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THE INFLUENCE OF YOGIC PRACTICE, AEROBIC TRAINING AND COMBINED TRAINING ON UPPER BODY MUSCULAR ENDURANCE AMONG ENGINEERING STUDENTS.

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Abstract
The motivation behind the study was to figure out the Influence of chosen Yogic Practice, Aerobic Training and combined training on Upper Body Muscular Endurance among Engineering Students. One hundred female obese college student's under Visvesvaraya Technological University in Bengaluru region were arbitrarily picked as tests and their age ran between 18 to 20 years. The chose subjects were isolated into 3 trial gathering and 1 benchmark group by arbitrary. Bunch I went through yogic practice, Group II went through Aerobic Training, Group III performed Combined Training (Yogic Practice and Aerobic Training) and Group VI as control bunch for Five days in seven days for a time of twelve weeks. The reliant factors chose for this review were Upper Body Muscular Endurance, the reliant factors to be specific Upper Body Muscular Endurance estimated by changed Bent Knee Push up test, the information were gathered from each subject previously, during and after the preparation period and measurably dissected by utilizing subordinate "t" test and examination of covariance (ANCOVA). It was viewed that Yoga training was better in increasing push up count among college students than the other training group.

Keywords: Yogic practice, Aerobic Training, Combined Training and Muscular Endurance.

Introduction

A woman's right to the enjoyment of the highest standard of health must be guaranteed throughout her lifetime, equal to that of men. Women are affected by many of the same health conditions as men, but women experience them differently due to both genetics and the social construction of gender. Good health is essential to leading a productive and fulfilling life of dignity, and the right of all women to control all aspects of their health. In modern days people prefer going for different workout plans. Many prefer yoga, aerobics and weight training and claim it has transformed their lives. With a mindful Physical fitness training like Yoga, aerobics and combined training, the benefits of training for women extend well beyond just physical progress.

Although obesity has been defined as the most common health problem in modern societies; currently, it is a problem with gradually increasing frequency both in developed and developing countries. Changing lifestyles reduces the daily time period during which children are active. Television and computers are factors for this change, and insufficient recreation/play areas in districts of low development levels, the fact that families do not give permission for their children to play outside because of unsafe external environments, and transportation of children to school by vehicles are the main causes that lead to a reduction in physical activity. Unfortunately, a child involuntarily stuck at home burns very little energy with indoor activities, after a sedentary lifestyle is established; it is very difficult to develop behavioural modification in daily life.

Physical activity is closely linked with health and well-being, however, many of us do not engage in regular exercise. Yoga, aerobics and combined training has gained much interest in recent years as feasible strategy for increasing physical activity. Regular practice of yoga and aerobics improves muscles in your arms, back, chest, and shoulders which is vital to keeping your upper body strong, reduces fat and giving your muscles endurance and strength. Yoga and aerobics are an essential component of any fitness routine, especially for your upper body and improves posture. Numerous researchers, specialist, psycholinguists are widely concentrating their advantageous parts of yoga and aerobic exercises which urges as to accomplish positive health through yogic and aerobic exercise.

Few literature surveys has done and found the following study very feasible to my work: The study **Dhokrat (2015)** indicates that yoga has significantly increased the endurance capacity of abdominal muscles, flexibility and muscular strength in school boys. The results revealed that balance, flexibility, muscular endurance was significantly improved after practices of Yoga. It was concluded that Yoga training program of certain duration enhanced the push up count among school boys.

Pawiter singh (2017) undertaken to evaluate the effect of 6 weeks' yoga training program on physical fitness components of tug of war players. The result showed that there was increase in push up count after yoga training among tug of war players.

We can conclude that Yoga and aerobic exercise are the two ways to wind up mind full of all round and wonderful development among college students in the modern society. Thus, the specialists influenced and endeavour to investigate the experimental examination to inspect the impact of Yogic practice and aerobic practice on Upper body muscular endurance among engineering students.

This paper has organized under different sections which tell about the objectives of the study and the methodology used to achieve the objectives are discussed.

Problem of the Research

The reason for the study is to figure out the Influence of chosen different training Upper Body Muscular Endurance among Engineering Students.

Objective of the Study

The goal of the study is to decide the Influence of chosen Training on Upper Body Muscular Endurance among obese Engineering Female Students.

Hypothesis

1. There would be huge contrasts in the difference in Upper Body Muscular Endurance when contrasted with Aerobics training, Yogic Practices and combined training.
2. It was estimated that multi week of Aerobics preparing would be a huge improvement of Upper Body Muscular Endurance of Engineering Students.

Methodology

Hundred (N=100) obese female understudies concentrating under Visvesvaraya Technological University in Bengaluru region were haphazardly picked as tests and their age went between 18 to 20 years were randomly assigned to four equal groups of 25 subjects. The chose subjects were separated into exploratory gathering and a benchmark group. Prepared for Five days in week for a time of twelve

weeks. The reliant factors chose for this review were Upper Body Muscular Endurance, Upper Body Muscular Endurance estimated by changed Bent knee push-ups, the information were gathered from each subject previously, during and after the twelve week preparing period. The post test score was directed on said rule variable after the treatment. The contrast among pre and post mean scores on Upper Body Muscular Endurance considered as the impact of examination medicines. Investigation of fluctuation and examination of covariance was utilized to decide the meaning of the means for said standard variable. Post hoc investigation was made utilizing LSD test when gotten F esteem was huge. In all cases 0.05 level and 0.01 levels was fixed to test the speculation.

Results and Inference

Examination of Influence of chosen Training Experimental Group and control Group on Upper Body Muscular Endurance among Engineering Students was introduced in the accompanying table.

Table – 1
Analysis of covariance on Cardio Vascular Endurance among Experimental Group and Control Group

Test	Yoga group	Aerobics group	Yoga& Aerobics group	Control group	Sources of Variance	Sum of squares	DF	Mean squares	F value
Pre-test mean	10.45	10.65	9.85	10.45	Between	7.20	763	2.40	0.457
					Within	399.0		5.25	
Mid test mean	15.50	15.35	14.20	10.75	Between	293.30	763	97.77	18.5*
					Within	402.50		5.296	
Post-test mean	22.55	21.10	20.10	10.95	Between	1652.05	763	550.68	112.7*
					Within	371.50		4.89	
Adjusted post-test mean	16.67	15.70	14.72	10.72	Between	837.02	753	279.02	121.4*
					Within	8.175		2.73	

Source: Primary data

The above table shows the pre-test means on Push up test of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group are 10.45, 10.65, 9.85, 10.45 respectively and the F value is 0.457. The F value is insignificant at 0.05 level of significance for 3 and 76 degrees of freedom. The mid-test means on Push up test of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group are 15.50, 15.35, 14.20, and 10.75 respectively and the calculated F value is 18.55. The F value is significant at 0.05 level of significance for 3 and 76 degrees of freedom. The post-test means on body weight of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group are 22.55, 21.10, 20.10, and 10.95 respectively and the calculated F value is 112.7. The F value is significant at 0.05 level of significance at 3 and 76 degrees

of freedom. The adjusted posttest means on body weight of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group are 16.67, 15.70, 14.72 and 10.72 respectively and F value is 121.4. The F value is significant at 0.05 level of significance at 3 and 75 degrees of freedom. The analysis of the study indicates that there is a statistically significant difference between the posts adjusted means of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group on Push up test.

Thus, it can be concluded that there is a significant difference between the Yoga group, the Aerobics group, a combination of the Yoga and Aerobics group, and the Control group on Push up test. To examine which of the paired means had a significant difference, the scheffe's post hoc test was used and the results are presented in the below table-II

Table-II, Computation of Scheffe's Post-hoc Test Ordered Adjusted Final Mean of Push up test

Yoga group	Aerobics group	Yoga &Aerobics group	Control group	Mean difference	Confidence interval
16.67	15.70			0.97	
16.67		14.72		1.95	
16.67			10.72	5.95	
	15.70	14.72		0.98	
	15.70		10.72	4.98	
		14.72	10.72	4	

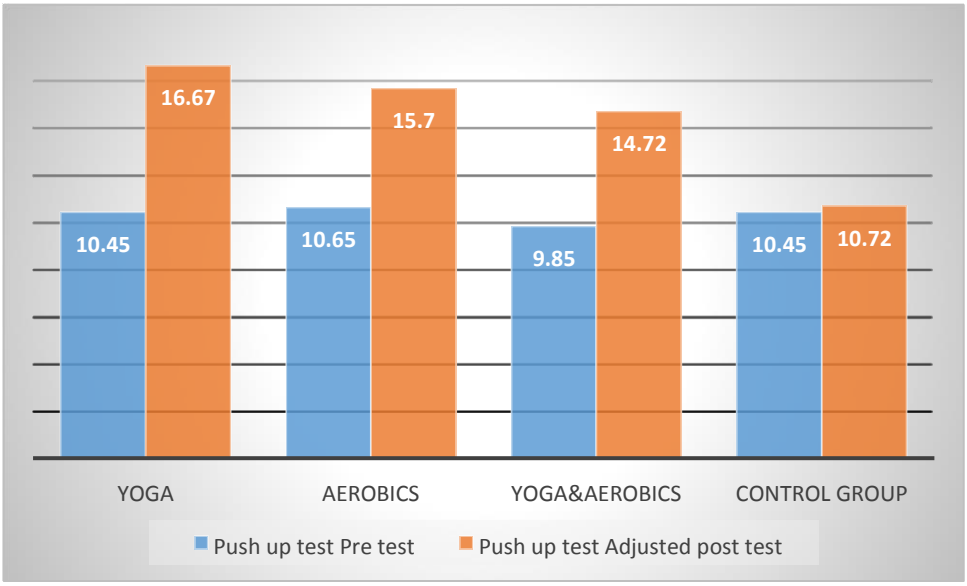
***= significant at 0.05 level.**

The above table shows the adjusted post-test mean difference on Yoga and Aerobics group, Yoga group and a combination of Yoga and Aerobics group and Aerobics and a combination of Yoga & Aerobics group is 0.97 and 0.15, 0.56 respectively which are lesser than the confidence interval of 0.66 which is insignificant at 0.05 level of significance for 3 and 75 degrees of freedom.

It also shows that adjusted post-test difference on sit and reach count of yoga group and control group, Aerobics group and control group, and a combination of Yoga and Aerobics group and control group are 2.16, 1.75, 2.31 respectively and higher than the confidence interval value of 0.66 which is significant at 0.05 level of significance for 3 and 75 degrees of freedom.

Therefore, it can be concluded from the study that there is no significant difference between the adjusted post-test means of Yoga and Aerobics group, Yoga and a combination of Yoga and Aerobics group and Aerobics and a combination of Yoga and Aerobics group. There is a statistically significant difference between the adjusted post-test means of yoga group and control group, Aerobics group and control group, and a combination of Yoga and Aerobics group and control group on push up test. The intervention of yoga, aerobics and a combination of yoga and aerobics training are proved by increasing the Push up test count among the engineering college students.

GRAPH -I
The mean values of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group on Push up test are graphically Presented in



Graph-I Bar chart illustrates comparison of pre-test, and adjusted post-test mean scores of Push up test of engineering college students of Yoga group, Aerobics group, a combination of Yoga and Aerobics group, and Control group.

Conclusion

The result of the study reveals that there was a significantly differs in the push up test of Yoga, Aerobic and a combination of Yoga & Aerobics training between the mid test and posttest. But there is no significant difference in the push up test of Experimental group and control group between pretest.

According to adjusted post-test means there was no significant difference between the adjusted post-test means of Yoga and Aerobics group, yoga and a combination of Yoga and Aerobics. There was a significant difference between the adjusted post-test means of yoga group and control group, Aerobics group and control group, and a combination of Yoga and Aerobics group and control group on push up test. The intervention of yoga, aerobics and a combination of yoga and aerobics training are proved by increasing the Push up test count among the engineering college students.

Based on mean scores, there was more difference in the mean score of push up test in the Yoga group between pre and post-test compared to Aerobics and combined Yoga and Aerobics group. It can be concluded that Yoga training was better in increasing push up count among college students than the other training group.

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