

Comparison of Whole-Body Vibration and Plyometric Exercises on Explosive Power in Non-Athlete Girl Students

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Abstract : The aim of this study was investigate and compare plyometric and vibration exercises on muscle explosive power in non-athlete female students. For this purpose, 45 female students from non-athletes selected target then divided in to the three groups, two experimental and one control groups. From all groups were getting pre-tested. Experimental A did whole-body vibration exercises involved standing on one of machine vibration with frequency 30 Hz, amplitude 10 mm and in 5 different postures. Training for each position was 40 seconds with 60 seconds rest between it, and each season 5 seconds was added to duration of each body condition, until time up to 2 minutes for each postures. Exercises were done three times a week for 2 month. Experimental group B did plyometric exercises that include jumping, such as horizontal, vertical, and skipping .They included 10 times repeat for 5 set in each season. Intensity with increasing repetitions and sets were added. At this time, asked from control group that keep a daily activity and avoided strength training, explosive power and. after do exercises by groups we measured factors again. One-way analysis of variance and paired t statistical methods were used to analyze the data. There was significant difference in the amount of explosive power between the control and vibration groups ($p=0/048$) there was significant difference between the control and plyometric groups ($019/0 = p$). But between vibration and plyometric groups didn't observe significant difference in the amount of explosive power.

Keywords : vibration, plyometric, exercises, explosive power, non-athlete

Conference Title : ICSEHS 2015 : International Conference on Sport, Exercise and Health Sciences

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : August 24-25, 2015