**PhD Candidate**

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**PhD Thesis Summary: The effects of Cross Education in overhead athletes with scapular dyskinesis**

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Volleyball athletes as athletes who basically perform activities above shoulder height, show the highest rates of Scapular Dyskinesis. Kinetic chain rehabilitation exercises have shown great research interest as it is claimed that they improve the motor control and shoulder mobility. Also, a type of intervention, known as Cross Education, can enhance the results of Kinetic chain rehabilitation exercises. The purpose of this study is to also examine the adjunctive benefits of Kinetic chain rehabilitation exercises with the combined use of a mirror (Mirror Cross-Education - MCE) in a) shoulder symmetry, b) upper and lower chain balance through functional balance tests and c) throwing performance in professional volleyball athletes with Scapular Dyskinesis, by controlling at the same time the Ground Reaction Forces in relation to their impact in throwing performance. This study will recruit volleyball athletes and will be conducted in an Institutionalized Research Sports Lab. Investigating the effectiveness of research interventions in the kinetic chain and the motor characteristics of the scapulae in overhead athletes will prevent the occurrence of painful symptoms and faster diagnosis and treatment with significant economic and social benefits. Also, investigating the effectiveness of MCE can potentially accelerate athletes' return to sports activities with significant benefits for the athletes' professional careers as well as preventing premature retirement. Finally, a safe method of intervention will be proposed to restore Scapular Dyskinesis, with a lower financial burden given its ease of application and faster return-to-competition for professional athletes.

Ενδεικτική βιβλιογραφία:

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