

Effect of Yoga Training Programme on Selected Physical Fitness Components of College Going Students

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Abstract:

The main purpose of this study was to find out the effect of Yoga Training on Physical Fitness Components of Vasundhara Mahavidyalaya, Ghatnandur, Beed, 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 B.A. Final Year class students studying in Vasundhara Mahavidyalaya, Ghatnandur, Beed, The researcher had selected 36 male subjects for this study. All the subjects were divided into two groups (Pre and Post) consisting of 18 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 no significant effect of Yoga training on the Agility and (2) There was significant effect of Yoga training on the 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.

Methodology:

The sources of data were collected from B.A. Final Year class students studying in Vasundhara Mahavidyalaya, Ghatnandur, Beed, The researcher had selected 36 male subjects for this study. All the subjects were divided into two groups (Pre and Post) consisting of 18 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 Vasundhara Mahavidyalaya, Ghatnandur, Beed,.

Experimental Procedure of Yoga training design:

Sr.No.	Name of Group	Type of Group	Type of Training
1.	A	Control	No training
2.	B	Experimental	Plyometric Training

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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 and Cardio Vascular Endurance of control group –A (N=18), and experimental groups (N=18). 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 1
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	11.738	1.452	0.430	0.453	34	1.055	2.021
Post Test	12.192	1.102					

Level of Significance = 0.05. Tabulated ‘t’ 0.05 (34) = 2.021

Table 1 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 0.453. 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. = 1.452 and Post test where S.D. = 1.102 and their Combine standard error = 0.453. There was no significant difference between pre and post test of control group because value of calculated ‘t’ = 1.058 which is less than tabulated ‘t’ = 2.021 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 2
Agility between Pre and Post Test
of Experimental Group

Experimental Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Pre. Test	11.094	0.744	0.212	0.507	34	2.393	2.021
Post Test	10.587	0.503					

Level of Significance = 0.05. Tabulated ‘t’ 0.05 (34) = 2.021

Table 2 reveals that there is no significant difference between means of pre and post test of experimental group, because mean of pre test is 11.094 is greater than mean of post test is 10.587, and there mean difference is 0.507. 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. = 0.744 and Post test where S.D. = 0.503 and their Combine standard error = 0.212. There was significant difference between pre

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and post test of experimental group because value of calculated 't' = 2.393 which is greater than tabulated' =2.021 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Table 3
Agility between Post Tests Of Control
and Experimental Group

Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Control	12.192	1.102	0.286	1.604	34	5.619	2.021
Experimental	10.587	0.503					

Level of Significance = 0.05. Tabulated 't' 0.05 (34) = 2.021

Table 3 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 12.192 is greater than mean of post test of experimental group is 10.587, and there mean difference is 1.604. 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) = 1.102 and S.D. of (experimental group) = 0.503 and their Combine standard error = 0.286. There was significant difference between post tests of control and experimental group because value of calculated 't' = 5.619 which is greater than tabulated 't' = 2.021 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Graph 2
Graphical Representation of Mean Difference of Agility between Post-Post Test
of Control and Experimental Group

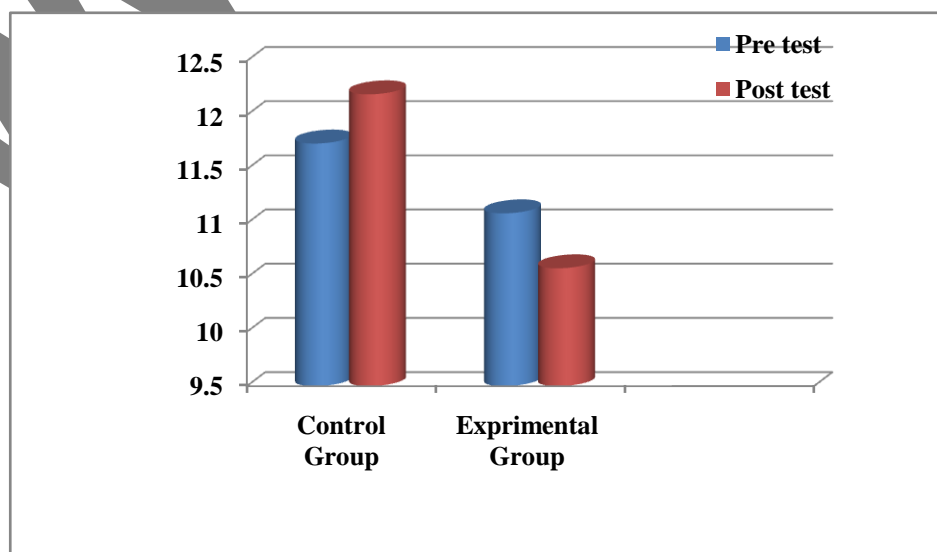


Table 4
Cardio-Vascular Endurance between Pre And
Post Test of Control Group

Control Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Pre. Test	0.145	0.020	0.006	0.004	34	0.576	2.021
Post Test	0.149	0.018					

Level of Significance = 0.05. Tabulated 't' 0.05 (34) = 2.021

Table 4 reveals that there is least significant difference between means of pre and post test of control group, because mean of pre test is 0.145 is slightly less than mean of post test is 0.149, and there mean difference is 0.004. 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 = 0.006. There was not significant difference between pre and post test of control group because value of calculated 't' = 0.576 which is less than tabulated 't' = 2.021 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 5
Cardio-Vascular Endurance between Pre And
Post Test of Experimental Group

Experimental Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Pre. Test	0.143	0.024	0.006	0.040	34	6.170	2.021
Post Test	0.103	0.013					

Level of Significance = 0.05. Tabulated 't' 0.05 (34) = 2.021

Table 5 reveals that there is least significant difference between means of pre and post test of experimental group, because mean of pre test is 0.143 is greater than mean of post test is 0.103, and there mean difference is 0.006. 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. = 0.024 and Post test where S.D. = 0.013 and their Combine standard error = 0.006. There was significant difference between pre and post test of experimental group because value of calculated 't' = 6.170 which is greater than tabulated 't' = 2.021 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

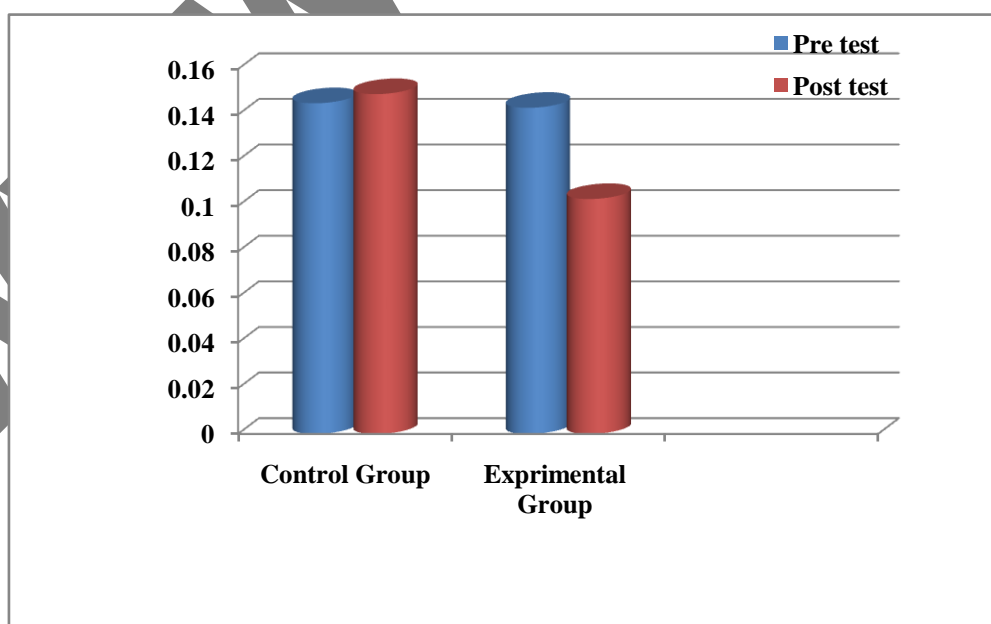
Table 6
Cardio-Vascular Endurance between Post Tests
Of Control and Experimental Group

Group	Mean	S.D.	S.E. Comb.	M.D.	D.F.	O.T.	T.T.
Control	0.149	0.018	0.005	0.045	34	8.754	2.021
Experimental	0.103	0.013					

Level of Significance = 0.05. Tabulated 't' 0.05 (34) = 2.021

Table 6 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 0.149 is greater than mean of post test of experimental group is 0.103, and there mean difference is 0.045. 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) = 0.018 and S.D. of (experimental group) = 0.013 and their Combine standard error = 0.005. There was significant difference between post tests of control and experimental group because value of calculated 't' = 8.754 which is greater than tabulated 't' = 2.021 at 0.05 level of confidence, which shows improvement was found in experimental group after six weeks Yoga training.

Graph 2
Graphical Representation Of Mean Difference Of
Cardio-Vascular Endurance Between Post-Post
Test Of Control and Experimental Group



Testing of Hypothesis:

It was hypothesized that there will be significant effect of Yoga training on selected Physical Fitness Components. But the effect of training does not show the significant effect on Agility and shows significant effect on Cardio Vascular Endurance. Therefore hypothesis was partially accepted and partially rejected.

Conclusion:

On the basis of the result drawn with the mentioned methodology the following conclusion were sougheed out.

1. There was no 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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