Effects of Sand Plyometric Exercise on Vertical Jump Height and Quadriceps Muscle Performance


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Plyometric training is a method of choice when aiming to improve vertical jump ability and leg muscle power. The present review will summarize the results of the study about sand plyometric exercise and whether it has an effect on vertical jump height and muscle performance. Participants in this study were males and females Sedentary students aging between 18 to 25, BMI (19.14-34.6), height (109 cm-154 cm) weight (187kg-163kg) containing smokers .40 participants were picked randomly and 20 from them were classified as control for this study. The following variables age, weight, height, BMI, level of activity and state of smoking and the length of the both lower limbs using a tape measurement (recording the length from G.T to lateral epicondyle, and from lateral epicondyle to lateral malleoules, and from tibial tuberosity, Medial malleoules ) were taken to check if there is any significance between them and the study’s outcome .

The study was done for 6 weeks 3 training days per week. There was a lower body power test done on the participants (dynamometer) as they were tested in the vertical jump (vertec) for jump height assessment .measurements took place in the first week, 3rd week and the last week, 6 weeks total.

Results: There were no significant difference neither in muscle performance (501 >0.05) nor in vertical jump height. (285>0.05)

Conclusion: This study proved that Sand plyometric training done for 6 weeks 3 times a week had no significant effect on vertical jump and muscle performance.