VOLUME-7, ISSUE-10, OCTOBER-2018 • PRINT ISSN No 2277 - 8160

Original Research Paper

Physical Education

EFFECT OF RESISTANCE AND CIRCUIT TRAINING ON SELECTED PHYSICAL AND PHYSIOLOGICAL VARIABLES AMONG COLLEGE MALE PLAYERS

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KEYWORDS :

OBJECTIVE OF THE STUDY:

The main objective of this study was to find out the Effect of Resistance Training and Circuit Training on selected Physical and Physiological variables among college Players.

METHODOLOGY

Selection of Subjects: Thirty male Boxers we selected from VNSGU University who have represented at inter collegiate tournament were randomly selected as subjects for the study. This experimental study was administered to only two experimental groups and one control group of 10 subjects each. The age of subjects ranged from 18 to 25 years only.

Experimental Design:

This experimental study was administered to only two experimental groups and one control group of 10 subjects each. For this purpose, Group I underwent Resistance training, Group II underwent Circuit training in three alternative days for twelve weeks. Group III acted as control group.

TRAINING PROGRAMES:

Resistance training –1.Bench press 2.Shoulder Press 3.Push Press 4.Heel Raises 5. Arm Curl 6.Leg Extension 7.Biceps Curl 8.Leg Press.

The intensity ranged between 60% to 90% of one RPM. Circuit training - The Exercise as follows.

Zig zag, Sit-ups, Dips, Medicine ball twister, Shuttle run, Pushups, step ups, Burpees Training period is 6 weeks, Duration in between 20 to 45 sec, Intensity – 60% to 90% Rest time – 2 min to 6 min.

RESULT: EXPLOSIVE STRENGTH

	Resistance Training	Circuit Training	Control Group	Sum of Square	DF	MS	F
Pre Mean	84.3	88.5	84.5	112.26 649.1	2 27	56.13 24.04	2.33
Post Mean	125.7	84.8	84.8	4589.23 47.61	2 27	4589.23 47.61	96.37
Adjusted Mean	127.35	85.33	85.33	9306.22 1156.22	2 27	9306.22 1156.22	104.62

Resistance Training	Circuit Training Control Group	Control Group	Confidence Interval value
127.35	-	30.58	7.92
127.35	96.77	42.02	7.92
	96.77	11.44	7.92

Table 1 (a) shows the Schaffer's post -hoc test result. The ordered adjusted final mean difference for muscular strength of experimental groups I, II and control group were tested for significant at 0.05 level of confidence against confidential interval value. The mean difference between experimental group I, experimental group II, control and I group were 30.58, 42.02 and 11.44 respectively and it were seen to be greater than the confidential interval value of 7.73. Hence, the above expressions were significant.

RESTING PULSE RATE

	Resistance Training	Circuit Training	Control Group	Sum of Square	DF	MS	F
Pre Mean	75.0	75.13	75.07	0.13 216.67	2 42	0.07 5.16	0.01
Post Mean	73.0	66.0	74.87	644.98 246.67	2 42	322.49 5.87	29.23
Adjusted Mean	9.20	9.22	9.40	0.3915 103.48	2 42	0.1985 2.52	212.61

Resistance Training	Circuit Training Control Group	Control Group	Confidence Interval value
73.0	-	74.87	1.47
73.0	66.0	-	1.47
	66.0	74.87	1.47

Table I (a) shows the Schffe's post -hoc test result. The ordered adjusted final mean difference for resting pulse rate of experimental groups I, II and control group were tested for significant at 0.05 level of confidence against confidential interval value. The mean difference between experimental group I, experimental group II, I and control groupwere1.87, 7.00 and 8.87 respectively and it were seen to be greater than the confidential interval value of 1.47. Hence, the above comparisons were significant.

CONCLUSION:

The resistance training and circuit training has produced significant improvement on performance variables Explosive strength greater than control group of college male Boxing Players.

The Explosive strength favored to Resistance training greater than Circuit Training and control group of college male Player.

Resistance Pulse rate was favored to circuit training greater than Resistance training and control group of college male Player.

Control group did not produce any significant improvement on all criterion variables of college male Player.