



## The Effect of Central Stability Exercise on Static, Dynamic Balance and Fundamental Skills of Children with Lazy Eye

### Poster Presentation

Hossein Mafi; Abdollah Fallahi; Mahboubeh Ghayour Najafabadi\*

Department of Motor Behaviour, Faculty of Physical Education and Sport Sciences, University of Tehran, Tehran,  
Iran(m.ghayournaj@ut.ac.ir)

### Abstract

**Introduction:** One of the concerns of researchers in the field of human motor behavior is to create appropriate developmental programs for children with visual impairments in the field of development of their motor skills. Strengthening and stabilizing the central body reduces the displacement of the center of gravity beyond the base of support and reduces fluctuations; therefore, it improves the use of motor skills. The aim of this study was to investigate the central stability exercises on balance and fundamental skills of children with lazy eyes. **Methods:** The statistical population consisted of elementary school students aged 7-9 years old in Ahar city, which 20 children with lazy eyes inconvenient method were selected. During the pre-test, the stork test was used to measure static balance, the star balance test measured dynamic balance, and the Test of gross motor development-2(Ulrich 2) assessed fundamental skills. After the pre-test, the intervention was performed on the experimental group in the form of central stability exercises for eight weeks and three times a week (45-50minutes for each session) Every other day. A post-test similar to the pre-test was taken at the end of the interventions.

**Results:** According to the results of MONOVA test during the pretest in static balance, dynamic balance And fundamental skills there was no significant difference between the two groups( $P > 0.05$ ); While during the post-test in the variables of static balance ( $F(1,18) = 8.181, P = 0.010, \eta^2 = 0.312$ ), dynamic balance ( $F(1,18) = 9.223, P = 0.007, \eta^2 = 0.339$ ) and fundamental skills There was a significant difference between the two groups ( $F(1,18) = 8.048, P = 0.011, \eta^2 = 0.309$ ).

**Conclusion:** Based on the results, it seems that the use of central stability exercises can be used as an efficient, accessible, and low-cost method to improve the balance and fundamental skills of children with lazy eyes and improve their performance.

### Keywords

Central stability; Balance; Fundamental Skills; Lazy eye

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