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## Effect of yogic training on low level physical fitness of collegiate girls

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### Abstract

This study was designed to investigate the impact of yogic practices on low level physical fitness of collegiate girls. In this study, a sample of 40 low level physical fitness girls' students ranging between 18 to 20 years studying in college from Bharatiya Mahavidyalaya, Amravati District was taken as subjects for this study. Before selecting these 40 subjects researcher conducted AAHPERD youth physical fitness test on 60 subjects and who had less than 50% Physical Fitness Selected for the study. AAPHER Youth Physical Fitness Test was used to measure Physical Fitness of the subjects. The test consist these six test items: Flexed arm hang, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk. The selected forty subjects were randomly divided into two groups of twenty each, out of which group-A (n = 20) underwent yogic practice and group-B (n = 20) remained as control. The training programme was carried out for five days per week during morning session only (7 am to 8 am) for seven weeks. The data was analyzed using paired 't' test to compare the pre and post training values of both the groups. P value of less than 0.05 was accepted as indicating significant difference between the compared values. Our present findings that AAPHER Youth Physical Fitness tests such as Flexed arm hang, Sit-up, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk increased significantly after yoga training.

**Keywords:** Yogic training, physical fitness, girls

### Introduction

Today, yoga is widely adopted for physical, mental and spiritual health and peace. Yoga helps in controlling the body, mind and soul of a person. It brings together physical and mental discipline to calm the body and mind. It also helps in managing stress and anxiety and keeps you relaxed. Yoga asanas are known to develop strength, flexibility and confidence. One of the main advantages of practicing yoga is that it helps to manage stress. Stress is common these days and is known to have a devastating effect on one's body and mind. Stress causes people with serious problems like sleeping disorder, neck pain, back pain, headache, high heart rate, sweaty palms, heartburn, anger, insomnia and inability to concentrate.

### Methodology

In this study, a sample of 40 low level physical fitness girls' students ranging between 18 to 20 years studying in college from Bharatiya Mahavidyalaya, Amravati District was taken as subjects for this study. Before selecting these 40 subjects researcher conducted AAHPERD youth physical fitness test on 60 subjects and Who had less than 50% Physical Fitness Selected for the study. AAPHER Youth Physical Fitness Test was used to measure Physical Fitness of the subjects. The test consist these six test items: Flexed arm hang, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk.

### Yogic Training Programme

The selected forty subjects were randomly divided into two groups of twenty each, out of which group-A (n = 20) underwent yogic practice and group-B (n = 20) remained as control. The training programme was carried out for five days per week during morning session only (7 am to 8 am) for seven weeks.

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**Statistical Analysis**

The data was analyzed using paired ‘t’ test to compare the pre and post training values of both the groups. P value of less

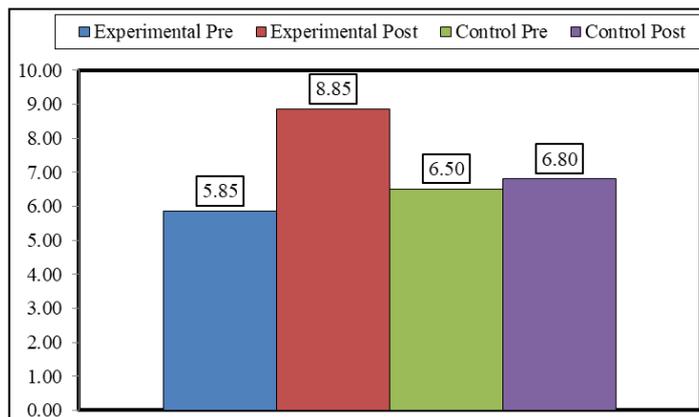
than 0.05 was accepted as indicating significant difference between the compared values.

**Table 1:** Comparison of flexed arm hangs between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	5.85	1.95	0.60	3.00	10.029*	19	2.093
	Post	20	8.85	1.84					
Control	Pre	20	6.50	0.83	0.27	0.30	1.453	19	2.093
	Post	20	6.80	0.89					

Table-1 shows that the significant difference in flexed arm hangs between pre and post test experimental group. The obtained ‘t’ value of 10.029 is more than the table value of 2.093 with 19 degree of freedom and insignificant difference

between pre and post test control group. The obtained ‘t’ value of 1.453 is less than the table value of 2.093 with 19 degree of freedom.



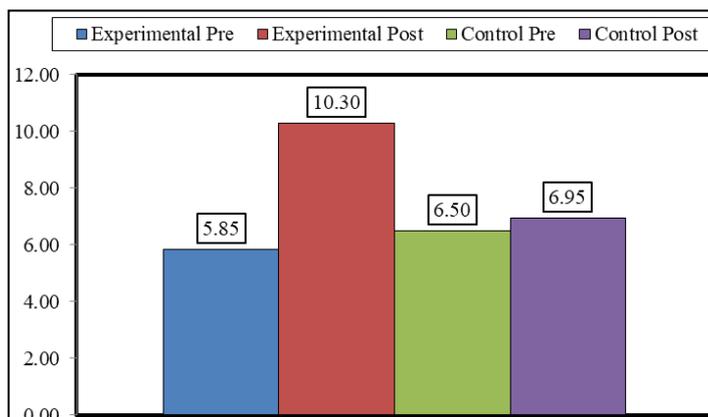
**Graph 1:** Mean value of flexed arm hangs between pre and post test of experimental and control groups

**Table-2:** Comparison of Sit-ups between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	5.85	2.13	0.68	4.45	18.108*	19	2.093
	Post	20	10.30	2.18					
Control	Pre	20	6.50	1.70	0.48	0.45	1.831	19	2.093
	Post	20	6.95	1.28					

Table-2 shows that the significant difference in sit-ups between pre and post test experimental group. The obtained ‘t’ value of 18.108 is more than the table value of 2.093 with

19 degree of freedom and insignificant difference between pre and post test control group. The obtained ‘t’ value of 1.831 is less than the table value of 2.093 with 19 degree of freedom.



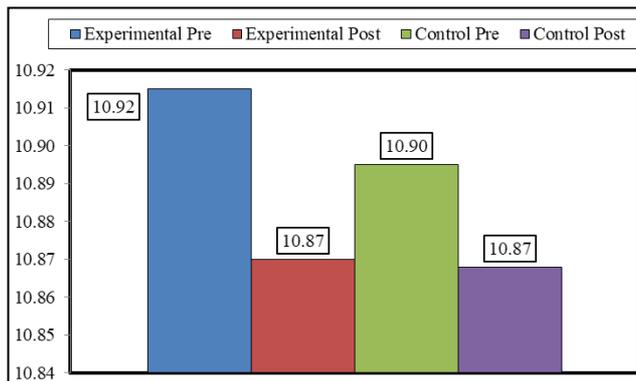
**Graph-2:** Mean value of sit-ups between pre and post test of experimental and control groups

**Table-3:** Comparison of shuttle run between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	10.92	0.64	0.20	0.05	1.528	19	2.093
	Post	20	10.87	0.61					
Control	Pre	20	10.90	0.63	0.21	0.03	0.605	19	2.093
	Post	20	10.87	0.70					

Table-3 shows that the insignificant difference in shuttle run between pre and post test experimental group. The obtained 't' value of 1.528 is less than the table value of 2.093 with 19

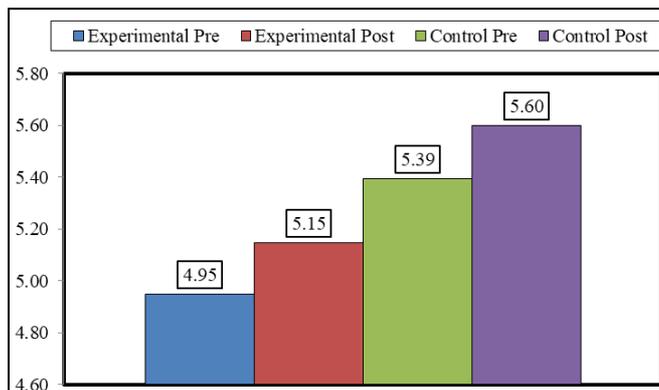
degree of freedom and insignificant difference between pre and post test control group. The obtained 't' value of 0.605 is less than the table value of 2.093 with 19 degree of freedom.



**Graph-3:** Mean value of shuttle run between pre and post test of experimental and control groups

**Table 4:** Comparison of standing broad jump between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	4.95	0.77	0.23	0.20	2.401*	19	2.093
	Post	20	5.15	0.71					
Control	Pre	20	5.40	0.73	0.22	0.20	1.983	19	2.093
	Post	20	5.60	0.66					



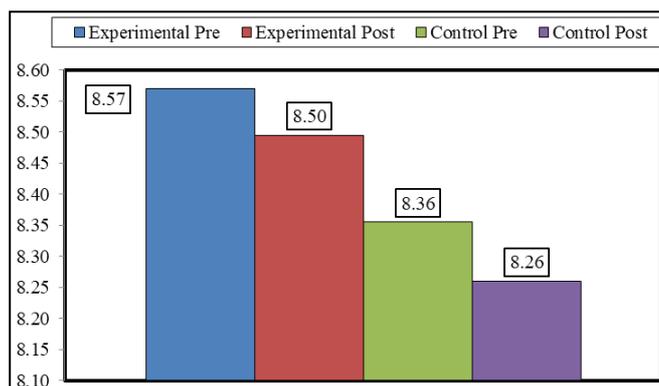
**Graph 4:** Mean value of standing broad jump between pre and post test of experimental and control groups

**Table 5:** Comparison of 50 yard dash between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	8.57	1.48	0.46	0.07	3.000*	19	2.093
	Post	20	8.50	1.43					
Control	Pre	20	8.36	1.06	0.34	0.10	1.956	19	2.093
	Post	20	8.26	1.07					

Table-5 shows that the significant difference in 50 yard dash between pre and post test experimental group. The obtained 't' value of 3.00 is less than the table value of 2.093 with 19

degree of freedom and insignificant difference between pre and post test control group. The obtained 't' value of 1.956 is less than the table value of 2.093 with 19 degree of freedom.



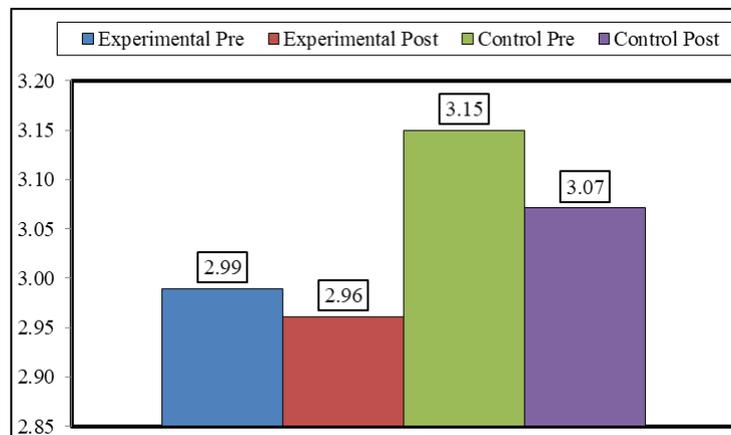
**Graph 5:** Mean value of 50 yard dash between pre and post test of experimental and control groups

**Table 6:** Comparison of 600 yard run and walks between pre and post test of experimental and control groups

Group	Test	N	Mean	SD	SE	MD	Ot	df	Tt
Experimental	Pre	20	2.99	0.57	0.18	0.03	4.862*	19	2.093
	Post	20	2.96	0.57					
Control	Pre	20	3.15	0.45	0.14	0.08	2.653*	19	2.093
	Post	20	3.07	0.44					

Table-6 shows that the significant difference in 600 yard run walks between pre and post test experimental group. The obtained 't' value of 4.862 is less than the table value of 2.093 with 19 degree of freedom and significant difference between

pre and post test control group. The obtained 't' value of 2.653 is more than the table value of 2.093 with 19 degree of freedom.

**Graph 6:** Mean value of 600 yard run walks between pre and post test of experimental and control groups

### Conclusion

Our present findings that AAPER Youth Physical Fitness tests such as Flexed arm hang, Sit-up, Standing Broad Jump, 50 yard Dash and 600 Yard Run/Walk increased significantly after yoga training is consistent with earlier studies. Sathish (2013) <sup>[1]</sup> have reported a significant increase in endurance and explosive power after six weeks of yoga training. Rayat (2015) <sup>[2]</sup> have reported that yogic training improves Muscular strength & endurance. Godara, (2017) <sup>[3]</sup> have reported the positive and significant effect of yogic exercises on the Physical fitness. The selected yogic exercises because of their slow movement and held position improve the muscular tone. This improved muscle tone of the abdominal, lower back, upper back and back & hamstrings is responsible for the improvement of Physical fitness. Thus, yoga is a miracle and once followed, it will guide you throughout your life. Per day Yoga can change your life in the long run by promoting balance between physical, mental and spiritual health.

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