

IMPACT OF YOGIC PRACTICES AND BALLISTIC EXERCISES TRAINING ON HIGH DENSITY LIPOPROTEIN AND LOW DENSITY LIPOPROTEIN OF URBAN SCHOOL OBESE BOYS STUDENTS

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ABSTRACT

The purpose of the study is to find out the impact of yogic practices and ballistic exercises on high-density lipoprotein and low-density lipoprotein of urban school obese boys students. Forty-five healthy, untrained students were selected from Karaikudi Maharishi Vidya Manddir Matric.Hr.Sec.School, Karaikudi. The subject's ages ranged from 13 to 15 years. They chose subjects that were isolated into three gatherings with fifteen subjects in each gathering. The preparation times of trial bunches were a month and a half, three elective days out of each week with a span of an hour. The control group did not undergo any training programme rather than their routine work. Pre-tests were conducted for all the 45 subjects on selected high-density lipoprotein and low-density lipoprotein variables. After the experimental period of six weeks, the post-test was conducted immediately. To study the effect of the yogic practices group and ballistic exercises training group along with a control group and to find out the significant mean differences among them, the analysis of covariance (ANCOVA) technique was used. Scheffe's test was pursued as a post hoc test to figure out which of the matched methods distinction was noteworthy. The 0.05 level of confidence was fixed to test the level of significance which was considered as appropriate. The results of the study were concluded that there was a significant improvement in selected variables.

KEY WORDS: Yoga, Physical Exercises, High-density lipoprotein, Low-density lipoprotei, Urban, Obese.

INTRODUCTION

Ballistic preparing, additionally called force preparing, is a type of preparation which includes tossing loads, and hopping with loads, so as to expand the dangerous force. The expectation in ballistic activities is to augment the quickening period of an article's development and limit the deceleration stage. For example, tossing a drug ball boosts the speeding up of the ball; this can appear differently in relation to a standard weight preparing exercise where there would be an articulated deceleration stage toward the finish of the redundancy for example toward the finish of a seat press practice the free weight is decelerated and brought to a stop. So also, a competitor bouncing while holding a snare bar expands the increasing speed of the weight through the way toward holding it while they hop; whereas they would decelerate it toward the finish of a standard snare bar deadlift.

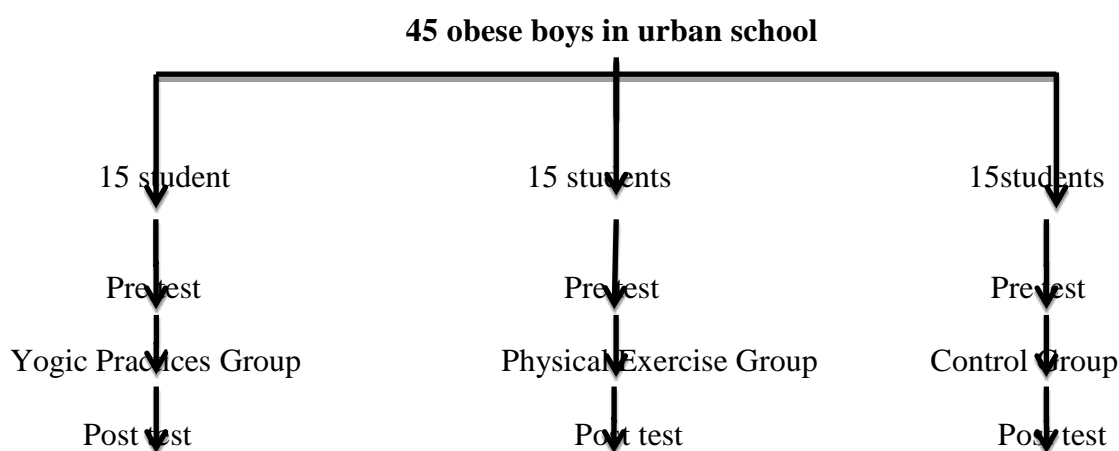
HDL (high-thickness lipoprotein) cholesterol, known as "unprecedented" cholesterol since raised levels rot coronary disorder probability, should address at any rate 25 percent of one's full-scale cholesterol. HDL transports cholesterol from the cells back to the liver so it may be discharged. It is, as it were, called the "remarkable" cholesterol since it passes on cholesterol from different bits of your body back to your liver. Your liver by then removes the cholesterol from your body. A blood test can measure your cholesterol levels, including HDL. When and how regularly you should get this test depends upon your age, danger segments, and family heritage.

Low-thickness lipoproteins (LDL) contain a higher proportion of cholesterol to protein and are thought of as the "awful" cholesterol. Raised levels of LDL lipoprotein

increment the danger of coronary illness, stroke, and fringe conduit sickness, by helping structure cholesterol plaque along within supply route dividers. After some time, as plaque development (plaque stores) builds, the conduit limits (atherosclerosis) and bloodstream diminish. On the off chance that the plaque cracks, it can cause blood coagulation to frame that forestalls any bloodstream. This coagulation is the purpose behind respiratory disappointment or myocardial restricted corruption if the coagulation occurs in one of the coronary channels in the heart.

METHODOLOGY

The purpose of the study is to find out the impact of yogic practices and ballistic exercises training on high-density lipoprotein and low-density lipoprotein of urban school obese boys students. The selected subjects were divided into three groups with fifteen subjects in each group selected randomly, with two experimental groups and one control group. Experimental Group I underwent the yogic practices training selected asanas and pranayama. Experimental Group II underwent the selected ballistic exercise training. The preparation times of trial bunches were a month and a half, three elective days out of each week with a span of an hour. The control group did not undergo any training programme rather than their routine work. All the groups were tested on selected criterion variables such as high-density lipoprotein and low-density lipoprotein prior to and immediately after the training programme. High-Density Lipoprotein and Low-Density Lipoprotein were assumed by the lab test. The analyses of covariance (ANCOVA) were utilized to locate the critical contrast assuming any, among the exploratory gatherings and control bunch on chosen foundation factors.



RESULTS AND DISCUSSION

Table-1

Analysis of Covariance for the Pre, Post and Adjusted Post Test Means Values for Control Group, Yogic Practices Group and Ballistic Exercises Group on High-Density Lipoprotein (mg/dL)

	CG	YPG	BEG	Source of Variance	Sum of Squares	Df	Mean Squares	Obtained 'F' ratio
Pre test Mean	36.66	36.23	36.73	Between	2.202	2	1.101	0.28
				Within	162.89	42	3.88	

Post Test Mean	36.00	37.12	39.67	Between	105.89	2	52.95	9.67*
				Within	229.93	42	5.47	
Adjusted Post Test Mean	35.89	37.42	39.48	Between	97.36	2	48.68	26.84*
				Within	74.36	41	1.81	

*Significant at 0.05 level of confidence

The table-I shows that the pre-test mean values on High-Density Lipoprotein of the control group, yogic practices group and ballistic exercises training group were 36.66, 36.23 and 36.73 respectively. The obtained 'F' ratio of 0.28 for pre-test mean was less than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on High-Density Lipoprotein. Hence it was insignificant. The post-test mean values on High-Density Lipoprotein of control group, yogic practices group, ballistic exercises training group were 36.00, 37.12 and 39.67 respectively. The obtained 'F' ratio 9.67 for post-test mean was greater than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on high-density lipoprotein. Hence it was significant. The adjusted post-test means of control group, yogic practices group and ballistic exercises training group were 35.89, 37.42 and 39.48 respectively. The obtained 'F' ratio 26.84 for adjusted post-test mean was greater than the table value 3.23 for df 2 and 41 required for significance at 0.05 level of confidence high-density lipoprotein. Since the obtained 'F' ratio value was significant further to find out the paired mean difference, the Scheffe's post hoc test was employed and presented in a table- II

Table-II
The Scheffe's Test for the Difference between Paired Means of High-Density Lipoprotein (mg/dL)

Means			Mean Difference	Required CI
Control Group	Yogic Practices Group	Ballistic Exercises Group		
35.89	37.42	-	1.53*	1.25
35.89	-	39.48	3.59*	
-	37.42	39.48	2.06*	

*Significant at 0.05 level of confidence

Table-II shows the significant difference of paired adjusted post-test means of control group, yogic practices group and ballistic exercises training group on High-Density Lipoprotein. The obtained mean differences between the control group, yogic practices group and ballistic exercises training group were 1.53, 3.59 and 2.06 respectively. The required confidence interval value was 1.25.

Since the acquired mean contrasts between the benchmark group and trial bunches were more noteworthy than they got certainty interim worth High-Density Lipoprotein, it was presumed that the yogic practices gathering and ballistic activities preparing bunch improved the High-Density Lipoprotein superior to anything the benchmark group. Further, it was concluded that the ballistic exercises group improved the High-Density Lipoprotein better than the yogic practices group.

Figure -I
Bar Diagram Showing the Pre, Post and Adjusted Post Test Mean Values of Control Group, Yogic Practices Group and Ballistic Exercises Group on High-Density Lipoprotein

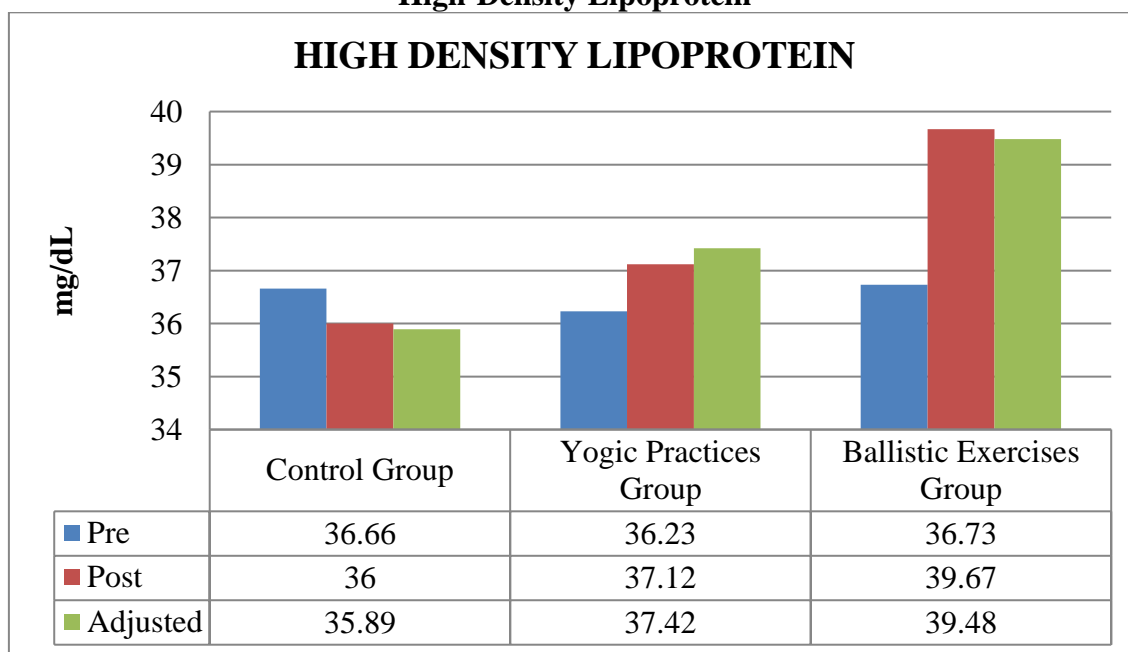


Table-III
Analysis of Covariance for the Pre, Post and Adjusted Post Test Means Values for Control Group, Yogic Practices Group and Ballistic Exercises Group on Low-Density Lipoprotein (mg/dL)

	CG	YPG	BEG	Source of Variance	Sum of Squares	Df	Mean Squares	Obtained 'F' ratio
Pre test Mean	183.8	182.73	183.53	Between	9.244	2	4.622	0.5
				Within	3917.07	42	93.26	
Post Test Mean	190.8	180.2	171.35	Between	2843.98	2	1421.99	13.49*
				Within	4425.22	42	105.36	
Adjusted Post Test Mean	190.58	180.51	171.26	Between	2798.46	2	1399.23	16.72*
				Within	3431.96	41	83.71	

*Significant at 0.05 level of confidence

The table-III show that the pre-test mean values on Low-Density Lipoprotein of a control group, yogic practices group and ballistic exercises training group were 183.8, 182.73 and 183.53 respectively. The obtained 'F' ratio 0.5 for pre-test mean was less than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Low-Density Lipoprotein. Hence it was insignificant. The post-test mean values on Low-Density Lipoprotein of control group, yogic practices group, ballistic exercises training group were 190.8, 180.2 and 171.35 respectively. The obtained 'F' ratio 13.49 for post-test mean was greater than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Low-Density Lipoprotein. Hence it was significant. The adjusted post-test means of control group, yogic practices group and ballistic exercises training group were

190.58, 180.51 and 171.26 respectively. The obtained 'F' ratio 16.72 for adjusted post-test mean was greater than the table value 3.23 for df 2 and 41 required for significance at 0.05 level of confidence Low-Density Lipoprotein. Since the obtained 'F' ratio value was significant further to find out the paired mean difference, the Scheffe's post hoc test was employed and presented in a table- IV

Table-IV
The Scheffe's Test for the Difference between Paired Means of
Low-Density Lipoprotein (mg/dL)

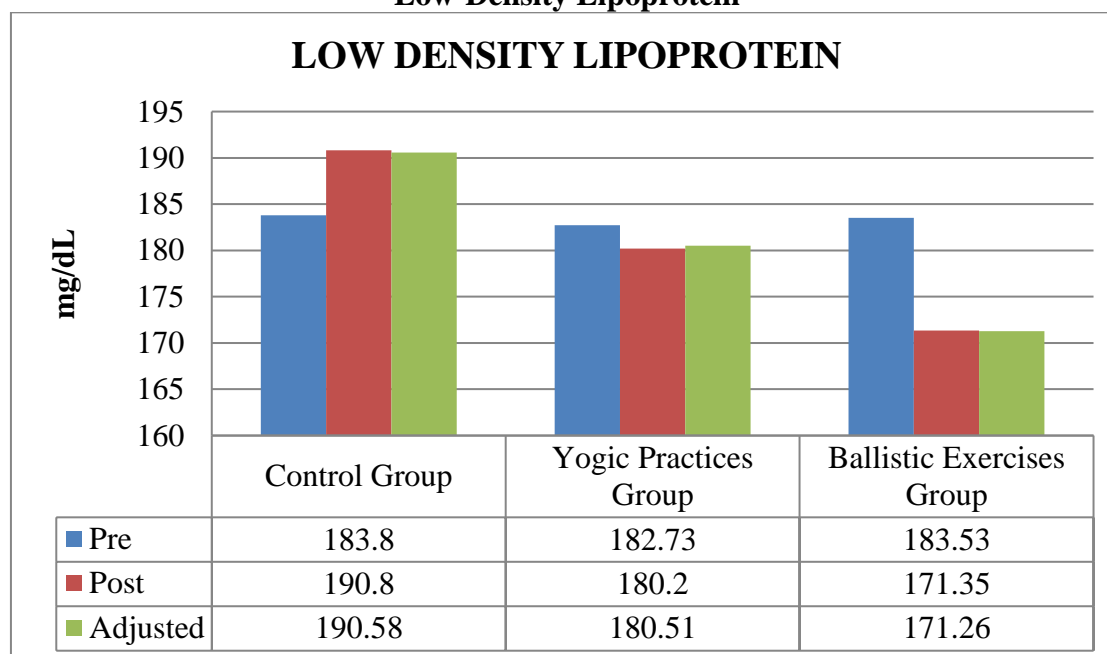
Means			Mean Difference	Required CI
Control Group	Yogic Practices Group	Ballistic Exercises Group		
190.58	180.51	-	10.07*	8.49
190.58	-	171.26	19.32*	
-	180.51	171.26	9.25*	

*Significant at 0.05 level of confidence

Table-IV shows the significant difference of paired adjusted post-test means of control group, yogic practices group, and ballistic exercises training group on Low-Density Lipoprotein. The obtained mean differences between the control group, yogic practices group and ballistic exercises training group were 10.07, 19.32 and 9.25 respectively. The required confidence interval value was 8.49.

Since the obtained mean differences between the control group and experimental groups were greater than the obtained confidence interval value Low-Density Lipoprotein, it was concluded that the yogic practices group and ballistic exercises training group improved the Low-Density Lipoprotein better than the control group. Further, it was concluded that the ballistic exercises group improved the Low-Density Lipoprotein better than the yogic practices group.

Figure -II
Bar Diagram Showing the Pre, Post and Adjusted Post Test Mean Values of Control Group, Yogic Practices Group and Ballistic Exercises Group on Low-Density Lipoprotein



CONCLUSIONS

1. It was concluded from the results of the study that the yogic practices and ballistic exercises groups showed significant improvement in High-Density Lipoprotein and Low-Density Lipoprotein when compared with a control group.
2. Ballistic exercises training were a suitable training system to improve the High-Density Lipoprotein and Low-Density Lipoprotein among the obese boys student.

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