# EFFECT OF YOGIC ASANAS ON HEALTH RELATED PHYSICAL FITNESS OF GIRL STUDENTS



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### **ABSTRACT**

The study was conducted to find out the effect of Yogic Asanas on Health Related Physical Fitness of Students. 40 girl students were selected on the bases of simple random sampling method. The age of the subjects ranged between 17 to 25 years. The Girls 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 Bent Knee Sit-ups (t = 0.964), Sit & Reach Test (t = 0.034) and Body Mass Index (t = 0.136), as calculated t-values are less than the tabulated t-value. 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). Insignificant difference 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. 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), Insignificant difference found in Body Mass Index (t = 0.255) which is 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 & 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 or 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

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breathing clears the body of toxins, cleanses the mind and allows the free flow of energy.

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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 menial recesses, along with the physical.

### **OBJECTIVE**

The main objective of the present study was to find out the Effect of Yogic Asanas on the Health Related Physical Fitness of Girl Students.

### **HYPOTHESIS**

It was hypothesized that, Yogic Asanas would be improved the Health Related Physical Fitness of College Girl Students.

### **METHODOLOGY**

The source of the data was collected form Girls of Agricultural College. 40 girl students were selected on the bases of simple random sampling method. The age of the subjects ranged between 17 to 25 years.

### **Criterion Measures:**

Muscular Endurance- Bent 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. 't'-test was employed.

Table No: I

Table showing the 1 min Bent 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	1.500	1.550	0.201

Significant 0.05 level

Tabulated  $t_{0.05 (19)} = 2.093$ 

Table No I show that, 1 min Bent 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.

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Table No: II

Table showing the Sit & Reach Test Between the Means of Pre and Post-tests of
Control Group

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	0.011	1.011	0.031

Significant at 0.05 level

Tabulated  $t_{0.05(19)} = 2.093$ 

Table II 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 No: III

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 <sup>@</sup>
Post-test	21.417	2.018	0.100	0.737	0.130

Significant at 0.05 level

Tabulated  $t_{0.05(19)} = 2.093$ 

Table III 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 No: IV
Table showing the Bent 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	250	1.021	

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(19)} = 2.093$ 

Table IV shows that, 1 min Bent 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.

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Table No: V

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	2.000	1.200	2.100

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(19)} = 2.093$ 

Table V 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 No: VI
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		0.102	0.500

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(19)} = 2.093$ 

Table VI 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 No: VII
Table showing the Bent 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	2.700	1.200	2.10

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(38)} = 2.024$ 

Table VII 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.

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

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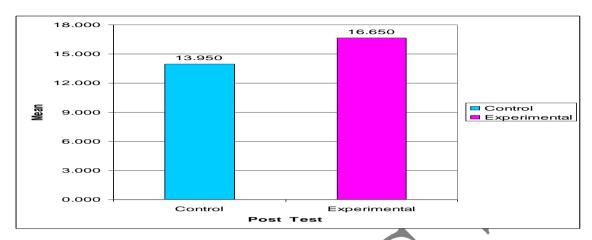


Figure No: I
Table No: VIII

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

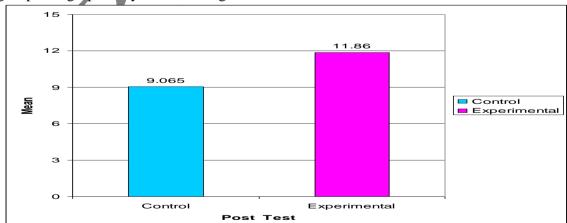
Group	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Control	9.065	2.799	2.795	1.199	2.331*
Experimental	11.860	3.706		111/	

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(38)} = 2.024$ 

Table VIII 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.

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



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Table No: IX
Table showing the Body Mass Index of Post-tests of Control and Experimental

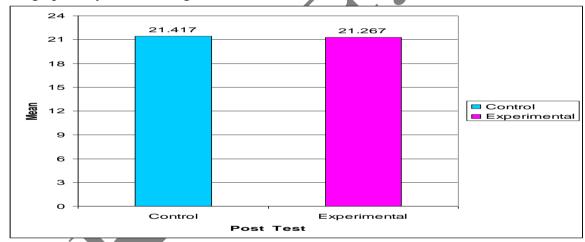
Group						
Group	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio	
Control	21.417	2.018	0.150	0.585	0.255 <sup>@</sup>	
Experimental	21.267	1.032			0.200	

<sup>\*</sup> Significant at 0.05 level

Tabulated  $t_{0.05(38)} = 2.024$ 

Table IX 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.

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



# **Discussion on Findings:**

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

- 1 min Bent 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

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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.

The 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 be improve the Health Related Physical Fitness of Agriculture College Girl Students. It is observed that significant difference found in, 1 min Bent 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 Agriculture College Girl Students.

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