

## **EFFECT OF AEROBIC TRAINING, RESISTANCE TRAINING AND CONCURRENT TRAINING ON SELECTED BIOMOTOR ABILITIES**

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### **ABSTRACT**

The reason of the think about was to discover out the impact of high-impact, resistance and concurrent training on chosen bio motor capacities. For this think about, sixty men understudies were chosen haphazardly as subjects and isolated into four teams as high-impact, resistance and concurrent training. Test to be specific explosive strength and strength endurance were tried at the starting and conclusion of 12th week exploratory treatment. The collected information was factually analysed by utilizing investigation of covariance (ANCOVA). It was found that there was a significant improvement

In test groups in explosive strength and strength endurance.

**Keywords:** Aerobic training, resistance training, concurrent training, strength endurance and explosive strength.

### **Introduction**

Effective competitors comprehend athletic program and the genuine explanation for their endeavours. It doesn't dominantly have a say in the improvement of their exercises and explicit game abilities. The brilliant players are improving themselves competitors, which thus improve the performance. The best performance realize their own keep up with the particular game abilities, by investing their energy and the loads and dominating the abilities of execution may have best performance the particular game abilities. There has clearly been a change in needs of these more predominant players. The mix different wellness parts to accomplish ideal execution. These incorporate football, hockey, netball, ball and numerous others. As a competitor associated with such a game, one are probably not going to have the advantage of preparing any of these parts in seclusion throughout some stretch of time, and one's moulding programs most likely include the simultaneous preparing of a few wellness parts across various miniature cycles.

### **METHODOLOGY**

To accomplish the motivation behind this review, 60 male subjects were chosen aimlessly from TNPESU- Chennai, TamilNadu, India. The age of the members went somewhere in the range of eighteen and twenty five old. The chose members were separated into three, test gatherings and a benchmark group with fifteen members (n=15) in each gathering. Group-I (ATG=15) went through high-impact preparing, Group II RTG=15) went through opposition preparing, Group III (CTG=15) went through simultaneous acquiring and Group IV filled in as control bunch (CG=15). Every one of the trial bunches went through 12 weeks of preparing, 3 meetings each week. Every one of the subjects were tried on chosen factors before and following the preparation time frame. The reliant factors in particular unstable strength and strength perseverance were evaluated by directing Sargent bounce board test and YMCA brief bowed knee sit-ups.

## ANALYSIS OF DATA

The information gathered from every one of the four gatherings were genuinely examined with (ANCOVA) as four gatherings were involved. At whatever point the 'F' proportion was observed to be critical, Scheffe's test was utilized as post hoc test to figure out which of the combined means contrasted essentially. In all cases the standard for factual importance was set at 0.05 degree of certainty ( $P < 0.05$ ).

**Table - I**

**Analysis of Covariance on Explosive Strength and Strength Endurance of Aerobic Resistance Concurrent Training and Control Groups**

Variables	Tests/ groups	ATG	RTG	CTG	CG	SV	SS	df	MS	F
Explosive strength	Pre Test Mean $\pm$ SD	0.42 $\pm$ 0.05	0.41 $\pm$ 0.05	0.44 $\pm$ 0.09	0.37 $\pm$ 0.05	B W	0.042 0.236	3 56	0.0014 0.0042	3.327*
	Post Test Mean $\pm$ SD	0.46 $\pm$ 0.04	0.46 $\pm$ 0.04	0.53 $\pm$ 0.07	0.38 $\pm$ 0.04	B W	0.160 0.145	3 56	0.0053 0.003	20.575*
	Adjusted Post - Test Mean	0.453	0.459	0.518	0.399	B	0.091	3	0.03	14.801*
Strength Endurance	Pre Test Mean $\pm$ SD	43 $\pm$ 4.78	40.87 $\pm$ 4.47	46.33 $\pm$ 8.56	39.13 $\pm$ 5.59	B W	432.533 2062.8	3 56	144.178 36.836	3.914*
	Post Test Mean $\pm$ SD	47.66 $\pm$ 4.53	46.4 $\pm$ 3.66	54.47 $\pm$ 6.22	40.27 $\pm$ 4.89	B W	1526 1351.6	3 56	508.667 24.136	21.075*
	Adjusted Post - Test Mean	47.397	46.994	52.846	41.563	B W	803.924 1012.845	3 55	267.975 18.415	14.552*

(The table value required for 0.05 level of significance with f 3, 56 and 3,55 are 2.76 and 2.78 respectively)

## DISCUSSIONS

The acquired f-proportion esteems were higher than the table worth 2.76 with df 3 and 55 needed for

importance at 0.05 level. It demonstrates that there were huge contrasts among the changed posttest method for oxygen consuming, opposition and simultaneous preparing groups on explosive strength and strength endurance.

**Table — II**  
**Scheffe's Test for Differences of the Adjusted**  
**Post-test Paired Means of Explosive Strength and Strength Endurance**

Variables	Adjusted Post-test means				MD	CI
	ATG	RTG	CTG	CG		
Explosive Strength	0.453	0.459			0.006	0.047
	0.453		0.518		0.065*	
	0.453			0.399	0.054*	
		0.459	0.518		0.059*	
		0.459		0.399	0.049*	
			0.518	0.399	0.119*	
Strength Endurance	47.397	46.994			0.403	4.53
	47.397		52.846		5.449*	
	47.397			41.563	5.834*	
		46.994	52.846		5.852*	
		46.994		41.563	5.431*	
			52.846	41.563	11.283*	

\* Significant at 0.05 level.

## DISCUSSIONS

The examination of the information infers that there is no huge contrast on explosive strength and strength endurance among ATG and RTG. In any case, simultaneous preparing is observed to be preferred in expanding hazardous strength over ATG and RTG.

## CONCLUSIONS

1. Aerobic, resistance and concurrent training methods helped to improve explosive strength and muscular endurance. The concurrent training has increased explosive strength and muscular endurance performance significantly when compared to the aerobic and resistance training systems. There is no significant difference between the aerobic and resistance training systems in the development of explosive strength and muscular endurance performance.
2. Concurrent training is a suitable training system to attain the optimum level of bio-motor performance.

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