



## **EFFECT OF EXCESSIVE MEDIUM AND LOW INTENSITIES OF INNOVATIVE RESISTANCE SCHOOLING ON DECIDED ON ELECTRICITY PARAMETERS**

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### **ABSTRACT**

The purpose of the examine became to discover the impact of high, medium and coffee intensity of innovative resistance schooling on decided on power parameters. To reap the purpose of the existing look at, 80 college male students from Bharath College, Thanjavur District, Tamilnadu had been selected as subjects at random and their ages ranged from 18 to twenty-five years. The subjects have been divided into four equal corporations of twenty male students each. The look at changed into formulated as a real random organization layout, together with a pre-take a look at and put up-check. The topics (N=eighty) had been randomly assigned to 4 identical businesses of university male students each. The companies were assigned as high depth revolutionary resistance education, medium intensity modern resistance schooling, low depth progressive resistance schooling and control group in an equal way. The organization I underwent excessive intensity innovative resistance schooling, organization II underwent medium depth progressive resistance training, institution III underwent low depth revolutionary resistance education and organization IV acted as a control organization. The 3 experimental businesses were participated the schooling for a length of twelve weeks to find out the outcome of the education programs and the manage group did now not participated in any schooling program. The variable to be used in the gift examine was accrued from all subjects before they have to deal with the respective remedies. It was assumed as pre-test. After of completion of



treatment they have been tested again as it changed into within the pre-check on all variables used within the gift observe. This check became assumed as put up-take a look at. The subsequent statistical strategies had been followed to treat the accrued facts in reference to mounted hypothesis and targets of this study. Analysis of covariance (ANCOVA) became applied due to the fact the topics have been decided on random, but the agencies were no longer equated on the subject of the factors to be tested. Therefore the difference among approach of the three agencies in the pre-take a look at had to be taken into consideration for the duration of the evaluation of the post-check variations among the manner. This turned into achieved by the utility of the evaluation of covariance, where the final approach had been adjusted for differences inside the initial approach, and the adjusted way have been examined for importance. Every time the adjusted submit-test manner had been observed vast, the scheffe's post-hoc take a look at become administer to discover the paired means difference. To check the received effects on variables, stage of importance 0.05 was selected and considered as enough for the have a look at. In evaluating the impact of schooling, from the acquired f-ratios, it was discovered that HIPRT confirmed higher overall performance on growing muscular power and energy staying power than the alternative corporations.

***Keyword: Resistance, muscular electricity, strength persistence.***

## **INTRODUCTION**

Resistance training is well established powerful methods of workout for developing muscular health. Resistance exercise is a type of exercising that has won popularity over the past decade. Resistance schooling is any exercise that causes the muscle mass to contract towards an external resistance with the expectation of increases in electricity, tone, mass and patience. The external resistance can be dumbbells, rubber exercise tubing, very own body weight, bricks, bottles of water or some other item that reasons the muscle groups to agreement. This schooling works the muscle mass of the frame and is maximum useful while all of the degrees of movement are blanketed. The resistance schooling is completed two to three instances every week with an average of 8 to twelve repetitions of a series of various resistance based totally exercises. Resistance education works by inflicting microscopic damage or tears to the muscle

cells, which in turn are fast repaired via the body to help the muscle tissue regenerate and develop more potent. Innovative resistance is vital for constructing muscle and accomplishing goals, consisting of rehabilitation. The frame adapts to workout, and it desires to be continuously challenged in order to grow and trade. Revolutionary resistance training is a try to result in a wide spectrum of physiological, purposeful, and psychological fitness-related diversifications. Modern resistance training has been set up as the choice for inducing skeletal muscle hypertrophy in healthy adults and people with chronic disorder.

## **METHODOLOGY**

The purpose of the observe became to find out the impact of excessive, medium and occasional depth of modern resistance education on selected electricity parameters. To achieve the reason of the prevailing take a look at, 80 college male college students from Bharath, Thanjavur District, Tamilnadu had been selected as topics at random and their a while ranged from 18 to twenty-five years. The topics were divided into four equal agencies of twenty male students each. The examine changed into formulated as a true random organization design, together with a pre-test and publish-test. The topics (N=80) have been randomly assigned to 4 same organizations of college male students every. The businesses had been assigned as high depth revolutionary resistance schooling, medium depth innovative resistance schooling, low depth modern resistance education and manipulate organization in an equal manner. The institution I underwent excessive intensity revolutionary resistance training, organization II underwent medium depth revolutionary resistance education, organization III underwent low depth progressive resistance schooling and organization IV acted as a manipulate group. The three experimental groups were participated the education for a length of twelve weeks to discover the final results of the education packages and the manipulate organization did now not participated in any schooling software.

The variable to be used within the present examine became gathered from all subjects before they must deal with the respective treatments. It became assumed as pre-take a look at. After completion of treatment they had been tested once more as it became within the pre-check on all variables used in the present look at. This take a look at become assumed as post-test. the



subsequent statistical techniques have been followed to treat the accrued records in reference to installed speculation and targets of this examine. Analysis of covariance (ANCOVA) changed into applied due to the fact the subjects were decided on random, however the businesses had been no longer equated in terms of the factors to be tested. Hence the difference among approach of the three organizations in the pre-take a look at had to be taken under consideration for the duration of the evaluation of the publish-check differences among the approach. This became executed by the software of the evaluation of covariance, where the very last ways have been adjusted for variations within the preliminary way, and the adjusted means were tested for importance. Whenever the adjusted publish-test way had been determined sizeable, the scheffe’s submit-hoc check become administer to find out the paired means difference. To test the obtained results on variables, degree of significance 0.05 become selected and taken into consideration as sufficient for the observe.

**RESULTS**

**TABLE – I**

**COMPUTATION OF EVALUATION COVARIANCE OF MEAN OF HIGH, MEDIUM, LOW INTENSITY PROGRESSIVE RESISTANCE TRAINING AND CONTROL GROUPS ON MUSCULAR STRENGTH (HIPRT, MIPRT, LIPRT & CG)**

	HIPRT	MIPRT	LIPRT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
<b>Pre-Test Means</b>	41.88	42.41	42.70	43.26	<b>BG</b>	6.82	3	2.27	1.16
					<b>WG</b>	147.47	75	1.94	
<b>Post-Test Means</b>	51.87	49.27	49.28	41.50	<b>BG</b>	870.27	3	290.09	357.29*
					<b>WG</b>	60.04	76	0.79	
<b>Adjusted</b>					<b>BG</b>	835.86	3	278.62	



<b>Post-Test Means</b>	50.86	49.27	49.28	42.34	<b>WG</b>	59.99	75	0.80	346.31*
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Table – I famous that the indicated that the obtained ‘F’-ratio for the pre-check manner a few of the agencies on muscular power had been 41.88 for experimental group – I, forty two.41 for experimental group – II, 42.70 for experimental organization – III and forty three.26 for manipulate organization. The obtained ‘F’-ratio 1.16 changed into lesser than the desk ‘F’- ratio 2.seventy two. Consequently the pre-test mean ‘F’-ratio changed into insignificant at zero.05 stage of confidence for the degree of freedom 3 and seventy five. The post-take a look at approach had been 51.87 for experimental group – I, 49.27 for experimental group – II, forty nine.28 for experimental group – III and 41.50 for control group. The acquired ‘F’-ratio 357.29 was better than the table ‘F’-ratio 2.72. for this reason the put up-take a look at suggest ‘F’-ratio turned into tremendous at 0.05 degree of self assurance for the diploma of freedom three and 76. The adjusted submit-test way has been 50.86 for experimental group – I, forty nine.27 for experimental group – II, 49.28 for experimental institution – III and forty two. 34 for manipulate institution. The acquired ‘F’-ratio 346.31 was better than the desk ‘F’-ratio 2.seventy two. Subsequently the adjusted publish-check suggests ‘F’-ratio turned into extensive at 0.05 stage of self belief for the diploma of freedom 3 and seventy five. It became concluded that there has been a significant mean distinction among excessive group, medium group, low depth revolutionary resistance education group and manipulate group in growing muscular electricity of the soccer gamers.

**FIGURE – I**  
**ADJUSTED POST TEST DIFFERENCES OF THE HIGH, MEDIUM, LOW**  
**INTENSITY PROGRESSIVERESISTANCE TRAINING AND CONTROL GROUPS**  
**ON MUSCULAR STRENGTH**  
**(HIPRT, MIPRT, LIPRT & CG)**

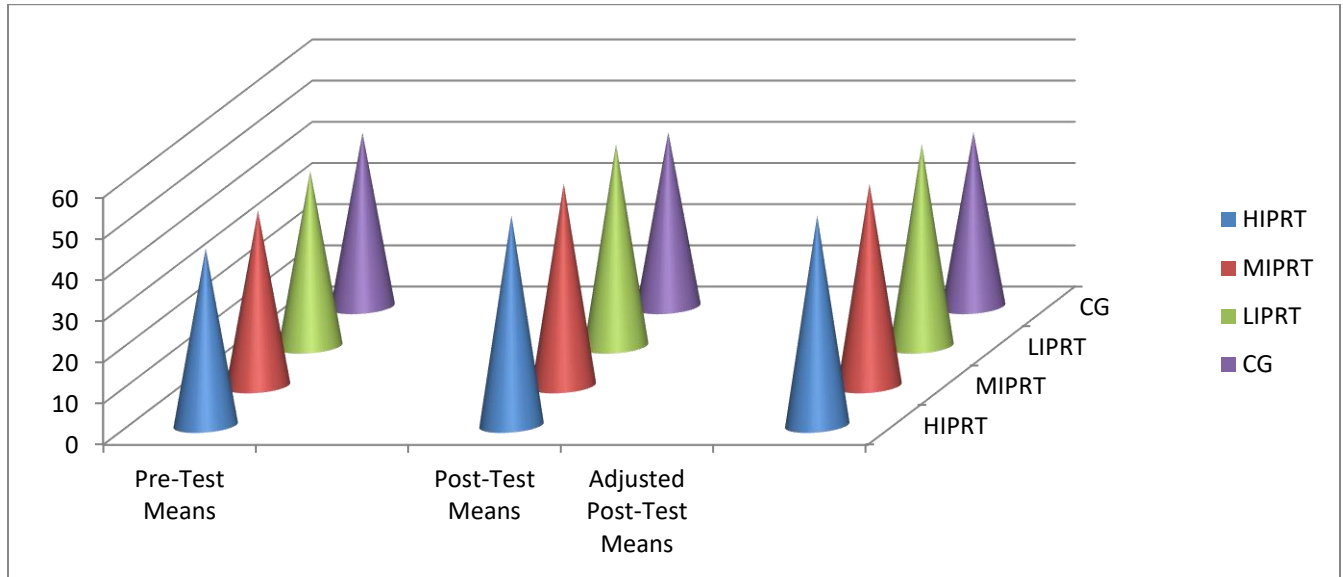


TABLE – II

THE SCHEFFE’S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST MEANS ON MUSCULAR STRENGTH

Adjusted Post-Test Means				Mean Difference	Confidence Interval
HIPRT	MIPRT	LIPRT	CG		
50.96	49.07	---	---	1.89*	0.66
50.96	---	49.08	---	1.88*	
50.96	---	---	42.31	8.68*	
---	49.07	49.08	---	0.01	



---	49.07	---	42.31	6.66*
---	---	49.08	42.31	6.87*

The multiple comparisons showed in table II proved that there existed significant differences between the adjusted means of HIPRT and MIPRT (1.89), HIPRT and LIPRT (1.88), HIPRT and CG (8.68), MIPRT and CG (6.66), LIPRT and CG (6.87). There was no significant difference between MIPRT and LIPRT group (0.01) at 0.05 level of confidence with the confidence interval value of 0.66. The pre, post and adjusted means on muscular strength were presented through bar diagram for better understanding of the results of this study.

**TABLE – III**  
**COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF HIGH, MEDIUM, LOW INTENSITY PROGRESSIVE RESISTANCE TRAINING AND CONTROL GROUPS ON STRENGTH ENDURANCE (HIPRT, MIPRT, LIPRT & CG)**

	HIPRT	MIPRT	LIPRT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
<b>Pre-Test Means</b>	20.40	18.50	18.80	19.65	<b>BG</b>	11.03	3	3.67	2.80
					<b>WG</b>	98.95	76	1.30	
<b>Post-Test Means</b>	25.50	23.15	21.06	20.30	<b>BG</b>	283.93	3	94.64	32.88*
					<b>WG</b>	218.75	76	2.87	
<b>Adjusted Post-Test</b>	25.82	22.97	22.58	20.37	<b>BG</b>	284.22	3	94.74	33.10*
					<b>WG</b>	214.66	75	2.86	





Means									
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Table – III exhibits that the indicated that the obtained ‘F’-ratio for the pre-check manner many of the groups on power persistence were 20.forty for experimental group – I, 18.eighty for experimental organization – II, 19.80 for experimental institution – III and 19.65 for manage organization. The obtained ‘F’-ratio 2.80 changed into lesser than the table ‘F’-ratio 2.72. Hence the pre-check imply ‘F’-ratio become insignificant at zero.05 level of confidence for the degree of freedom 3 and seventy six. The publish-check means had been 25.50 for experimental organization – I, 23.15 for experimental organization – II, 21.06 for experimental group – III and 20.30 for control group. The obtained ‘F’-ratio 1844.26 turned into higher than the table ‘F’-ratio 2.seventy two. Hence the put up-test mean ‘F’-ratio changed into considerable at zero.05 level of self assurance for the diploma of freedom three and seventy six. The adjusted post-test method were 25.82 for experimental institution – I, 22.ninety seven for experimental group – II, 22.58 for experimental group – III and 20.37 for control institution. The received ‘F’-ratio 33.10 turned into better than the desk ‘F’-ratio 2.seventy two. for this reason the adjusted post-test imply ‘F’-ratio was good sized at zero.05 stage of self belief for the diploma of freedom three and 75. It became concluded that there was a big mean difference amongst excessive organization, medium organization, low depth revolutionary resistance education group and control group in growing power patience.

**FIGURE – II**  
**ADJUSTED POST CHECK VARIATIONS OF THE HIGH, MEDIUM, LOW**  
**INTENSITY PROGRESSIVERESISTANCE TRAINING AND CONTROL GROUPS**  
**ON STRENGTH ENDURANCE**  
**(HIPRT, MIPRT, LIPRT & CG)**



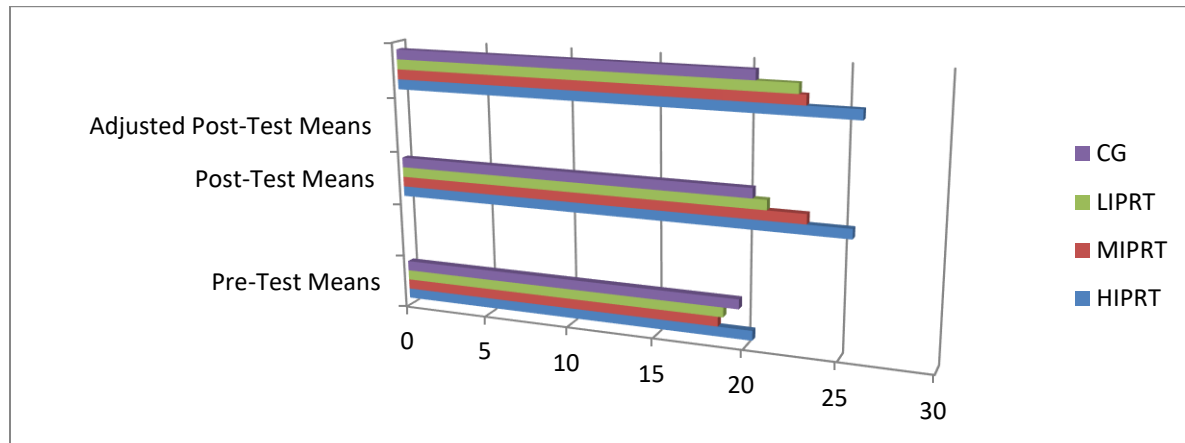


TABLE – IV

THE SCHEFFE’S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST MEANS ON STRENGTH ENDURANCE

Adjusted Post-Test Means				Mean Difference	Confidence Interval
HIPRT	MIPRT	LIPRT	CG		
25.82	22.97	---	---	2.85*	1.24
25.82	---	22.58	---	3.24*	
25.82	---	---	20.37	5.45*	
---	22.97	22.58	---	0.39	
---	22.97	---	20.37	2.60*	
---	---	22.58	20.37	2.21*	

The more than one comparisons showed in table IV proved that there existed extensive variations among the adjusted method of HIPRT and MIPRT (2.eighty five), HIPRT and LIPRT (3.24), HIPRT and CG (five.45), MIPRT and CG (2.60), LIPRT and CG (2.21). there has been no substantial difference between MIPRT and LIPRT organization (zero.39) at 0.05 level of self belief with the self assurance c programming language fee of one.24. The pre, submit and altered

method on muscular energy have been offered via bar diagram for higher information of the outcomes of this observe.

## **CONCLUSION**

1. The big imply difference does not exist among all of the four corporations within the pre take a look at on muscular power and electricity persistence.
2. In trying out submitting take a look at mean difference the various 4 corporations statistically vast on variables of muscular electricity and energy persistence. In trying out the post adjusted imply a few of the 4 groups additionally predicts the above result.
3. In comparing the impact of training, from the acquired f-ratios, it was determined that HIPRT confirmed better performance on increasing muscular power and power staying power than the opposite corporations.

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