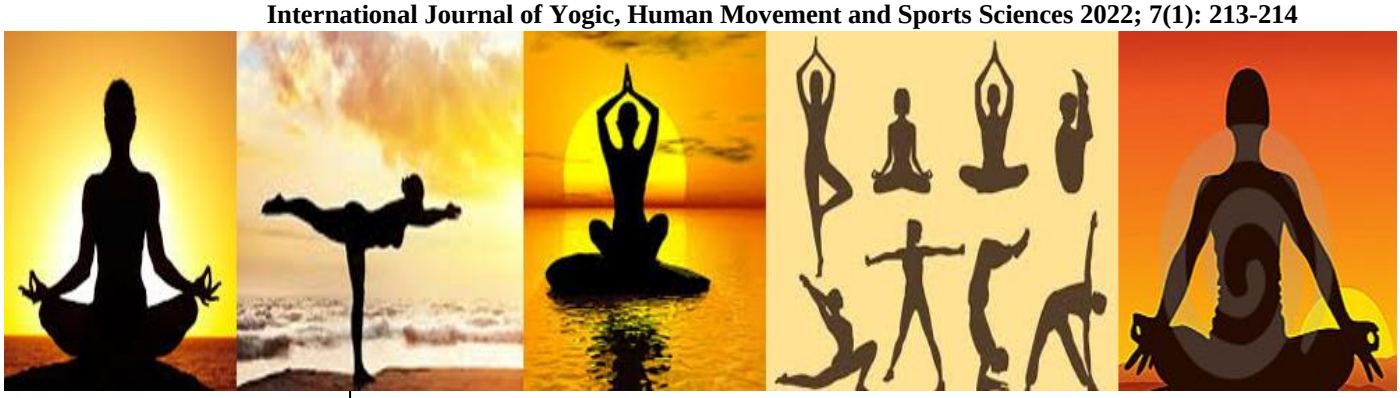
International Journal of Yogic, Human Movement and Sports Sciences 2022; 7(1): 213-214



ISSN: 2456-4419
Impact Factor: (RJIF): 5.18
Yoga 2022; 7(1): 213-214

www.theyogicjournal.com
Received: 18-01-2022
Accepted: 05-03-2022

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The effect of yoga on cardio respiratory endurance of teacher trainees

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Abstract
Aim of this study is to make clear whether yoga has any effect on the cardio respiratory endurance of teacher trainees. This study has been conducted on eighty students from Kerala University College of Teacher Education. These students were randomly divided into experimental and control groups of forty each. A twelve week training programme was given to the experimental group, after taking the pre test for the selected variable. The control group did not involve in any type of training. After the training programme, a post test was conducted for both groups. The data were analysed by using mean, standard deviation and t-test. The result reveals a significant improvement in the cardio respiratory endurance of teacher trainees due to yoga.

Keywords: Yoga, cardio respiratory endurance

Introduction
Yoga is believed to be an activity that can provide the same benefits as any type of well-organised physical exercise program, that improves general health and stamina, purifies and strengthens the body, mind and soul and improving those conditions brought about by sedentary lifestyles of people. It is an ancient Indian way of life which includes many asana and breathing exercises. Cardio respiratory endurance refers to the ability of the body to perform prolonged, large-muscle, dynamic exercise at moderate-to-high levels of intensity. Cardio respiratory endurance is an important part of overall physical fitness. It is the ability of the lungs and heart to take in and transport adequate amounts of oxygen to working muscles, allowing activities that involve large muscle masses (eg. running, swimming, bicycling) to be performed over long periods of time (Fox, Edward, 1971). The present investigation is an attempt to find out whether yoga has any effect on the cardio respiratory endurance of teacher trainees.

Objectives
The objective of this study is
To find out the effect of yoga on cardio respiratory endurance of teacher trainees.

Delimitations
This study is delimited to B.Ed students of Kerala University College of Teacher Education.
The study is further delimited to female students.

Limitations
No motivational techniques were used for this study.
The personal behavioral styles of students were beyond the control of the investigator is also considered as a limitation of the study.

Hypothesis
There will be significant change in the cardio respiratory endurance of teacher trainees due to yoga training.

Methodology

Selection of Subjects

For the purpose of this study, 80 students from Kerala University college of teacher education were selected as subjects. The average age of the subjects was 22 years.

Design of the Study

Randomly selected 80 subjects were divided into two equal groups as 'A' and 'B'. After taking the pre-test for the selected variable, the training programme was given to the experimental group 'A', and 'B' served as the control group. The experimental group 'A' had undergone the training programme in yoga for five days in a week for 12 weeks. After twelve weeks of training as per the schedule, a post-test was conducted for the same variable to both groups.

Administration of Training Programme

The experimental group was given an organised training programme for 12 weeks. The programme was of 40 minutes duration for five days in a week. This was monitored and controlled by the investigator. The control group did not involve in any session of training.

Statistical Technique for Analysis of Data

To find out the significance of difference between the pre-test and post-test data on the selected variable for the experimental and control groups, the 't'-test was applied.

Analysis of Data and Discussion of Findings

The t-test was employed to analyse the significant difference between pre-test and post-test on the selected variables.

The Significance of Differences between the Pre-Test and Post-Test Means of Cardio Respiratory Endurance of the Experimental and Control Groups

Groups	Means		MD	SD	SE	't' value
	Pre-test	Post-test				
Experimental group (N=40)	26.27	25.76	0.51	0.214	0.0339	15.001*
Control group (N=40)	26.59	26.61	0.02	0.083	0.0133	1.942

* Significant at 0.05 level 't' value required at 0.05 level = 2.03 (df 39)

The table shows that the post-test mean (25.76) of the experimental group is less than the pre-test mean (26.27). In the case of the control group, the post-test mean (26.61) is greater than the pre-test mean (26.59). The't' value (15.001) of the experimental group and the 't' value (1.942) of the control group, both derived from the 't' test, prove highly significant for the experimental group and insignificant for the control group, as compared to the tabulated 't' value (2.03), at 39 degrees of freedom at 0.05 level of significance. Hence the result of cardio respiratory endurance of the experimental group (Yoga) is statistically found significant. The results are also diagrammatically presented in figure 1.

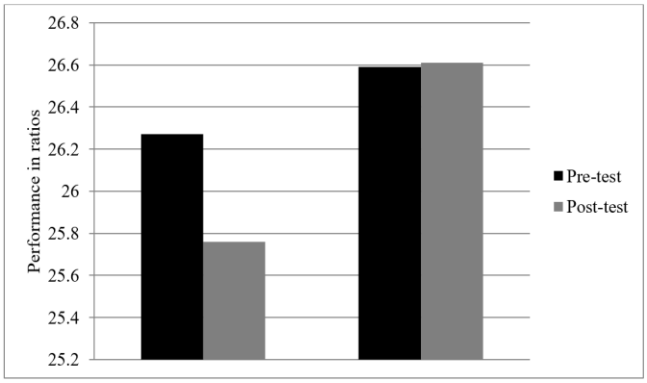

Fig 1: The result of cardio respiratory endurance of the experimental group (Yoga) is statistically found significant

Conclusion

The analysis of data clearly showed that due to yoga training, the cardio respiratory endurance of teacher trainees was significantly improved.

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