



## Effect of Yoga Training on Selected Physical and Performance Variables Among College Handball Players

### KEYWORDS

Yoga Training and Hand ball.

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**ABSTRACT** *The purpose of the study was to examine the effect of yoga training on selected physical and performance variables among College Handball Players. To achieve the purpose of this study 40 male College Handball Players from Thanjavur District, Trichy District, Ariyalur District and Perambalur District in Tamil Nadu were selected as subjects and their age ranged from 18 to 27 years. The subjects were randomly assigned to two equal groups of twenty each and named as yoga training group and control group. Yoga training group underwent training for six weeks and control group was not given any training. The physical fitness, variables namely Flexibility, Agility, Speed, Strength and Endurance and performance variables namely overhead pass, Jump shot, and Goal keeping was selected. Analysis of covariance was used to find out the differences among the groups. The results reveal that the yoga training group showed significant improvement on all selected variables among Men College Hand ball players.*

### INTRODUCTION

Handball, a popular game throughout the world, was introduced in Germany by a gymnastics teacher, Max Heiser, in 1917. The game was primarily devised for girls and played 11-a-side on a football field. There are, however, authentic reports of a similar game, "Handbold" being played in Denmark as early as 1904

In 1919, another Berlin sports teacher, Carl Schelenz, modified the existing rules. He advocated the use of a smaller ball, the players were allowed to fight for the ball, the three-step rule was introduced and the 16-metre penalty area of the football field provided an ideal throwing zone. Soon other countries accepted these rules and handball was on its way to becoming an international sport. Health is the motto of yoga. Yoga does not mean twisting and bending of the body. It is a comprehensive method of culturing and nurturing the body. Yoga is the cheapest and the most scientific method of ensuring the soundness of the body and the richness of the mind. Yoga provides strength and indirectly aids attitude. A vigorous approach to life is built and strengthened by a practice carried out daily. Yoga training refers to the substitution of skills other than the skills directly involved in the performance of an event that helps to sustain their endurance and muscular-strength. The main objective is to avoid injuries and maintain muscular balance through a period of intense sports training. Further yoga training as the training program of breathing and flexibility in nature, its concurrent effect would have highly positive to the game that underlies endurance. The degrees of requirements in aerobic and anaerobic aspects differ based on positions of the players. But no specific training program is provided for this, even such a disproportion exists. With this perspective, the present study is carried out to find out the effect of yoga training on selected physical and performance variables among Men College Hand ball players. All the asanas which have an effect on the diaphragm help to massage the heart and at the same time massage the abdominal organs. Yoga helps to keep

the body in proper shape and to increase the power of resistance.

### MATERIALS AND METHODS

To achieve the purpose of this study 40 Male Men College Hand ball players from Thanjavur District, Trichy District, Ariyalur District, and Perambalur District in Tamilnadu were selected as subjects and their age ranged from 18 to 27 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects were randomly assigned to two equal groups of twenty each and named as yoga training group and control group. Yoga training group underwent training for six weeks and control group was not given any training. The physical fitness variables namely speed was assessed by 50mts dash, strength was assessed by grip dynamometer, agility was assessed by 'T' agility test, endurance was assessed by Cooper 12 minutes-run and flexibility was assessed by sit and reach and performance variables namely overhead pass, jump shot and goal keeping were assessed using subjective rating. It was done by three qualified coaches on each skill selected in this study. The rating was done on 10 points scale by each coach and average on each variable was taken as individual score. The subjects were selected randomly, but the groups were not equated in relation to the factors to be examined, hence the difference between means of the two groups in the pre-test had to be taken into account during the analysis of the post-test differences between the means. This was achieved by the application of the analysis of covariance, where the final means were adjusted for differences in the initial means, and the adjusted means were tested for significance.

### RESULTS AND DISCUSSIONS

The results were presented in the following tables,

**Table - I**  
**Descriptive Analysis of Selected Physical and Performance Variables of Yoga Training Group**

Sl.No.	Skills	Pre Test Mean	SD ( ± )	Post Test Mean	SD ( ± )	Adjusted Mean
1	Flexibility	20.10	2.95	21.95	2.39	21.28
2	Agility	11.25	0.74	10.30	0.75	10.39
3	Speed	6.20	0.35	5.50	0.38	5.60
4	Strength	41.35	2.68	44.35	1.01	43.52
5	Endurance	7.30	0.65	6.61	0.53	6.57
6	Overhead pass	3.15	1.01	8.05	0.54	8.05
7	Jump Shot	4.43	0.71	7.56	0.63	7.54
8	Goal Keeping	3.70	0.72	7.15	1.01	7.25

The above table documents the pre & posttests means, standard deviations and adjusted mean values of yoga training group on selected variables among Men College Hand ball Players.

Figure 1 : Showing the mean values of yoga training group on selected variables among Men College level Hand Ball Players

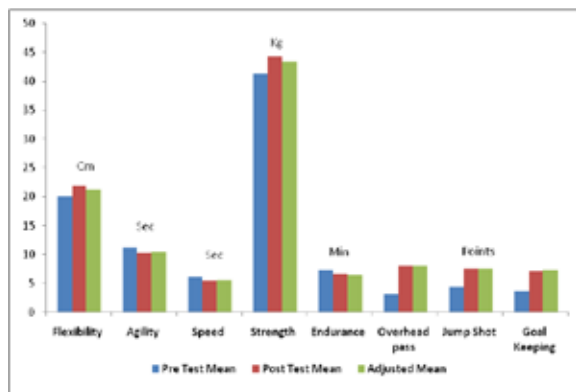


Figure 1 : Showing the mean values of yoga training group on selected variables among Men College level Hand Ball Players

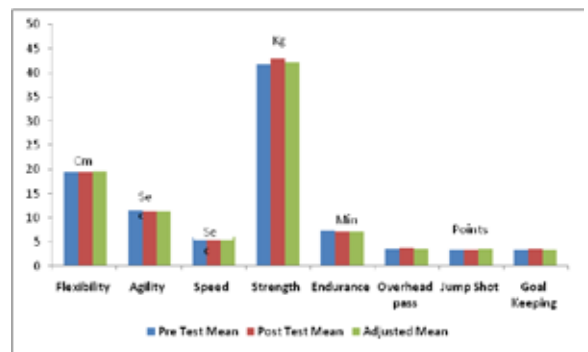


Figure 2 : Showing the mean values of Control group on selected variables among Men College level Hand Ball Players

**TABLE -II**  
**Descriptive Analysis of Selected Physical and Performance Variables of Control Group**

Sl.No.	Skills	Pre Test Mean	SD ( ± )	Post Test Mean	SD ( ± )	Adjusted Mean
1	Flexibility	19.40	4.07	19.40	3.72	19.70
2	Agility	11.47	0.46	11.45	0.61	11.40
3	Speed	6.00	0.29	6.05	0.28	6.08
4	Strength	41.90	2.18	43.00	1.03	42.22
5	Endurance	7.40	0.39	7.25	0.50	7.28
6	Overhead pass	3.63	0.81	3.77	0.64	3.71
7	Jump Shot	3.47	0.51	3.41	1.20	3.68
8	Goal Keeping	3.51	0.53	3.70	0.61	3.52

The above table documents the pre & posttests means, standard deviations and adjusted mean values of yoga training group on selected skills in Men College Hand Ball Players.

**TABLE – III**  
**Descriptive Analysis of Selected Physical and Performance Variables of Control Group**

Sl.No.	Skills	Source of Variance	Sum of Squares	df	Mean Square	F
1	Flexibility	BG	32.54	1	32.54	21.90
		WG	54.65	37	1.40	
2	Agility	BG	11.05	1	0.60	16.4
		WG	25.20	37	2.40	
3	Speed	BG	1.33	1	1.13	7.24
		WG	2.74	35	0.148	
4	Strength	BG	16.43	1	16.43	13.95
		WG	43.70	7	1.15	
5	Endurance	BG	2.40	1	2.40	7.56
		WG	12.46	37	0.30	
6	Overhead pass	BG	126.10	1	1.14	96.17
		WG	33.48	37	133.70	
7	Jump Shot	BG	133.70	1	133.70	120.42
		WG	30.10	37	1.05	
8	Goal Keeping	BG	104.73	1	104.73	132.10
		WG	21.14	37	0.59	

\*Significance at 0.05 level

\*F 0.05(1.35=4.01)

In table III the results of analysis of covariance on Flexibility, Agility, Speed, Strength, Endurance, Overhead Pass, Jump Shot & Goal Keeping. The obtained F values for flexibility, agility, speed, strength, endurance, were 21.90, 16.14, 7.24, 13.95, 7.56, 96.17, 120.42, 132.10 respectively were greater than the required value 4.01 at 0.05 level of confidence. Since the observed 'F' value was greater than the table 'F' value on all selected variables. Hence there exists significant difference among the groups.

### FINDINGS AND CONCLUSIONS

In this study forty Men College Hand ball players were examined on their selected physical and performance factors. When sport performance is concerned, physical fitness play a vital role. yoga training is the modern concept of sports training which combines different training methods. More over specific skills training is the need of the present sport scenario. In the present situation, the contribution of yoga training towards the sports performance is inevitable. This study explains the concept of combining the yoga training with game-specific exercises and found positive outcomes on the selected variables.

From the analysis of data, the following conclusions were drawn.

1. It was found that the yoga training group showed significant improvement in all selected variables among Hand ball players. Previous research in this field has been concerned with either anthropometrical changes during interventions, or has been concerned with skill-specific improvements.
2. It was also found that the control group did not show significant improvement in all the selected variables.
3. It was also found that the experimental group showed significant improvement in all the selected variables than the control group.

### REFERENCE

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