



EFFECT OF SPORTS LOADING TRAINING ON EXPLOSIVE POWER AMONG COLLEGE STUDENTS

Dr. M. Madan Mohan

Associate Professor, Department of Physical Education, A.V.V.M. Sri Pushpam College, Poondi, Thanjavur, Tamilnadu

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Abstract:

The purpose of the study was to find out the effect of sport loading training on explosive power among college students. To achieve the purpose of the present study, thirty women from A.V.V.M. Sri Pushpam College, Poondi, Thanjavur were selected as subjects at random and their ages ranged from 18 to 21 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Sport Loading Training) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. Analysis of covariance (ANCOVA) was used to test the treatment effect of the training programmes on all the variables used in the study. It was observed that the six weeks of sport loading training have significantly improved the explosive power.

Key Words: Sports Loading Training, Speed, Agility

Introduction:

Sport loading can be defined as the systematic addition of weight to the others player's body in any form (uniform, vest pants or shirts) or to the implements used in sports (sticks, bats, balls and so on). Sport loading is a technique designed to improve explosive concentric movements such as sprinting speed. A relatively light resistance that does not drastically alter sprinting form produces the best results. Sport loading along with strength training, speed endurance training, plyometric and over speed training produce the greatest change in the exercise in the fast twitch muscle fibres (Bimal, 2013).

Methodology:

The purpose of the study was to find out the effect of sport loading training on explosive power among college students. To achieve the purpose of the present study, thirty women from A.V.V.M. Sri Pushpam College, Poondi, Thanjavur were selected as subjects at random and their ages ranged from 18 to 21 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Sport Loading Training) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. Analysis of covariance (ANCOVA) was used to test the treatment effect of the training programmes on all the variables used in the study.

Results

Table 1: Computation of Mean and Analysis of Covariance of Explosive Power on Experimental and Control Groups

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	0.19	0.18	BG	0.001	1	0.001	0.37
			WG	0.025	28	0.001	
Post Test Mean	0.30	0.20	BG	0.073	1	0.073	40.04*
			WG	0.051	28	0.002	
Adjusted Post Mean	0.30	0.20	BG	0.073	1	0.073	38.70*
			WG	0.051	27	0.002	

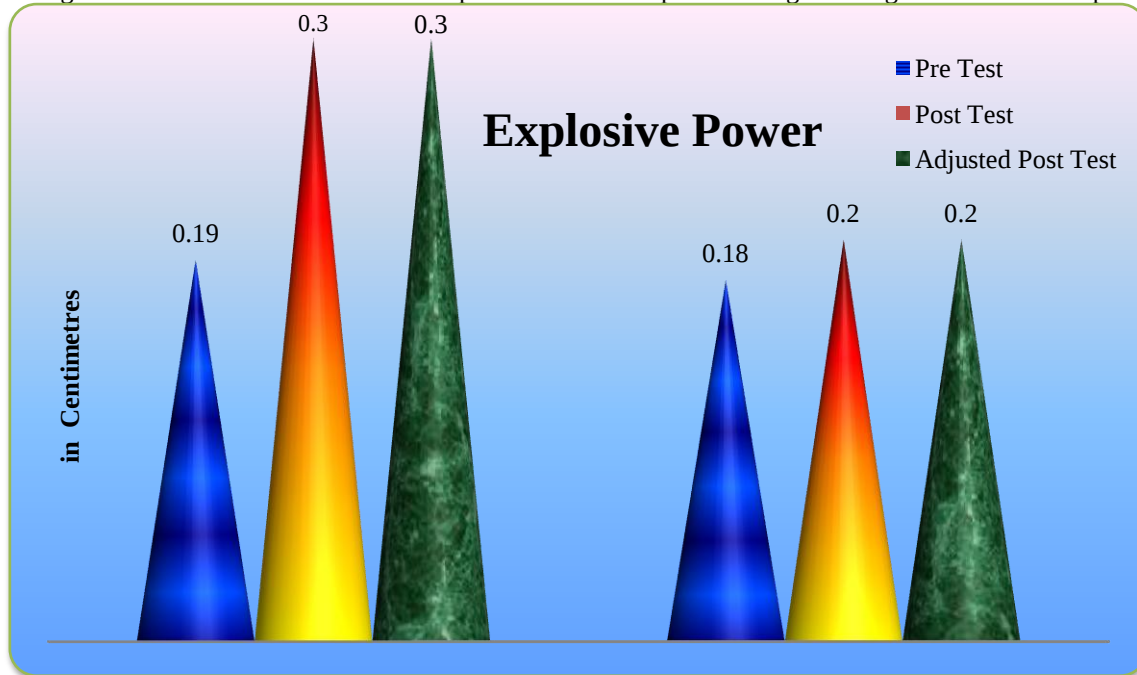
* Significant at 0.05 level

Table value for df 1, 28 was 4.20, df 1, 27 was 4.21

The above table indicates the adjusted mean value of explosive power of experimental and control groups were 0.30 and 0.20 respectively. The obtained F-ratio of 38.70 for adjusted mean was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on explosive power. The above table also indicates that both pre and post test means of experimental and control

groups also differ significantly. The pre, post and adjusted mean values of explosive power of both control and experimental groups are graphically represented in the figure 1.

Figure 1: Show the Mean Values on Explosive Power of Sport Loading Training and Control Groups



Conclusion:

It was observed that the six weeks of sport loading training have significantly improved the explosive power.

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