



## Effect of Asana and Meditation on Selected Performance Factors among Kabaddi Players

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### Abstract

*The purpose of the study was to investigate the effect of yoga on performance factors among college kabaddi players. It was hypothesized that there would be significant differences on performance factors due to the effect of yoga among college kabaddi players. For the present study the 45 male college kabaddi players from Kings College of Engineering, Pudukkottai, Tamilnadu were selected at random and their age ranged from 18 to 25 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to three equal groups of fifteen each. Group 'A' underwent asana practices only, group 'B' underwent asana and meditation practices and group 'C' have not underwent any training. During the actual playing situation a panel of the three qualified judges evaluated the playing ability of the players. The investigator has made detailed discussion with panel of experts about the study and criteria for evaluation. The experts of the game will observe each player and rate their performance in ten point scale. The average score of the three judges was taken. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) and scheffe's post hoc test. The level of significance was set at 0.05. The asana and asana & meditation group had positive impact on hand touch and leg touch among college kabaddi players.*

**Keywords:** Asana, Meditation, Kabaddi, Performance.

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### Introduction

Yoga is as old as civilisation. Early Upanishads, the Bhagavadgita and the Yoga sutras of Patanjali are universally accepted as constituting the verbal foundation of the Yoga tradition. Among these, the Yoga Sutras provide the basis and inspiration for most of today's tradition of Yoga. In its recorded history and continuous evolution, Yoga has come to represent not only the ultimate goal, but also the many practices, techniques, methods and ways that to move towards that goal. Thus the literature includes numerous yogic paths. Yoga's classical definition is derived from the Sanskrit root "Yuj". Yoga represents the study, path and the means to proceed and also the absolute aim, which includes the following core concepts: the union of opposites, the effect the outside world has on the body, the yearning for and seeking of form of liberation; the merging of the individual consciousness with the Universal consciousness and the interest of discovering and attaining one's true self.

Kabaddi is a combative team game, played with absolutely no equipment, in a rectangular court, either out-doors or indoors with seven players on the ground in each side. Each side takes alternate chances at offence

and defense. The basic idea of the game is to score points by raiding into the opponents' court and touching as many defense players as possible without getting caught on a single breath. During play, the players on the defensive side are called "Antis" while the player of the offense is called the "Raider". Kabaddi is perhaps the only combative sport in which attack is an individual attempt while defense is a group effort. The attack in Kabaddi is known as a 'Raid'. The antis touched by the raider during the attack are declared 'out' if they do not succeed in catching, the raider before he returns to home court. These players can resume play only when their side scores points against the opposite side during their raiding turn or if the remaining players succeed in catching the opponent's raider.

### Methodology

The purpose of the study was to investigate the effect of yoga on performance factors among college kabaddi players. It was hypothesized that there would be significant differences on performance factors due to the effect of yoga among college kabaddi players. For the present study the 45 male college kabaddi players from Kings College of Engineering, Pudukkottai, Tamilnadu were selected at random and their age ranged from 18 to 25 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were

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randomly assigned to three equal groups of fifteen each. Group 'A' underwent asana practices only, group 'B' underwent asana and meditation practices and group 'C' have not underwent any training. During the actual playing situation a panel of the three qualified judges evaluated the playing ability of the players. The investigator has made detailed discussion with panel of experts about the study and criteria for evaluation. The experts of the game will observe each player and rate their performance in ten point scale. The average score of the three judges was taken. The data was collected

before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) and scheffe's post hoc test. The level of significance was set at 0.05.

### Results

The findings pertaining to analysis of co-variance between experimental and control groups on performance factors among college kabaddi players for pre-post test respectively have been presented in table I to V.

**Table I.** Descriptive analysis of asana, asana and meditation and control groups on selected variables

S.No	Variables	Asana Group			Asana and Meditation Group			Control Group		
		Initial Mean	Final Mean	Adjusted Mean	Initial Mean	Final Mean	Adjusted Mean	Initial Mean	Final Mean	Adjusted Mean
1	Hand Touch	3.20	6.93	6.92	3.33	7.33	7.34	3.27	3.33	3.33
2	Leg Touch	3.40	7.30	7.30	3.47	7.67	7.66	3.40	3.60	3.60

**Table II.** Summary of analysis of variance for the initial means among asana, asana and meditation and control groups on selected variables

Sl. No	Variables	Source of variation	Sum of Squares	df	Mean Squares	F-value
1	Hand Touch	Between Sets	0.13	2	0.07	0.09
		Within Sets	30.67	42	0.73	
2	Leg Touch	Between Sets	0.04	2	0.02	0.04
		Within Sets	24.93	42	0.59	

Table value for df 2 and 42 was 3.21

The F-value obtained from testing the initial means among the three groups on the criterion measures were shown in table II, the corresponding 'F' values needed for significance at 0.05 level of confidence was 3.21. The calculated 'F' values are hand touch (0.09) and leg touch (0.04). Since the observed F-values of these

were found lesser than the required table value of 3.21 at 0.05 level of confidence, the observed mean difference among the groups on selected variables measures was statistically not significant. Thus the obtained results confirm the random assignment of subjects to three groups was successful.

**Table III.** Summary of analysis of variance for the final means among asana, asana and meditation and control groups on selected variables

Sl. No	Variables	Source of Variation	Sum of Squares	df	Mean Squares	F-value
1	Hand Touch	Between Sets	145.60	2	72.80	103.30*
		Within Sets	29.60	42	0.71	
2	Leg Touch	Between Sets	151.81	2	75.91	128.38*
		Within Sets	24.83	42	0.59	

\* Significant at 0.05 level

Table value for df 2 and 42 was 3.21

The F-value obtained from testing the final means among the three groups on the criterion measures were shown in table III, the corresponding 'F' values needed for significance at 0.05 level of confidence was 3.21. The calculated 'F' values are hand touch (103.30)

and leg touch (128.38). Since the observed F-values of these were found greater than the required table value of 3.21 at 0.05 level of confidence, the observed mean difference among the groups on selected variables was statistically significant.

**Table IV.** Summary of analysis of variance for the adjusted means among asana, asana and meditation and control groups on selected variables

Sl. No	Variables	Source of Variation	Sum of Squares	df	Mean Squares	F-value
1	Hand Touch	Between Sets	145.72	2	72.86	103.55*
		Within Sets	28.85	41	0.70	
2	Leg Touch	Between Sets	151.67	2	75.84	125.24*
		Within Sets	24.83	41	0.61	

\* Significant at 0.05 level

Table value for df 2 and 41 was 3.22

The F-value obtained from testing the adjusted means among the three groups on the criterion measures were shown in table IV, the corresponding 'F' values needed for significance at 0.05 level of confidence was 3.22. The calculated 'F' values are hand touch (103.55), leg touch (125.24) and ankle hold (113.76). Since the observed F-values of these were found greater than the

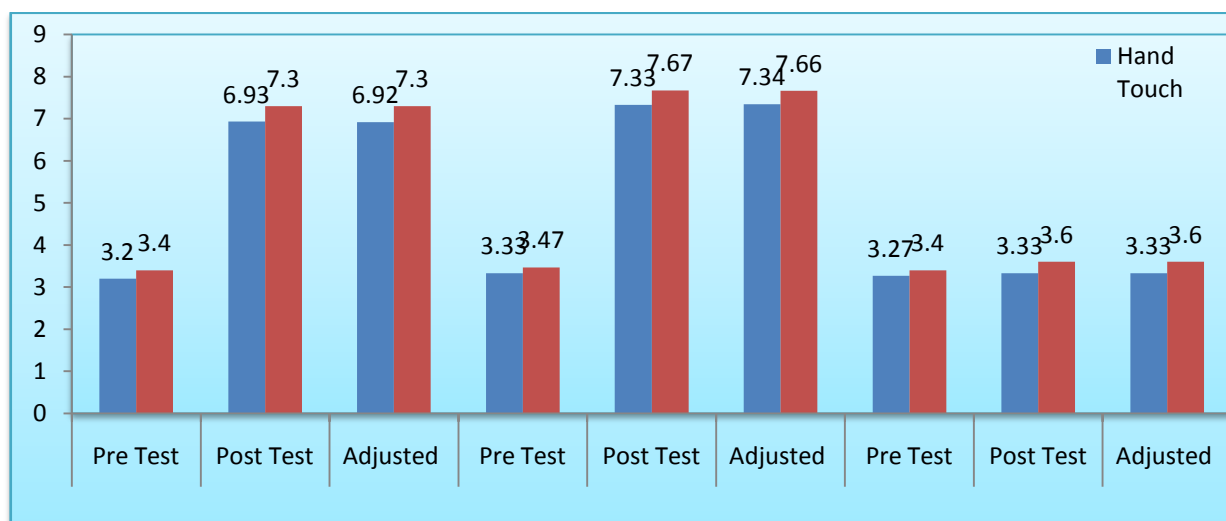
required table value of 3.22 at 0.05 level of confidence, the observed mean difference among the groups on selected variables was statistically significant. Since the observed mean difference among the three groups was statistically significant. In order to find out which of the pairs of group grown up for the significant difference the Scheffe post-hoc test was applied.

**Table V.** Scheffe's test of significance between paired final adjusted means for performance variables

Sl.No	Performance Variables	Adjusted Means			Mean Differences	CI Value
		Asana Group	Asana and Meditation Group	Control		
1	Hand Touch	6.92	7.34	-----	0.42	0.77
		6.92	-----	3.33	3.59*	
		-----	7.34	3.33	4.01*	
2	Leg Touch	7.30	7.66	-----	0.36	0.57
		7.30	-----	3.60	3.70*	
		-----	7.66	3.60	4.06*	

As per the results of the table V, since the mean difference for hand touch and leg touch between asana and control group were 3.59 and 3.70 respectively, asana & meditation and control group were 4.01 and 4.06 respectively are higher than the CI value of 0.77 and 0.57 respectively. It was concluded that the observed adjusted

mean difference is statistically significant. Since the mean difference for hand touch and leg touch between asana and asana & meditation group were 0.42 and 0.36 respectively are lesser than the CI value of 0.77 and 0.57 respectively. It was concluded that the observed adjusted mean difference is statistically not significant.

**Figure I.** Bar diagram showing the means among asana, asana and meditation and control groups on selected variables

## Conclusions

On the basis of findings and within the limitations of the study the following conclusions were drawn:

1. The asana and asana & meditation group had positive impact on hand touch and leg touch among college kabaddi players.
2. The experimental groups showed better improvement on hand touch and leg touch among college kabaddi players than the control group.

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