



P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (ISRA): 5.38  
IJPESH 2017; 4(2): 341-344  
© 2017 IJPESH  
[www.kheljournal.com](http://www.kheljournal.com)  
Received: 16-01-2017  
Accepted: 20-02-2017

**Jeetender Singh**  
Physical Education Teacher,  
YS&S J&K, University of  
Kashmir, Jammu and Kashmir,  
India

**Padam Dev Singh**  
Sports Supervisor, Department  
of Sports and Physical  
Education, University of  
Kashmir, Jammu and Kashmir,  
India

**Correspondence**  
**Jeetender Singh**  
Physical Education Teacher,  
YS&S J&K, University of  
Kashmir, Jammu and Kashmir,  
India

## Analyze the effect of yoga asana and physical exercise on Health-related fitness of hockey players

**Jeetender Singh and Padam Dev Singh**

### Abstract

The main purpose of the study was to analyze the effect of Yogasana and physical exercise on selected health Fitness component of hockey player.

**Methodology:** To achieve the purpose of this study, 80 male hockey players of Kashmir hockey academy who's performance are selected for the study. The age of Subject was taken between 13 To 22 years and average age was 16 years. The purpose of Study was clearly explained to them. The selected Subject (N-80) were divided into four groups.

**Result:** The data obtained were examined by 't' test, the level of Significance was set at 0.05 level of Confidence which was Considered adequate and appropriate for the purpose of the study. The analysis of data revealed that the three experimented groups. Trained by Yogic asanas, specially designed exercise and combined (exercise and yoga) Showed significant improvement in the selected Health Fitness components Baride, J. P, and Sancheti, S. S. (1994. i.e., cardiovascular Endurance, Strength, Flexibility, Agility, body composition. Conclusion It was found that there is improvement in Health related Fitness due To Yoga and Physical exercise among Hockey player.

**Keywords:** Analyze, yoga, asana, physical, fitness, hockey

### Introduction

Elementary body movement that are performed in series and as part of sports at other activities. Physical exercise are systematized for the purpose of physical development. Yoga has been practiced for themed of years. It is based on ancient theories, observations & principals of the body-mind relation. Substantial research has been conducted to look at the heath benefit of yoga, asanas, breathing and meditation, Health, Physical fitness and emotional Stability are the objectives which bring yoga and Physical education on a common platform for the benefit of human individual

A major discussion concerns the use several of yoga asanas and Physical exercise to enhance the performance of an athletes. When the asanas are performed a Yogic way and maintained easy and effortlessly, various muscles tendons and joint are stretched smartly and pleasantly, the value of Yoga and Physical exercise has become a worthy rescored issue on it is not known whether Yoga asanas and physical exercise is of benefit, of potential harm, or having no effect on an individual performance. Fein, B. T. (1963) [3].

### Methodology

Methodology is most essential for research work. To achieve the purpose of the study 80 male players using physical fitness index were randomly selected as subject. the selected Subject (N/80) were divided into four grouped named Group I as the Yoga asanas, Group 2 as the Physical exercise (P), Group 3 as the combination of yogic asanas with physical exercise (CYP) and Group 4 as control Group (CG). This each group Consisted of 20 subject. At first the subject of four groups are planned to undergo pre- test to find out the measurement of Variable without Yoga asanas & Physical exercise programs. Objects of four groups are also planned to undergo the test once to find out the difference between measurement of variable before exercise and after exercise.

**Criterion measure's:**

Having the experts" Consultation in the field of yoga. Physical education, Sport Sciences and scanning various literatures related to health fitness components, training methods and Yoga, the investigator has selected the following test items as Criterion measures. The subjects were tested on the following Fitness component.

**Health Fitness components**

- Endurance measured by "1 mile walk / Run Test"
- Strength measured by "Bent knee sit-ups Test"
- Flexibility measured by "sit and Reach Test"
- Body Composition measured by "Body Mass Index (BMI)".

**Analysis of Data**

The analyses of data was done by 't' test, the level of Significance was set at 0.05 level of Confidence.

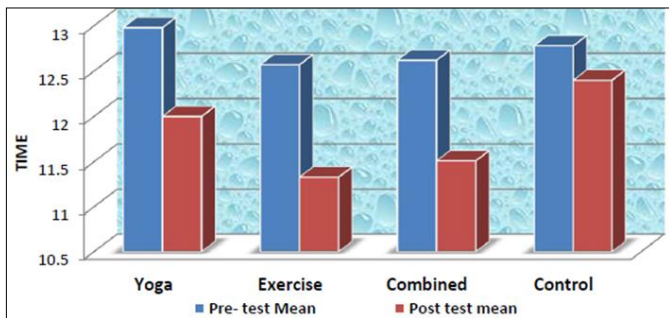
**Finding of the Study**

To find out the Significant differences, if any difference between the pre and post experimental means for each of the chosen variables of the four groups, the data was subjected to 't' Test. Subjects are trained by Yoga asanas and physical exercises for your weeks, per week 5 days, 40minutes to yoga, 40 minutes to exercise Chosen by investigator.

**Table 1:** Significance of difference between Pre-Test and Post-test means experimental Groups and the Control groups in Endurance

Groups	Pre-test Mean	Post-test Mean	Difference between Mean	t-value
Yoga	10.98	11.00	0.98	2.5
Exercise	11.57	12.33	1.24	3.48
Combined	11.62	12.51	1.11	2.89
Control	11.78	11.40	0.38	0.94

Significant at 0.05 level (Tab t = 1.74)



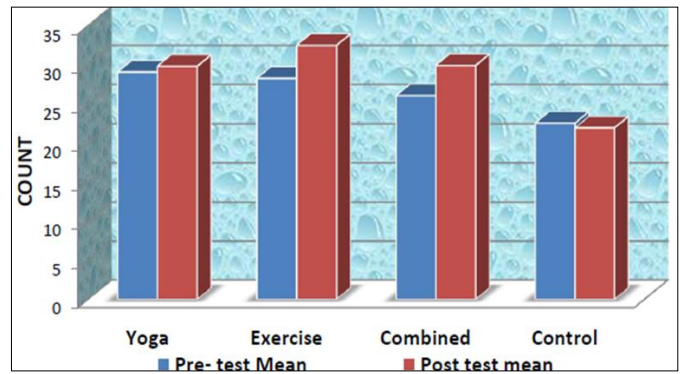
**Fig 1:** Endurance

It was evident from Table 1 that significant differences exist between pre and post experimental man of yoga, exercise and Combined group. The founded t value was more than the tabulated t value. So the Significant difference was seen in all groups.

**Table 2:** Significance of Difference between Pre-Test and Post-Test Means of experimental group and the Control groups in Strength

Groups	Pre-test Mean	Post-test Mean	Difference between Mean	t-value
Yoga	28.10	28.85	0.75	0.50
Exercise	30.50	32.30	2.20	2.77
Combined	29.10	32.10	3.00	2.30
Control	19.60	19.00	0.60	0.29

Significant at 0.05 level (Tab t at (2, 18) = 1.78.



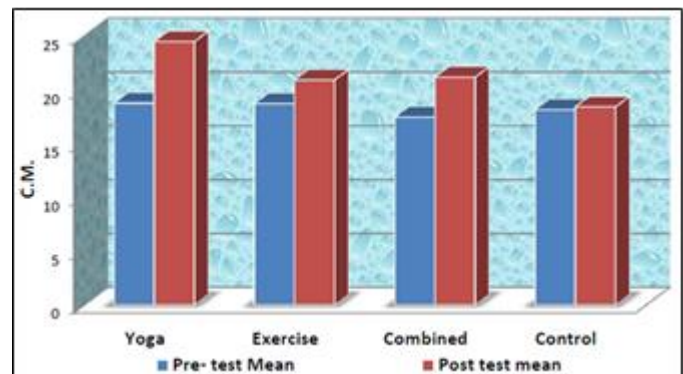
**Fig 2:** Strength

It was evident from Table 2, that significant difference exist between pre and post experimental mean of exercise and Combined groups. However significant difference was also seen in Control groups. The founded 't' value of exercise and combined groups were more than tabulated value. So the significant difference was seen in exercise and combined groups. t value of yoga was less than the Tabulated t value. So it was not significant Seen in Yoga group.

**Table 3:** Significance of difference between Pre- Test and Post-Test mean of experimental grouped the control group in Flexibility.

Groups	Pre-test Mean	Post-test Mean	Difference between Mean	t-value
Yoga	16.8	22.5	5.7	3.41
Exercise	16.75	18.95	2.2	1.59
Combined	15.5	19.2	3.25	2.29
Control	16.20	16.15	0.05	0.15

Significant at 0.05 level, (Tab tat (2, 18) = 1.74



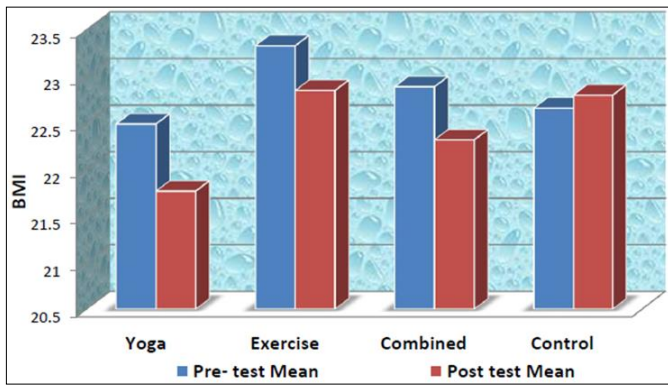
**Fig 3:** Flexibility

It was evident from table 3, that significant differences exist between pre. And post experimental mean of Yoga, exercise and combined groups. However insignificant difference is seen in the pre and post experimental mean of the control group.

**Table 4:** Significance Difference between Pre-Test and Post-Test Means of experimental group and the Central Group in Body Composition

Groups	Pre-test Mean	Post-test Mean	Difference between Mean	t-value
Yoga	20.49	19.77	0.72	0.74
Exercise	21.33	22.85	1.48	0.70
Combined	20.89	22.32	2.57	0.83
Control	20.66	20.80	-0.17	0.19

Significant at 0.05 level (Tab -t at (2, 18) = 1.74



**Fig 4:** Body composition

It was evident from Table 4 that significant difference exist between pre and post experimental means of Yoga, exercise and combined groups. However significant difference was not seen in the pre ad post experimental mean of the controlled groups.

### Discussion

The analysis of date revealed that the three experimental groups trained by Yoga asanas, specially designed exercises and combined (exercise and yoga Showed Significant improvement in the selected health Fitness Component. Such as Endurance, Strength and Flexibility. But no significant change was found in body composition. The main improvement achieved through Yogic asanas was higher in flexibility. The present findings suggested that cardiovascular endurance could be improved through practice of physical exercises.

Behera, D. (1998) <sup>[5]</sup>. Yoga therapy in chronic bronchitis Fein, B. T. (1963) <sup>[6]</sup>. “Respiratory and physical exercise in the treatment of bronchial asthma”, Arch. Phys

### Conclusion

The results of the Study confirms the notion that yogicasanas, physical exercises and combined programs of (yoga and exercise) improve the Selected Health fitness component of Hockey player's Kashmir Hockey academy.

### References

1. Baride JP, Sancheti SS. Yoga: A boon for health ? World Health Forum 1994;15:61-62.
2. Behera D. Yoga therapy in chronic bronchitis. J Assoc. Physicians India 1998;46:207-208.
3. Bera TK, Rajapurkar MV. Body composition, cardiovascular endurance and anaerobic power of yogic practitioner. Indian J Physiol. Pharmacol, 1993.
4. Bharshankar, *et al.* Effect of yoga on cardiovascular function in subjects above 40 years. Indian Journal of Physiology and Pharmacology 2003.
5. Bhole MV. Effect of Yogic treatment on various lung functions of asthma patients. Yoga Mimamsa 1982.
6. Fein BT. Respiratory and physical exercise in the treatment of bronchial asthma, Arch. Phys 1963.
7. Ganguli SK. Teaching Methodsfor Yogic Practices. 1988;13:14-64.
8. Ganguly SK. Cardio-vascular response to yogic treatment of asthmatics in Yoga Mimamsa 1982.