statistically significant differences related to children’s gender. In contrast, there were statistically significant differences between the MC groups in both BOT-2 subtests, with the very high MC group performing better than the others. As far as each item of the fine motor precision subtest is concerned, there were statistically significant differences in the items of filling in a circle, filling in a star and connecting dots. Regarding fine motor integration items, there were significant differences in all items except those that involved copying a circle and copying a triangle. Therefore, it is concluded that, firstly, the gender is not related to the pre – school children’s fine motor skills and secondly, the more motor skilful children perform better than their peers with a lower MC. Although the present study shows the relation between children’s performance in the fine motor subtests and their MC level, further research, using a sample of children diagnosed with motor difficulties, is considered necessary in order to draw safe conclusions about the possibility of screening motor difficulties based on fine motor skills performance.

Key Words: fine motor skills, BOT -2, preschool age, Developmental Coordination Disorder

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