

ABSTRACT

Different research showed that uniform plyometric training has an important role for improving the athlete's performance. Uniform plyometric training can improve different motor fitness parameters in teen-age athletes. The underlying principle of the study was to access the-“Effect of uniform plyometric training programme on motor fitness parameters of teen-age athletes. The study was formulated as a true random group design, consisting of a pre-test and post-test. Forty state level athletes from Barasat athletic club, North 24 parganas district, West Bengal, India were selected as subjects at random and their ages ranged from 14-19 years. The subjects (n=40) were randomly assigned to four equal groups of ten subjects of each groups (In the meantime there were three experimental group-sprinter, jumper and thrower and control group). Pre-test was conducted for all the subjects on selected motor fitness parameters. The selected motor fitness parameters were speed, agility, power, shoulder strength and reaction time. Speed were measured by 50 meter sprint, agility were measured by 4x10 meter shuttle run, power were measured by standing broad jump, shoulder strength measured by pull up test and reaction time were measured by Nelson choice response movement test. The initial test score formed as pre-test score of the subjects. The group was assigned as experimental group-I (sprinter), experimental group-II (jumper), experimental group-III (thrower) and control group-IV (sprinter, jumper and thrower). Experimental group-I (sprinter), experimental group-II (jumper) and experimental group-III (thrower) was exposed to uniform plyometric training (that training protocol made by experts) and control group-IV (sprinter, jumper and thrower) was not exposed to uniform plyometric training other than their regular daily activities. The duration of the experimental period was 12 weeks. After the experimental treatment, all the forty subjects were tested on their different parameters. This final test scores formed as different post-test (posttest-1, posttest-2 and posttest-3) scores of the subjects of different duration (1 month, 2 months, and 3 months). The pre-test and different post test scores were subjected to statistical analysis using Repeated measures Analysis of co-variance(ANCOVA) and Repeated measures Analysis of variance(ANOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant, Tukey's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypothesis. The formulated hypothesis is rejected as because the result established that, the 3 months uniform plyometric training produced significant improvement in speed, agility, power, shoulder strength and reaction time for teen-age sprinter, jumper and throwers. These findings suggest that the uniform plyometric training programme has a statistically significant in developing the selected criterion motor fitness parameters.

Keyword: uniform, plyometric training, speed, agility, power, shoulder strength, reaction time.