Sport specific movements on the biodex balance system as a measure of dynamic balance

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Balance is one of the processes our body takes care without our even realizing it. Yet it is amazing to think how much a part of our daily lives it is! This term has a very high significance with the sport gymnastics, which requires specific movements to be balanced on the floor and other apparatus. For the purpose of the present experiment 10 collegiate gymnasts under the age group 17-20 with mean and standard deviation of 18.1±0.94, with state participation were selected as subjects. All the gymnasts were assessed in six test items, both feet eyes open, both feet eyes closed, right foot eyes open, right foot eye closed, left foot eyes open and left foot eyes closed; with nine different parameters (Overall Stability Index, Mean Deflection, Standard Deviation, Anterior/Posterior SI, MD, SD, Medial/Lateral SI, MD and SD) in each type of the comprehensive limits of stability reports on the Biodex Balance System (BBS). They were further randomly classified to experimental and control (five each) group. The gymnasts of the experimental group underwent training on the BBS for eight weeks. The training consisted of dynamic balance for 30 seconds of five repetitions, thrice a week, along with their routine practice. The gymnasts of the control group did not have any additional training for balance apart from their routine practice. After eight weeks all the subjects were tested for the same parameters. The results showed significant difference in various parameters of dynamic balance for the gymnasts of experimental group in comparison to control group justifying the significance of sport specific movements on the BBS.

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