## World Academy of Science, Engineering and Technology International Journal of Sport and Health Sciences Vol:11, No:05, 2017

## Comparison of Dynamic Balance Ability and Flexibility in Different Sports

Authors: Inci Kesilmis, Manolya Akin, Mehmet Melih Kesilmis

**Abstract :** The aim of this research was to compare dynamic balance ability (bipedal, right, left foot) and plantar-dorsi flexion range of motion in fencers and swimmers. 43 fencers participated as volunteer with mean age  $15.74\pm1.90$ year and mean training year  $4.97\pm2.37$ year. 25 swimmers participated as volunteer with mean age  $15.36\pm1.65$  yr. and mean training year  $5.98\pm2.35$  yr. Dynamic balance measured while participants were standing in the anatomical position with prokin tecno body for bipedal, right, left foot. Plantar and dorsal flexion range of motion measured while participants in seated position on the examination table and goniometer placed on the lateral malleolus. For statistical analyses; independent samples t test was used. There were significant differences between bipedal (p < 0.05), right foot (p < 0.05), left foot (p < 0.05) dynamic balance ability in favor of fencers. Also there was significant difference between right and left foot dorsal flexion range of motion (p < 0.001) in favor of fencers. There was no significant difference in plantar flexion range of motion between fencers and swimmers. The difference observed in fencers may be due to the use of more dorsal flexion in action moves and that swimming does not impact loading sport and it is performed in pool.

Keywords: fencing, swimming, dynamic balance, flexibility

Conference Title: ICGFP 2017: International Conference on Gymnastics, Flexibility and Performance

Conference Location : Barcelona, Spain Conference Dates : May 26-27, 2017