

# BEING IN CONTEXT AND SIMILARITY IN FATIGUING PROTOCOLS TO MAIN ASPECTS OF WRESTLING DON'T ALTER THE BALANCE

*Original scientific paper*

## **Abstract**

*The purpose of this study was to show that: being "in context" and "similarity" in fatiguing protocols to the main aspects of sport doesn't alter wrestlers balance. Twenty professional male wrestling athletes (age 26.2±1 yr, VO<sub>2</sub>max 62.3±3.1 ml kg min) participated in this study (10 in experimental and 10 subjects in control group) and completed a fatigue protocol. In this study, regular wrestling match used for metabolic fatigue protocol. Biodex balance system and lactometer used for evaluation of balance and blood lactate level (respectively). For statistical analysis, Pearson correlation coefficient, paired t-test, sample t and ANOVA tests were used. Based on these study results, the static balance alterations in experimental group (eye opened and eye closed positions) were respectively 0.16% and 3.17% that this wasn't statistically meaningful. Also, Dynamic balance alterations in experimental group (eye opened and eye closed positions) were 0.12% and 0.41% (respectively) that this weren't statistically meaningful. There wasn't significant relationship between lactate acid accumulation and variations of stability indices ( $r=-0.570$ ,  $p<0.05$ ). One of the best Justifications for no alteration in wrestlers balance is that: fatiguing protocol exerted in this study is "in context" and "similar" to wrestling main training and this can apply Anticipatory postural adjustment system for further maintaining postural stability. The probable mechanisms that through them neck fatigue did affect static and dynamic stability could be include of alteration in afferent sensory inputs, decreasing in postural adjustment, increase in COP displacement, increase in delay time and decrease in muscular activity, alteration in proprioception and dysfunction of contractile units in anti gravity muscle following.*

**Keywords:** *wrestlers; Metabolic Fatigue; Functional Stability, similarity, in context.*