



Short Communication

Effects of yogic exercises (Asanas) on physical efficiency of Male Kabaddi players

Nilesh Mandloi

Maharaja Singh College of Professional Sciences, Indore, MP, India
n08mandloi@yahoo.com

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Abstract

Kabaddi was primarily devised as a way to develop the physical strength and speed in young men. To play kabaddi a player has to basically learn daring operation against opposite players, dodging and mastery over hand and feet movements. To excel in game player must learn both offensive and defensive skills. Yoga helps kabaddi players in controlling body and mind through meditation and various asanas. Yoga not only strengthens body it also helps player to recover fast from injury and also helps them in gaining more flexibility and stability. It also helps to increase their powers of concentration and to calm the mind. The purpose of the study is to determine the effect of Yogic Exercises (Asanas) on Physical Efficiency of male kabaddi players. The random group design was used for the study comprising of 25 subjects. The duration of training programme was 8 weeks. Pre and Post data relating to physical efficiency was collected and t-ratio was applied. It was found that there was significant difference in the physical efficiency of kabaddi players.

Keywords: Kabaddi, physical efficiency, yogic exercises, meditation, pranayama, Harvard step test, raider.

Introduction

Kabaddi was primarily devised as a way to develop the physical strength and speed in young men. During its inception, Kabaddi was played to boost the self-defense skills and to develop quick responsiveness to attack. Players of team games found that their reflexes of counter attacks were enhanced by kabaddi. Whether it is catcher or raider kabaddi requires tremendous physical strength, dexterity, proficiency at game, coordinates nerves and muscles, control over breathe, quick reflex action and presence of mind. To play kabaddi a player has to basically learn daring operation against opposite players, dodging and mastery over hand and feet movements. To excel in game player must learn both offensive and defensive skills. Yoga helps kabaddi players in controlling body and mind through meditation and various asana. Players find that various asanas not only enhance the capacity of tight and fatigued muscles but also tranquilize the mind. Yoga not only strengthens body it also helps player to recover fast from injury and also helps them in gaining more flexibility and stability. It also helps to increase their powers of concentration and to calm the mind.

Literature Review: Khodaskar¹ conducted a research to study the effects of Yogic and non yogic exercises on selected physiological variables of Kabaddi players. For these purpose 75 male kabaddi players of the age group ranging from 18 to 25 years were randomly selected from Physical Education College. The students were categorized in three groups viz., Group A- Yogic exercise group, Group B - Non- yogic exercise group and Group C - Control group. Group A and group B were given

training on yogic and non yogic exercise respectively for one and half month for half an hour daily for 6 days a week. All these three groups were also involved in regular training programme of their college. The result shows positive effect on selected physiological variables on the students trained on yogic exercises as compared to non yogic exercise group.

Madanmohan et al.² studies the effect of yogic exercise on respiratory pressures, handgrip, and pulmonary function. 20 school children of the age in between 12 to 15 years were selected at random and were given training on different asanas and pranayama for 6 months. Control group consists of students of the same gender. The study concludes that yogic exercise and pranayama improves functioning of lungs, strengthen inspiratory and expiratory muscles. It was also suggested that yoga should be part of the school curriculum.

Kathleen³ conducted a study to compare two methods of conditioning for endurance of college men. 49 boys of physical education students who opted for two track field classes were randomly chosen for the study. The Harvard step test was conducted and pre and post scores of conditioning programme of seven weeks were recorded. It reveals that the conventional method of conditioning showed a significant increase in the cardio respiratory endurance.

Gharote and Ganguly⁴ studies the effect of long term yoga training programme on Cardio Vascular efficiency, Harvard Step test was applied on 11 boys and the result of the study indicated that 60 minutes of daily yogic exercises including

pranayama schedule, significantly improved cardiovascular efficiency of the student.

Krishnan K.⁵ studied the effect of selected yogic practices upon the development of flexibility. The study conducted on the subjects selected from the YMCA College of Physical Education, Madras, and Tamil Nadu state shows a significant improvement in flexibility after training of yogic practices.

Prakash⁶ conducted a study to assess the effect of free hand gymnastic exercises of yogic asanas on flexibility of girls students. For this a sample of 60 girls students of the age group in between 16 to 18 years was selected. The data was statistically analysed using mean difference method (t-ratio). It was found that Yogic asanas training programme was found to be more effective as compared to the free hand gymnastic exercise programme in developing the flexibility.

Paul Satinder⁷ studied the effects of yogic exercise on breathing on the improvement of cant ability of raider in kabaddi. 30 male players between age group of 18 to 23 years were selected randomly. The subjects were divided into two groups i.e. Experimental Group and Control Group. The pre and post scores were taken for all the subjects before and after the training respectively and were analyzed using 't' ratio. Results shows that there is no significant improvement in the cant ability of raider before and after training programme.

Methodology

Twenty five male kabaddi players were randomly served as the subjects for the study. In order to obtain the pre and post test scores on physical efficiency, Harvard step test by short method was conducted on players. The study was conducted for a period of eight weeks. The data for physical efficiency was collected twice, that is before the start of the study and after the eight weeks of the final performance of the tests. The pre-scores were collected on the first day before training and post-scores were collected just after the training programme. The training programme covers asana like Utthan pada Asana, Paschimothan Asana, Bhujang Asana, Salabha Asana, Matsya Asana, Hala Asana, Shava Asana. In order to study, the effect of yogic exercises on physical efficiency t-ratio was applied at 0.05 level of significance.

The objective of the study is to see the effect of yogic exercises on physical efficiency of Kabaddi players.

Results and discussion

In order to see the significant difference between pre and post mean values of physical efficiency t-test was applied on the scores as obtained by Harvard step test. It was found that there is significant difference between pre and post mean values of yogic exercise group. The calculated value 13.33 is more than the tabulated value of 2.064 which clearly reveals that there is significant difference between the pre and post test means. Thus

the yogic exercise training programme has positive effect on physical efficiency.

Table-1: Scores of pre and post Pulse rate and Harvard Step Test of Yogic Exercise group.

Subject	Pulse Pre	Pulse Post	H S Score Pre	H S Score Post
1	79	77	69.04488	70.83825
2	78	73	69.93007	74.7198
3	63	60	86.58009	90.90909
4	72	70	75.75758	77.92208
5	83	81	65.71742	67.34007
6	71	69	76.82458	79.05138
7	68	66	80.2139	82.64463
8	78	73	69.93007	74.7198
9	77	71	70.83825	76.82458
10	75	70	72.72727	77.92208
11	77	73	70.83825	74.7198
12	68	66	80.2139	82.64463
13	90	85	60.60606	64.17112
14	79	75	69.04488	72.72727
15	85	81	64.17112	67.34007
16	87	85	62.69592	64.17112
17	58	56	94.04389	97.4026
18	60	57	90.90909	95.69378
19	93	88	58.65103	61.98347
20	74	71	73.71007	76.82458
21	75	70	72.72727	77.92208
22	79	77	69.04488	70.83825
23	80	76	68.18182	71.77033
24	79	75	69.04488	72.72727
25	88	85	61.98347	64.17112
Total	1916	1830	1803.431	1887.999
Mean	76.64	73.2	72.13723	75.51997

Table-1 shows that the pre (initial) mean value of yogic exercise group was found to be 72.14 which indicates that it falls in the average category. However, the post mean value of yogic exercise group was found to be 75.52 which also falls in the average category, but the index has approved.

Table-2: Significant difference between pre-test and post-test means of yogic exercise in physical efficiency of kabaddi players.

No. of subjects	Variables	Means		SD Difference	Calculated value	Table Value
		Pre Test	Post Test			
25	Yogic Exercise Group	72.14	75.52	1.269	13.33	2.064

Significant difference at .05 level of significance, $t_{.05}(24) = 2.064$.

Conclusion

After analyzing the data it was found significant at 0.05 level of significance the 't'-ratio stated that there is significant change in the physical efficiency of male kabaddi player after practicing yogic exercises. It was also observed that there is increase in physical stamina, flexibility, individual proficiency, neuromuscular coordination and quick reflexes.

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