

Associations Between Executive Function and Physical Fitness in Preschool Children

Authors : Aleksander Veraksa, Alla Tvardovskaya, Margarita Gavrilova, Vera Yakupova, Martin Musálek

Abstract : Considering the current agreement on the significance of executive functions, there is growing interest in determining factors that contribute to the development of these skills, especially during the preschool period. Although multiple studies have been focusing on links between physical activity, physical fitness and executive functions, this topic was more investigated in schoolchildren and adults than in preschoolers. The aim of the current study was to identify different levels of physical fitness among pre-schoolers, followed by an analysis of differences in their executive functions. Participants were 261 5-6-years old children. Inhibitory control and working memory were positively linked with physical fitness. Cognitive flexibility was not associated with physical fitness. The research findings are considered from neuropsychological grounds, Jean Piaget's theory of cognitive development, and the cultural-historical approach.

Keywords : cognitive flexibility, inhibitory control, physical activity, physical fitness, working memory.

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