



INFLUENCE OF RESISTANCE TRAINING PARALLEL WITH PLYOMETRIC TRAINING ON ELASTIC POWER

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Abstract

The purpose of the study was to find out the effects of resistance training parallel with plyometric training on elastic power. To achieve this purpose of the study, thirty men students studying Bachelors of Physical Education at Department of Physical Education, Annamalai University, India were randomly selected as subjects during the year 2018-19. They were divided into two equal groups of fifteen subjects each. Group I underwent resistance training parallel with plyometric training for three sessions per week for twelve weeks. And group II acted as control group who did not participate in any of the special training programme. Elastic power was only selected as dependent variable. Resistance training parallel with plyometric training was selected as independent variable. Elastic power was measured by using bunny hops test. The data were collected at prior and immediately after the training programme on elastic power. The collected data were analysed statistically by using analysis of covariance (ANCOVA). The .05 level of confidence was fixed to test the level of significance. The results of the study revealed that resistance training with plyometric training group significantly improved elastic power when compared with control group.

Keywords: Resistance Training, Plyometric Training, Elastic Power.

INTRODUCTION

The word training denotes the process of preparation for some task. This process invariably extends to a number of days and even months & years. The benefits of aerobic exercise and fitness include improved circulation and respiration, reduced risk of heart disease, improved fat metabolism and reduced body weight, fat free mass, strengthened bones, ligaments, body image and emotional stability. Plyometric training is a powerful training tool to help gain the competitive edge in the primary sport are avoid two negative consequences of training over training and burn out. Its provide various direct and indirect fitness benefits. Provides an additional means of burning fat.

METHODOLOGY

The purpose of the study was to find out the effects of resistance training parallel with plyometric training on elastic power. To achieve this purpose of the study, thirty men students studying Bachelors of Physical Education at Department of Physical Education,

Annamalai University, India were randomly selected as subjects during the year 2018-19. They were divided into two equal groups of fifteen subjects each. Group I underwent resistance training parallel with plyometric training for three sessions per week for twelve weeks. And group II acted as control group who did not participate in any of the special training programme. Elastic power was only selected as dependent variable. Resistance training parallel with plyometric training was selected as independent variable. Elastic power was measured by using bunny hops test. The data were collected at prior and immediately after the training programme on elastic power. The collected data were analysed statistically by using analysis of covariance (ANCOVA). The .05 level of confidence was fixed to test the level of significance. The analysis of covariance on elastic power of pre and post tests for resistance training parallel with plyometric training group and control group was analyzed and presented in Table I.

TABLE I
ANALYSIS OF COVARIANCE ON ELASTIC POWER OF PRE AND POST TESTS FOR RESISTANCE
TRAINING PARALLEL WITH PLYOMETRIC TRAINING
GROUP AND CONTROL GROUP

Test	Resistance parallel with plyometric training group	Control Group	Source of Variance	Sum of Squares	Df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	8.37	8.60	Between	0.3	1	0.3	0.412
S.D.	2.09	1.89	Within	20.4	28	0.729	
Post Test							
Mean	10.84	8.62	Between	17.63	1	17.63	21.39*
S.D.	1.59	1.88	Within	23.07	28	0.824	
Adjusted Post Test							
Mean	10.56	8.63	Between	22.11	1	22.11	172.73*
			Within	3.46	27	0.128	

* Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 1 and 28, 1 and 27 were 4.20 and 4.21 respectively).

The table I shows that the pretest means on elastic power of resistance parallel with plyometric training group and control group were 8.37 and 8.60 respectively. The obtained 'F' ratio for pretest of 0.412 which was less than the table value of 4.20 with df1 and 28 required for significance at .05 level of confidence.

Further it shows that the posttest means on elastic power of resistance parallel with plyometric training group and control group were 10.84 and 8.62 respectively. The obtained 'F' ratio for posttest of 21.39 which was more than the table value of 4.20 with df 1 and 28 required for significance at .05 level of confidence.

The table I further shows that the adjusted posttest means on elastic power of resistance parallel with plyometric training group and control group were 10.56 and 8.63 respectively. The obtained 'F' ratio for adjusted posttest of 172.73 which was more than the table value of 4.21 with df1 and 27 required for significance at .05 level of confidence.

The results of the study indicated that there was a significant difference among the adjusted posttest means of resistance training parallel with plyometric training group and control group on elastic power.

CONCLUSIONS

1. There was a significant difference exist among resistance training parallel with plyometric training group and control group on elastic power.
2. There was a significant improvement on elastic power due to resistance training parallel with plyometric training.

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