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**EVALUATION OF MOTOR DIFFICULTIES AND MASS COMPOSITION IN
CHILDREN OF EARLY SCHOOL AGE**

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**POSTGRADUATE
THESIS**

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ABSTRACT

Athanasios Tapeinos: Evaluation of motor difficulties and mass composition in children of early school age.

(Under the supervision of Antonios Kambas, Associate Professor)

The purpose of the present study was to evaluate the effect of the different BMI of children in the first school age in their performance in tests of motor competence. The measurements performed with the use of the screening tool Democritus - Screening Tool for Preschool Children (DEMOST-PRE®). For the needs of the study 91 children of first school age were evaluated from the town of Athens. The statistic analysis concluded the calculation of Spearman's r factor for the review of interrelationship between BMI and motor difficulties. Also a variance analysis for one factor was calculated (ONE-WAY ANOVA) for the evaluation of the effect of the independent variable of BMI in the dependent variables, i.e., the performances in the nine trials of DEMOST-PRE. The results showed that the interrelationship between BMI and motor difficulties was statistically important in three of the nine tests of DEMOST-PRE ($p < .05$ και $p < .005$) and the effect of the categorized variable of BMI proved to be statistically important in two of the nine tests of DEMOST-PRE. In conclusion, according to the findings of the research, the research hypothesis, that, as the BMI increasing so does the motor difficulties seems to be supported adequately.

Key words: motor performance, body mass index, first school age

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