



The Effect of Table Tennis Training on Static Balance, Dynamic Balance and Working Memory of Educable Mentally Retarded Children

Poster Presentation

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Abstract

Introduction: Mental retardation is one of the perceptual-motor abnormalities of the developmental period that Adolescence occurs and specifically refers to children who have deficiencies in cognitive mechanisms and some adaptive behaviors. The purpose of this study was to investigate the effect of table tennis training on static balance, dynamic balance, and working memory of educable mentally retarded children in Galikesh.

Methods: The research method was semi-experimental in which 20 educable students with mental disabilities of Shahid Naqdpour Exceptional School were selected by available sampling and randomly assigned to experimental and control groups (10 people in each group). The experimental group participated in table tennis exercises for eight weeks, one session per week and 45 minutes per session. The content of each training session included 10 minutes of warm-up activities, 25 minutes of specialized table tennis exercises, and the last 10 minutes related to cooling down. The modified stork test was used to measure static balance, the heel to toe walking test was used to assess dynamic balance, and the working memory test was used to measure working memory (Daniman and Carpenter, 1980). Analysis of covariance was used to analyze the data.

Results: The results showed a significant difference between the experimental and control groups in the post-test in terms of static balance performance, dynamic balance, and working memory, and the experimental group performed better than the control group.

Conclusion: In general, eight weeks of table tennis practice improves dynamic, static balance, and teachable working memory.

Keywords

Table tennis training; static balance; dynamic balance; working memory; mental disabilities

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