EFFECT OF DIFFERENT INTENSITY OF WEIGHT TRAINING ON ADJUSTMENT OF COLLEGE STUDENTS

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ABSTRACT

The purpose of the study is to find the effect of different intensity of weight training with on adjustment among college students. To achieve the purpose of the present study, forty five college students from Tiruchirappalli, Tamilnadu were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into three equal groups of fifteen each. Group I acted as Experimental Group I (WTWHIG), Group II acted as Experimental Group II (WTWLIG) and Group III 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. Analysis of covariance (ANCOVA) was applied and whenever the adjusted post-test means were found significant, the Scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study. The WTWHIG and WTWLIG had shown significant differences in resting heart rate among college students than the control group. The WTWHIG had produced significant differences in resting heart rate among college students than the WTWLIG.

KEYWORDS: Weight Training, Adjustment, Students.

INTRODUCTION

The goal of resistance training, is to gradually and progressively overload the musculoskeletal system so it gets stronger and also recommends that resistance training should be progressive in nature, individualized, and provide a stimulus to all the major muscle groups. Prior to any resistance training, it is best to consult first with the doctor. The body must be conditioned before the weights. Resistance training can be used without recourse to the devices. Resistance training works by causing microscopic damage or tears to the muscle cells, which in turn are quickly repaired by the body to help the muscles regenerate and grow stronger. The breakdown of the muscle fiber is called "catabolism," and the repair and re-growth of the muscle tissue is called "anabolism." One must be probably familiar with the term anabolic when used with steroids. Anabolic means to grow, and that's exactly what happens after you break down the muscle fibers with resistance exercise. In fact, many biological processes of growth in the body require some breakdown, or catabolism, prior to re growth. For instance, bones must be broken down first before calcium and other growth factors repair the bone and make it stronger. With muscles, testosterone, insulin like growth factor, growth hormone, protein, and other nutrients rush to the muscle after a resistance-exercise session to help repair the muscles to make them stronger (Jayaraman, 2011).

METHODOLOGY

The purpose of the study is to find the effect of different intensity of weight training with on adjustment among college students. To achieve the purpose of the present study, forty five college students from Tiruchirappalli, Tamilnadu were selected as subjects at

random and their ages ranged from 18 to 25 years. The subjects were divided into three equal groups of fifteen each. Group I acted as Experimental Group I (RTWHIG), Group II acted as Experimental Group II (RTWLIG) and Group III 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. Analysis of covariance (ANCOVA) was applied and whenever the adjusted post-test means were found significant, the Scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study.

RESULTS

TABLE – I
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF ADJUSTMENT OF WTWHIG, WTWLIG AND CONTROL GROUP

	WTWHIG	WTWLIG	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	26.26	25.60	26.53	BG	6.93	2	3.46	0.71
				WG	204.26	42	4.86	
Post Test Mean	15.73	19.93	25.53	BG	725.20	2	362.60	50.83*
				WG	299.60	42	7.13	
Adjusted Post Test Mean	15.68	20.14	25.37	BG	703.83	2	351.91	54.00*
				WG	267.16	41	6.51	

* Significant at 0.05 level Table value for df 2, 42 was 3.21 and 2, 41 was 3.22

The above table indicates the adjusted mean value of adjustment of WTWHIG, WTWLIG and control group were 15.68, 20.14 and 25.37 respectively. The obtained F-ratio of 54.00 for adjusted mean was greater than the table value 3.22 for the degrees of freedom 2 and 41 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 group on adjustment. The above table also indicates that both pre and post test means of experimental and control group differ significantly.

FIGURE – I
SHOWS THE MEAN VALUES ON ADJUSTMENT OF WTWHIG, WTWLIG AND CONTROL GROUP

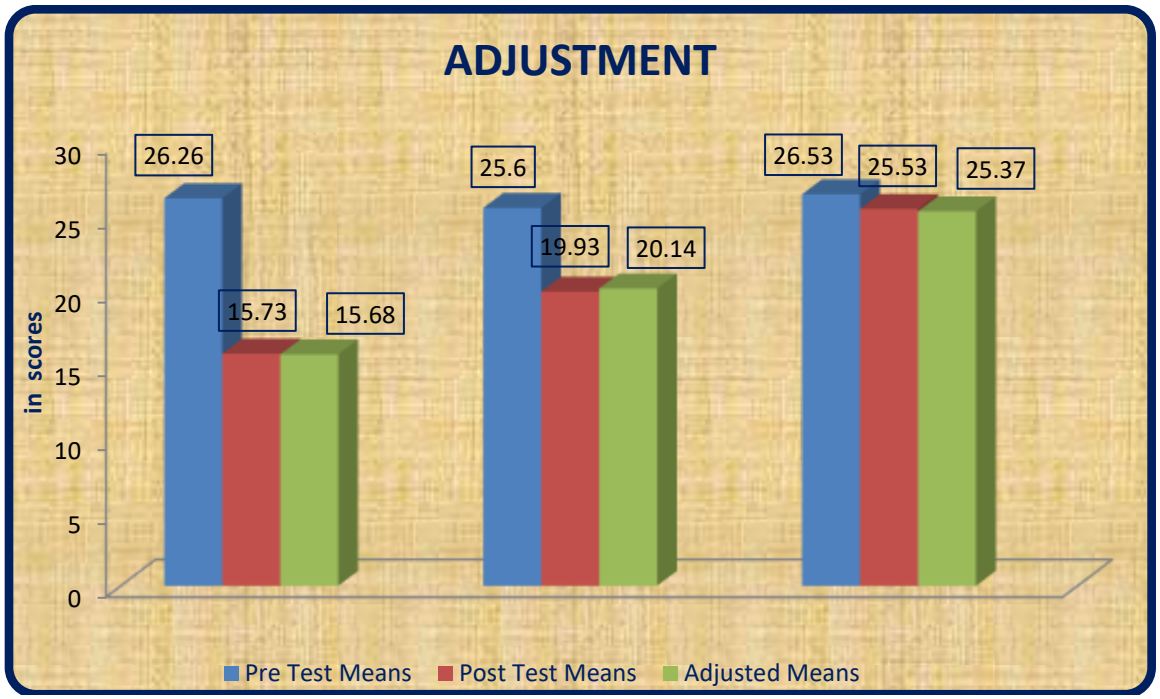

TABLE - II
ADJUSTED MEAN AND DIFFERENCES BETWEEN THE MEANS OF WTWHIG, WTWLIG AND CONTROL GROUP ON ADJUSTMENT

WTWHIG	WTWLIG	CONTROL GROUP	Mean Difference	CI value
15.68	20.14	---	4.46*	2.36
15.68	---	25.37	9.69*	
---	20.14	25.37	5.23*	

Table - II shows the adjusted means on systolic blood pressure and difference between the means of the WTWHIG, WTWLIG and control group. The mean differences of WTWHIG and WTWLIG, WTWHIG and control group, WTWLIG and control group were 4.46, 9.69 and 5.23 respectively was greater than the CI value 2.36. Hence there exist significant differences between the groups.

CONCLUSION

1. The WTWHIG and WTWLIG had shown significant differences in resting heart rate among college students than the control group.
2. The WTWHIG had produced significant differences in resting heart rate among college students than the WTWLIG.

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