



P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIF): 5.38
IJPESH 2022; 9(5): 80-83
© 2022 IJPESH
www.kheljournal.com
Received: 03-06-2022
Accepted: 07-07-2022

Vikas Mehta
Associate Professor SGHS
College, Sri Jiwan Nagar, Sirsa,
Haryana, India

Effect of yogic asanas on the health related physical fitness of students

Vikas Mehta

Abstract

The main objective of the study was to analyze the effect of yogic asanas on the health related physical fitness of student. The study was conducted on 40 male students of Sri Guru Hari Singh College, Sri Jiwan Nagar, Sirsa, Haryana. The age of the subjects ranged between 18 to 27 years. The boys were divided into two equal groups 1. Experimental Group 2) Control Group on the basis of the mean performance of pre-test score. This training programme was of 6 week having 5 days a week. 't'-test was employed. 1 min. Bend Knee Sit-ups ($t = 0.964$), Sit & Reach Test ($t = 0.034$) and Body Mass Index ($t = 0.136$), as calculated t-values were less than the tabulated t-value. The significant difference was observed in pre-test and post-test of experimental group in 1 min. Bend Knee Sit-ups ($t = 4.161$), and Sit & Reach Test ($t = 2.168$). Insignificant difference was found in Body Mass Index ($t = 0.308$) which is less than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom. The significant difference was observed in post test of control and experimental group in, 1 min. Bend Knee Sit-ups ($t = 2.104$), and Sit & Reach Test ($t = 2.331$), Insignificant difference was found in Body Mass Index ($t = 0.255$) which was less than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Keywords: Yogic asanas, health related physical fitness and students

Introduction

Yoga means the experience of one or unity with inner being. This unity comes after dissolving the duality of mind and matter into the supreme reality. It is a science by which the individual approaches truth. The aim of all yoga practice is to achieve truth where the individual soul identifies itself with the supreme soul or God. The attitude towards Yoga and its acceptance has undergone a change over the last twenty years. This is true not only of our country where Yoga originated a thousand years ago, but also of far-flung countries all over the world. Yoga inculcates discipline. Yoga has the surest remedies for man's physical as well as psychological ailments. It makes the organs of the body active in their functioning and has good effect on internal functioning of the human body. Apart from being therapeutic, it is an exhilarating experience harmonizing the body, mind and spirit. The combination of posture, relaxation, repetitions and breathing clears the body of toxins, cleanses the mind and allows the free flow of energy.

Yoga is not a religion. It is a method by which one obtains control of one's latent powers. It is the means to reach complete self-realization. Yogis achieve this by turning their thoughts inward, away from the objective world. By yoga life is so organized and so satisfying that in its twilight a person will be content to let go without regrets and without a sense of leaving too much undone. Yoga is a re-education of one's mental recesses, along with the physical.

Objective

The main objective of the present study was to analyze the effect of yogic asanas on the health related physical fitness of the students.

Hypothesis

It was hypothesized that, Yogic asanas would improve health related physical fitness of the students.

Corresponding Author:
Vikas Mehta
Associate Professor SGHS
College, Sri Jiwan Nagar, Sirsa,
Haryana, India

Design of the study

40 male students of Sri Guru Hari Singh College, Sri Jiwan Nagar, was selected for the present study. The simple random sampling method was used for selection of the subjects. The age of the subjects ranged between 18 to 27 years. Following items were used for data collection:-

Criterion Measures

- Muscular Endurance- Bend Knee Sit ups
- Flexibility- Sit and Reach Test
- Obesity- Body Mass Index

Administration of Test

The students were divided into two equal groups 1) Experimental Group 2) Control Group on the basis of the mean performance of pre-test score. This training programme was 6 weeks having 5 days in a week.

Data Analysis

Table 1: Table showing the 1 min. Bend Knee Sit-ups of Pre and Post-tests of Control Group

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	12.450	4.174	1.500	1.556	0.964
Post-test	13.950	4.347			

Significant 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 1 show that, 1 min Bend Knee Sit-ups mean difference between the pre test and post test of control group is not significant, because the calculated t-value of 0.964 is less than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 2: Table showing the Sit & Reach Test between the Means of Pre and Post-tests of Control

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	9.100	2.902	0.044	1.041	0.034
Post-test	9.056	2.799			

Significant at 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 2 show that, Sit & Reach Test means difference between the pre test and post test of control group is not significant, because the calculated t-value of 0.034 is less than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 3: Table showing the Body Mass Index Pre and Post-tests of Control Group

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	21.517	2.032	0.100	0.739	0.136 [@]
Post-test	21.417	2.018			

Significant at 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 3 show that Body Mass Index mean difference between the pre test and post test of control group is not significant, because the calculated t-value of 0.136 is less than

the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 4: Table showing the Bend Knee Sit-ups Pre and Post-tests of Experimental Group

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	12.400	3.136	4.250	1.021	4.161*
Post-test	16.650	2.412			

* Significant at 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 4 shows that, 1 min Bend Knee Sit-ups mean difference between the pre test and post test of Experimental group is significant, because the calculated t-value of 4.161 is greater than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 5: Table showing the Sit & Reach Test Pre and Post-tests of Experimental Group

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	9.175	3.044	2.685	1.238	2.168*
Post-test	11.860	3.706			

* Significant at 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 5 shows that, Sit & Reach Test mean difference between the pre test and post test of Experimental group is significant, because the calculated t-value of 2.168 is greater than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 6: Table showing the Body Mass Index Pre and Post-tests of Experimental Group

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Pre-test	21.391	1.166	0.124	0.402	0.308 [@]
Post-test	21.267	1.032			

* Significant at 0.05 level, Tabulated $t_{0.05(19)} = 2.093$

Table no 6 shows that, Body Mass Index mean difference between the pre test and post test of Experimental group is not significant, because the calculated t-value of 0.308 is less than the tabulated t-value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Table 7: Table showing the Bend Knee Sit-ups of Post-tests of Control and Experimental Group

Group	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Control	13.950	4.347	2.700	1.283	2.104*
Experimental	16.650	2.412			

* Significant at 0.05 level, Tabulated $t_{0.05(38)} = 2.024$

Table no 7 shows that, 1 min Bent Knee Sit-ups mean difference between the post test of Control and Experimental group is significant, because the calculated t-value of 2.104 is greater than the tabulated t-value of 2.024 at 0.05 level of confidence of 38 degree of freedom.

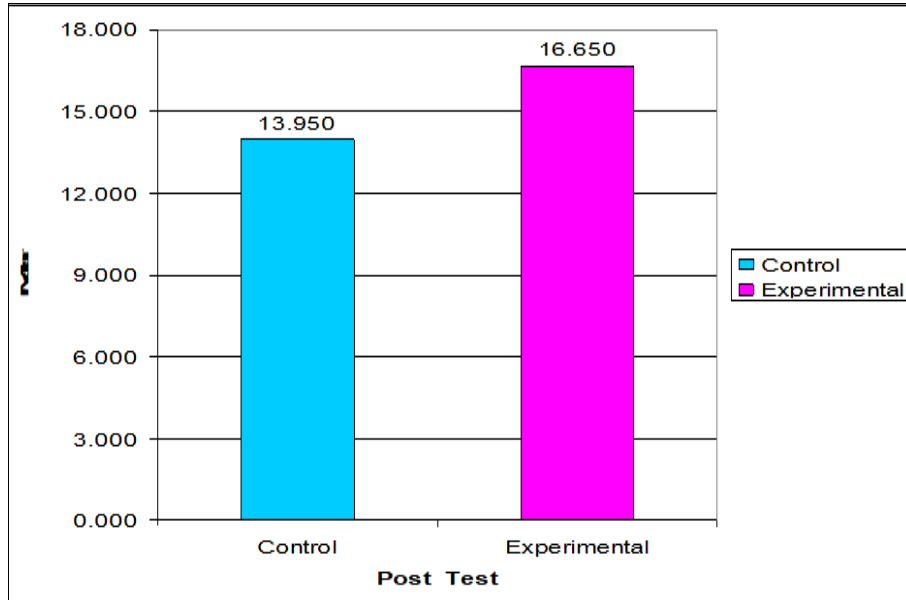


Fig 1: 1 min. Bend Knee Sit-ups means between the Post-tests of Control and Experimental group was graphically shown in Figure 1.

Table 8: Table showing the Sit & Reach Test of Post-tests of Control and Experimental Group

Group	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Control	9.065	2.799	2.795	1.199	2.331*
Experimental	11.860	3.706			

* Significant at 0.05 level, Tabulated $t_{0.05(38)} = 2.024$

Table no 8 shows that, Sit & Reach Test mean difference between the post test of Control and Experimental group is significant, because the calculated t-value of 2.331 is greater than the tabulated t-value of 2.024 at 0.05 level of confidence of 38 degree of freedom.

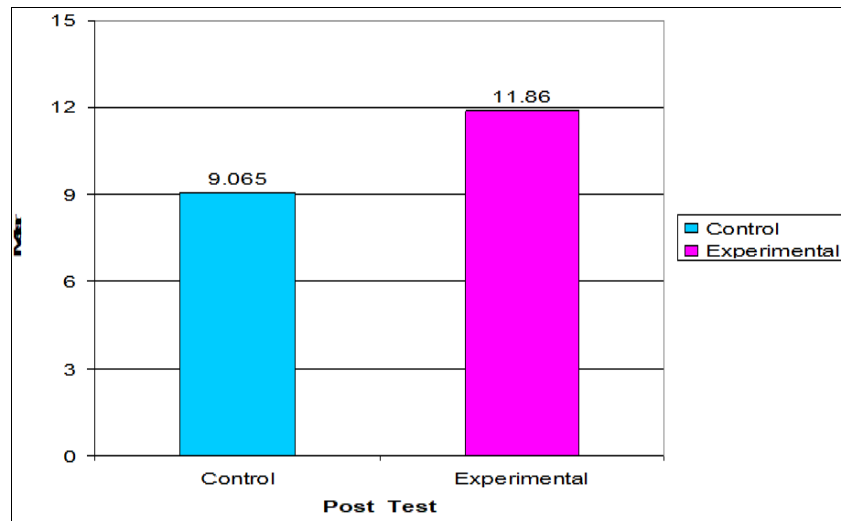


Fig 2: Sit & Reach Test means between the Post-tests of Control and Experimental group was graphically shown in Figure -2

Table 9: Table showing the Body Mass Index of Post-tests of Control and Experimental Group

Group	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Control	21.417	2.018	0.150	0.585	0.255@
Experimental	21.267	1.032			

*Significant at 0.05 level, Tabulated $t_{0.05(38)} = 2.024$

Table no 9 shows that, Body Mass Index mean difference between the post test of Control and Experimental group is not significant, because the calculated t-value of 0.255 is less than the tabulated t-value of 2.024 at 0.05 level of confidence of 38 degree of freedom.

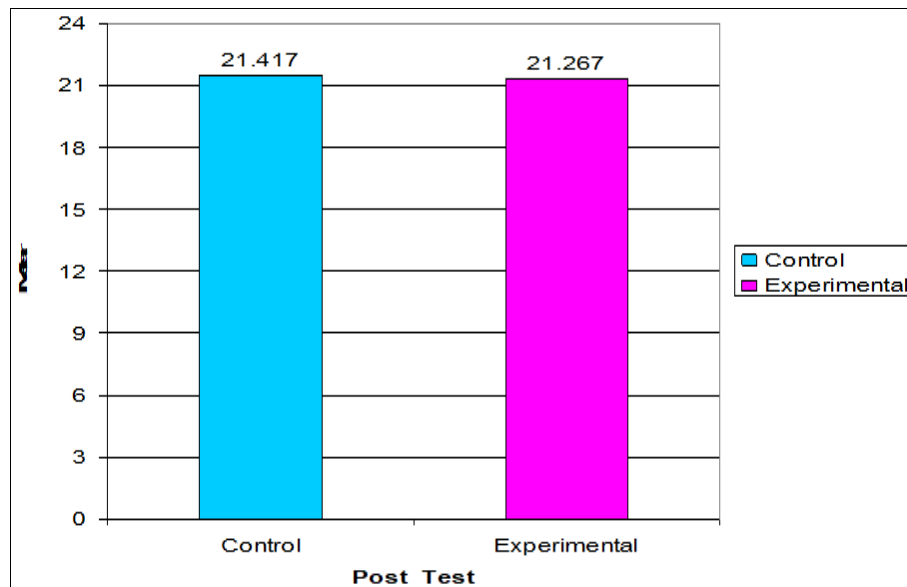


Fig 3: Body Mass Index means between the Pre and Post-tests of Experimental group was graphically shown in Figure - 3

Discussion on Findings

After statistical analysis the findings of the present study as follows:

- 1 min Bend Knee Sit-ups ($t = 0.964$), Sit & Reach Test ($t = 0.034$) and Body Mass Index ($t = 0.136$), because calculated t -values are less than the tabulated t -value of 2.093 at 0.05 level of confidence of 19 degree of freedom.
- Significant difference observed in pre test and post test of Experimental group in 1 min Bent Knee Sit-ups ($t = 4.161$), and Sit & Reach Test ($t = 2.168$), because calculated t -values are greater than the tabulated t -value of 2.093 at 0.05 level of confidence of 19 degree of freedom. But insignificant difference found in Body Mass Index ($t = 0.308$) it is less than the tabulated t -value of 2.093 at 0.05 level of confidence of 19 degree of freedom.
- Significant difference observed in post test of Control and Experimental group in, 1 min Bent Knee Sit-ups ($t = 2.104$), and Sit & Reach Test ($t = 2.331$), because calculated t -values are greater than the tabulated t -value of 2.093 at 0.05 level of confidence of 19 degree of freedom. But insignificant difference found in Body Mass Index ($t = 0.255$) it is less than the tabulated t -value of 2.093 at 0.05 level of confidence of 19 degree of freedom.

Justification of hypothesis

Earlier hypothesized was Yogic Asanas would improve the Health Related Physical Fitness of students. It is observed that significant difference found in, 1 min. Bend Knee Sit-ups, and Sit & Reach Test but not in Body Mass Index, hence the earlier stated hypothesis is partially accepted.

Conclusion

Further study concluded that the positive effect of Yogic Asanas on the Health Related Physical Fitness but not significant difference of Body Mass Index in male students.

References

1. Bhalla's Dorri. Inner Truth to Good-Health and Weight Loss. Kolkata; c1989. p. 5.
2. Dalai Nergis. Yoga for Rejuvenation Revitalizing Techniques of the Yoga. (New York: hursons); c1992. p.

- 12-13.
3. Dasgupta SN. Yoga Philosophy is Relation to Other Systems of the Indian Thoughts. (New Delhi: Narendra Prakash Jain); c1930. p. 3.
4. Ganguly SK. Effect of Yogic Training on Physical Fitness Yoga Mimamsa; c2006. p. 31-35.
5. Gaurav Vishaw. Effects of Hatha Yoga Training on the Health-Related Physical Fitness, International Journal of Sports Science and Engineering. 2011;5(3):169-173. ISSN 1750-9823.
6. Gharote ML, Ganguly SK. Effects of Nine Weeks Yogic Training Programme on Some Aspects of Physical Fitness of Physically conditioned young Males, Indian Journal of Medical Sciences. 1979;Oct 33:(10):258-263.
7. Gharote ML, Ganguly SK. Effect of yogic training on physical fitness. Yoga Mimamsa. 1973 Jan;15(4):31-35.
8. Gharote ML. Guidelines for Yogic Practices, (Lonavla: Medha Publications); c1982. p.1.
9. Giri C. Yoga and Physical Fitness with Special Reference to Athletics. (Patiala; IATHPER Journal; 1966, Apr 2-6.
10. Gopal KS, Artantharaman V, *et al.* The Effect of Yoeasanas on Muscular Tone and-Respiratory Adjustments, (Yoga Life). 1975 May;6(5):3-11.
11. Gore Makarand Madhukar. Anatomy and Physiology of Yogic Practices, (Shripad Grafics); c1984. p. 100-101.