Developmental coordination disorder in early childhood - A preliminary epidemiological study in Greek schools

Thomas Kourtessis¹, Evridiki Tsougou¹, Maria Maheridou¹, Nikolaos Tsigilis², Maroula Psalti¹, & Efthimis Kioumourtzoglou¹

1. Department of Physical Education & Sports Science, Democritus University of Thrace, Greece, 2. Department of Physical Education & Sports Science, University of Thessaly, Greece

ABSTRACT

Background: The need for early and accurate identification of developmental coordination disorders (DCD) has been stressed by many researchers. The purpose of the present study is an initial investigation of the prevalence of DCD within the Greek school environment in early childhood.

Methods: Participants were 354 early childhood students (204 boys and 160 girls) of 14 early childhood public centers and schools of two urban areas of Northern and Central Greece. The Movement Assessment Battery for Children (MABC) was used for assessment.

Results: Based on the norms of the battery, six children of the total sample (1.6%) exhibited performance that corresponded to the lowest 5% of the continuum suggesting definite coordination disorder. Furthermore, 39 children of the same group (10.8%) were characterized “at risk” since their motor performance corresponded between the 6th and 15th percentiles of the continuum. Finally, more boys than girls “fell” under the cutoff points of 15th and 5th percentiles.

Conclusions: Within its limitations, the present study suggests that the prevalence of DCD in Greek children during early childhood appears to be much lower compared to similar international studies. Having a starting point, we feel that there is a good reason for further investigation with psychological assessment tests and pediatric developmental screening in the cases needed, so as to define the factors contributing to our results.

Key words: prevalence, developmental coordination disorder, childhood, Greece, schools.

INTRODUCTION

Developmental Coordination Disorder (DCD) is described by the Diagnostic and Statistical Manual-IV¹ as a movement disorder characterized by a marked impairment in the development of motor coordination abilities that significantly interferes with performance of daily activities and/or academic perfor-