



Combined Effect Of Yoga Practices And Calisthenics Exercise On Selected Physiological Variable Among School Students

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Abstract

The purpose of the present study was to investigate the combined effect of yoga practices and calisthenics exercise on selected physiological variables among school students. To achieve the purpose of the study thirty school students were selected from Usilampatti, Tamilnadu, INDIA during the year 2021. The subject's age ranges from 14 to 18 years. The selected subjects were divided into two equal groups consists of 15 men students each namely experimental group and control group. The experimental group underwent an combined yoga practices and calisthenics exercise programme for six weeks. The control group was not taking part in any training during the course of the study. Resting pulse rate was taken as criterion variable in this study. The selected subjects were tested on resting pulse rate was measured through to record the pulse rate the fingertips were placed on the radial artery at the thumb side of the wrist about an inch from the base of the thumb. Pre-test was taken before the training period and post- test was measured immediately after the six week training period. Statistical Technique 't' ratio was used to analyse the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to combined yoga practices and calisthenics exercise given to the experimental group on resting pulse rate when compared to control group.

Keywords: Combined yoga practices and calisthenics exercise, Resting Pulse Rate and 't' ratio

INTRODUCTION

Physical exercise can improve both your mental and physical health. Since yogic practice directly relates to lowering blood pressure that is what we will focus on. The benefits of yogic practice include reduced cholesterol and blood pressure, improved muscular endurance, reduced body fat and increased metabolism. Exercise pumps more blood through your veins. This increases the size of your arteries, prevents fat from clogging your arteries and helps prevent blood clots. The important idea behind cardio or yogic practice today, is to get up and do it if you want to reap the benefits of yogic practice.

Calisthenics, free body exercises performed with varying degrees of intensity and rhythm, which may or may not be done with light handheld apparatuses such as rings and wands. The exercises employ such motions as bending, stretching, twisting, swinging, kicking, and jumping, as well as such specialized movements as push-ups, sit-ups, and chin-ups. Calisthenics exercises are relatively quick and involve moving most or all of your body. You repeat each exercise at least 10-12 times. You do more if you like, depending on your fitness level. Yoga is universally benefiting all people of all ages.

The study of Yoga is fascinating to those with a philosophical mind and is defined as the silencing of the mind's activities which lead to complete realization of the intrinsic nature of the Supreme Being. It is a practical holistic philosophy designed to bring about profound state as well as an integral subject, which takes into consideration man as a whole. The aim of Yoga is to devise ways and means of helping the better emotional and intellectual concentration. (Ajay Malhotra.2011.)

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the combined effect of yoga practices and calisthenics exercise on selected physiological variables among school students.

METHODOLOGY

The purpose of the study was to find out the combined effect of yoga practices and calisthenics exercise on selected physiological variables among school students. To achieve this purpose of the study, thirty school students were selected as subjects at random. The age of the subjects were ranged from 14 to 18 years. The selected subjects were divided into two equal groups of fifteen subjects each, such as a combined yoga practices and calisthenics exercise group (Experimental Group) and control group. The experimental group underwent combined yoga practices and calisthenics exercise for three days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physiological variable, namely Resting pulse rate was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable Resting pulse rate was measured through to record the pulse rate the fingertips were placed on the radial artery at the thumb side of the wrist about an inch from the base of the thumb test at prior to and immediately after the training programme. The 't' test was used to analysis the significant differences, if any, in between the groups respectively. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was found out by pre-test. The data were analysed and dependent's test was used with 0.05 levels as confidence.

Table I Analysis of t-ratio for the Pre and Post Tests of Experimental and Control Group on

Resting pulse rate

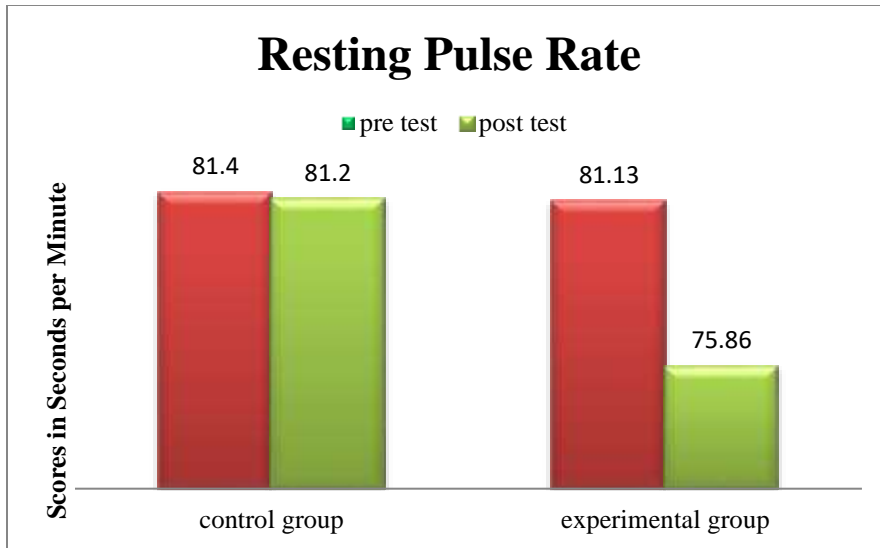
Scoring (Number of Beats/one minutes)

Variables	Group	Mean		SD		Sd Error		df	't' ratio
		Pre	Post	Pre	Post	Pre	Post		
Resting Pulse Rate	Control	81.40	81.20	3.90	4.46	1.00	1.15	14	0.53
	Experimental	81.13	75.87	4.12	3.96	1.06	1.02		25.53*

*Significance at .05 level of confidence.

The Table-I shows that the mean values of pre-test and post-test of the control group on Resting pulse rate were 81.40 and 81.20 respectively. The obtained 't' ratio was 0.53, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on Resting pulse rate were 81.13 and 75.87 respectively. The obtained 't' ratio was 25.53* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in resting pulse rate. It may be concluded from the result of the study that experimental group improved in resting pulse rate due to six weeks of combined yoga practices and calisthenics exercise.

Figure-1 Bar Diagram Showing the Pre and Post Mean Values of Experimental and Control Group on Resting Pulse Rate (Score in Seconds per Minute)



DISCUSSIONS ON FINDINGS

The result of the study indicates that the experimental group, namely combined yoga practices and calisthenics exercise group had significantly improved the selected dependent variable, namely Resting pulse rate, when compared to the control group. It is also found that the improvement caused by combined yoga practices and calisthenics exercise when compared to the control group.

CONCLUSIONS

1. There was a significant difference between experimental and control group on Resting pulse rate after the training period.
2. There was a significant improvement in Resting pulse rate. However the improvement was in favour of experimental group due to six weeks of combined yoga practices and calisthenics exercise.

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CONFLICT OF INTEREST

Nil

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