ISO 9001 - 2015

ISSN 2349 - 4891

Monthly

IJRRAS

IF
4.665

Volume 4,Issue 9, September 2017

International Journal of

Recent Research and Applied Studies

SURRAGH PUBLICATIONS

ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

Effect of Yoga Training on Selected Physical Fitness Components

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Received 30th July 2017, Accepted 1st September 2017

Abstract

The purpose of this study was to find out the effect of Yoga Training on Physical Fitness Components on college Students. This study was hypothesized that there will be significant effect of Yoga Training on Physical Fitness Components. The sources of data were collected from College of Agricultural Technology Students in Theni, Tamilnadu. The researcher had selected 30 male subjects for this study. All the subjects were divided into two groups (Pre and Post) consisting of 15 subjects each. The subjects were selected by using simple random sampling method. In this study the following equipments which were used for data collection (1) 40 Yard Shuttle Run were used to measure Agility and (2) Harvard Step Test were used to measure Cardio-Vascular Endurance. The data were analyzed and interpreted by using't' test and the level of significance at 0.05 was adequate for testing the hypothesis. Conclusion: (1) There was significant effect of Yoga training on the Agility (2) There was significant effect of Yoga training on the Cardio-Vascular Endurance.

Keywords: Agility, Cardio-Vascular Endurance.

Introduction

The training is a process of preparing an individual for any event or an activity or job. Usually in sports we use the term sports training which denote the sense of preparing sportspersons for the highest level of performance. But now- a-days sports training is not just a term but it is very important subject that affects each and every individual who takes up physical activity or sports either for health and fitness or for competition at different level. Hence sports training are the physical, technical, intellectual, psychological and moral preparation of an athlete or a player by means of physical exercises.

Hypothesis

It was hypothesized that there will be significant effect of Yoga training on selected Physical Fitness Components. Therefore hypothesis was partially accepted.

Methodology

The sources of data were collected from College of Agricultural Technology Students in Theni, Tamilnadu. The researcher had selected 30 male subjects for this study. All the subjects were divided into two groups (Pre and Post) consisting of 15 subjects each. The subjects were selected by using simple random sampling method. In this study the following equipments which were used for data collection (1) 40 Yard Shuttle Run were used to measure Agility and (2) Harvard Step Test were used to measure Cardio-Vascular Endurance.

Collection of Data

The necessary data was collected by administrating the tests for measuring the selected physical fitness components. Before collecting the data, the subjects was given a chance to practice the prescribed test so that they should become familiar with tests and know exactly what is to be done. To ensure the uniform testing conditions. The subjects were morning sessions and the data collected in College of Agricultural Technology Students in Theni, Tamilnadu.

Table 1
Experimental procedure of yoga training design

Sl No	Name of Group	Type of Group	Type of Training
1	A	Control Group	No Training
2	B	Experimental Group	Yoga Training

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Table 2
Six Weeks Yoga Training Schedule

Mon	Surya namaska	1 min. each set	24 set	2 min. Rest
Tues	Markatasana,Halasana, Vakrasana,Gomukhasana.	12 min. each set	3 set	2 min. Rest
Wed	Kapalbhati	10 min. each set	3 set	2 min. Rest
Thu	Nadi shodhana	10 min. each set	3 set	2 min. Rest
Fri	Surya namaskar	1 min. each set	24 set	2 min. Rest
Sat	Markatasana,Halasana Vakrasana, Gomukhasana	12 min. each set	3 set	2 min. Rest
Sun	-	-	-	-

Analysis of the data

The statistical analysis of the data gathered for the effect of Yoga training on Physical Fitness Components. The data collected qualitatively on four different test of Agility, Cardio Vascular Endurance of control group –A (N=15), and experimental groups (N=15). The data were analyzed and interpreted by using‘t’ test and the level of significance at 0.05 was adequate for testing the hypothesis.

Table 3
Agility between pre and post test of control group

Control Group	Mean	S.D	S.E Comb	M.D	D.F	O.T	T.T
Pre Test	11.73	1.46	0.44	0.5	28	1.55	2.02
Post Test	12.19	1.12					

Level of Significance = 0.05. Tabulated ‘t’ 0.05 (28) = 2.02

Table 3 reveals that there is no significant difference between means of pre and post test of control group, because mean of pre Test is 11.738 is less than mean of post Test is 12.192, and there mean difference is 0.46. To check the significant difference between pre and post Test of control group the data was again analyzed by applying‘t’ test. Before applying‘t’ test, standard deviation was calculated between pre-test where S.D. = 1.46 and Post Test where S.D. = 1.12 and their Combine standard error = 0.44. There was no significant difference between pre and post Test of control group because value of calculated ‘t’ = 1.55 which is less than tabulated ‘t’ =2.02 at 0.05 level of confidence, which shows no improvement was found in control group because no training was given to the subjects of control group.

Table 4
Agility between pre and post test of experimental group

Control Group	Mean	S.D	S.E Comb	M.D	D.F	O.T	T.T
Pre Test	11.09	0.75	0.21	0.51	28	2.40	2.02
Post Test	10.58	0.51					

Level of Significance = 0.05. Tabulated ‘t’ 0.05 (28) = 2.02

Table 4 reveals that there is no significant difference between means of pre and post test of experimental group, because mean of pre test is 11.09 is greater than mean of post test is 10.58, and there mean difference is 0.51. To check the significant difference between pre and post test of control group the data was again analyzed by applying ‘t’ test. Before applying ‘t’ test, standard deviation was calculated between pre-test where S.D. = 0.75 and Post test where S.D. = 0.51 and their Combine standard error = 0.21. There was significant difference between pre and post test of experimental group because value of calculated ‘t’ = 2.40 which is greater than tabulated’ =2.02 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training. of calculated ‘t’ = 5.619 which is greater than tabulated ‘t’ =2.02 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Table 5
Agility between post test of control and experimental group

Control Group	Mean	S.D	S.E Comb	M.D	D.F	O.T	T.T
Control Group	12.19	1.10	0.29	1.60	28	5.62	2.02
Experimental Group	10.59	0.50					

Level of Significance = 0.05. Tabulated 't' 0.05 (28) = 2.02

Table 5 reveals that there is least significant difference between means of post test of control and experimental group, because mean of post test of control group is 12.19 is greater than mean of post test of experimental group is 10.59, and there mean difference is 1.60. To check the significant difference between post test of control and experimental group the data was again analyzed by applying 't' test. Before applying 't' test, standard deviation was calculated between post test where S.D. (Control group) = 1.10 and S.D. of (experimental group) = 0.50 and their Combine standard error = 0.29. There was significant difference between post test of control and experimental group because value of calculated 't' = 5.62 which is greater than tabulated 't' =2.02 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Table 6
Cardio-vascular endurance between pre and post test of control group

Control Group	Mean	S.D	S.E Comb	M.D	D.F	O.T	T.T
Pre Test	0.15	0.020	0.007	0.005	28	0.58	2.02
Post Test	0.16	0.018					

Level of Significance = 0.05. Tabulated 't' 0.05 (28) = 2.02

Table 6 reveals that there is least significant difference between means of pre and post test of control group, because mean of pre test is 0.15 is slightly less than mean of post test is 0.16, and there mean difference is 0.005. To check the significant difference between pre and post test of control group the data was again analyzed by applying't' test. Before applying't' test, standard deviation was calculated between pre-test where S.D. = 0.020 and Post test where S.D. = 0.018 and their Combine standard error = 0.007. There was no significant difference between pre and post test of control group because value of calculated 't' = 0.58 which is less than tabulated 't' = 2.02 at 0.05 level of confidence, which shows no improvement was found in control group because no training was given to the subjects of control group.

Table 7
Cardio-vascular endurance between pre and post test of experimental group

Control Group	Mean	S.D	S.E Comb	M.D	D.F	O.T	T.T
Pre Test	0.14	0.025	0.007	0.04	28	6.17	2.02
Post Test	0.10	0.016					

Level of Significance = 0.05. Tabulated 't' 0.05 (28) = 2.02

Table 7 reveals that there is least significant difference between means of pre and post test of experimental group, because mean of pre test is 0.14 is greater than mean of post test is 0.10, and there mean difference is 0.007. To check the significant difference between pre and post test of control group the data was again analyzed by applying't' test. Before applying't' test, standard deviation was calculated between pre-test where S.D. = 0.025 and Post test where S.D. = 0.016 and their Combine standard error = 0.007. There was significant difference between pre andpost test of experimental group because value of calculated't' = 6.17 which is greater than tabulated 't' = 2.02 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Table 8
Cardio-vascular endurance between post test of control and experimental group

Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Control Group	0.19	0.18	0.008	0.055	28	8.85	2.02
Experimental Group	0.13	0.015					

Level of Significance = 0.05.Tabulated 't' 0.05 (28) = 2.02

Table 8 reveals that there is least significant difference between means of post test of control and experimental group, because mean of post test of control group is 0.19 is greater than mean of post test of experimental group is 0.13, and there mean difference is 0.055. To check the significant difference between post tests of control and experimental group the data was again analyzed by applying't' test. Before applying't' test, standard deviation was calculated between post tests where S.D. (Control group) =0.18 and S.D. of (experimental group) = 0.015and their Combine standard error = 0.008. There was significant difference between post tests of control and experimental group because value of calculated't' = 8.85 which is greater than tabulated't' = 2.02at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training

Conclusion

On the basis of the result drawn with the mentioned methodology the following
conclusion were soughed out:-

1. There was significant effect of Yoga training on the Agility.
2. There was significant effect of Yoga training on the Cardio Vascular Endurance.

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