



Effect of Suryanamaskar Practices on Selected Physical and Physiological Variables among College Men Kabaddi Players

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Received 14th June 2020, Accepted 5th July 2020

Abstract

This study was designed to effect of Suryanamaskar Practices on selected physical and physiological variables among college men Kabaddi players. To achieve the purpose of the study 30 inter collegiate men Kabaddi players were selected from Bharathiar University Department and Sri Ramalinga Sowdambigai College of Arts and Commerce Coimbatore. Their age ranged between 18 and 25 years and they were divided into two equal groups consists of 15 each. Group I underwent the Suryanamaskar Practices and Group II acted as control group. The training was given to the experimental group for 3 days per week for the period of 12 weeks. The control group was not given any sort of training except their routine work. The data were collected from the subjects was statistically analyzed with dependent 't' test to find out significant improvement if any at 0.05 level of confidence. The results speculated that the Flexibility and breath holding time of college men Kabaddi players improved significantly due to the influence of Suryanamaskar Practices with the limitations.

Keywords: Suryanamaskar Practices, Flexibility and Breath holding time.

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Introduction

Kabaddi is essentially an Indian game, which commands huge popularity in the India as well as its hinterland. Breath control, raid, dodging and movement of hand and feet are the basic skills that one has to acquire, in order to play kabaddi. The player has to acquire power and learn both offensive and defensive skills to excel in the game. In the modern competitive sports, seriousness towards work and workouts plays important role in achieving high performance in competitions. Outstanding players have been found to be more disciplined, practical, and tough minded. Competitions now a day are so tough that only those achieve high performance who trains for long hours. It is in fact the preoccupation for the adaptation of the sports man's body to growing physical and mental efforts, to which all the parts of the human body participate. Kabaddi is our indigenous game, which requires skill and power. It is one of the major games in India. A benefit of yoga brings down stress and enhances powers of relaxation, boosts physical strength, stamina and flexibility bestows greater powers of concentration and selfcontrol which inculcates impulse control, helps in

rehabilitation of old and new enhancing mental clarity, boosts functioning of the immune system enhance posture and muscle tone, improves blood circulation result in healthy, glowing skin cleanses and improves overall organ functioning. Suryanamaskar is a series of twelve physical postures. It is one of the ancient ways of exercise and more than that was the lifestyle of the ancient India. This sequence of movement and poses can be practiced on varying level of awareness, ranging from that of physical exercise in various styles. To a complete sadhana which incorporate asana, mantra and chakra meditation. A full round of suryanamaskar is considered to be two sets of the twelve poses with a change in the second set by moving the opposite leg first through the series.

Physical Fitness

Physical fitness is generally achieved through proper nutrition, moderate vigorous physical exercise, and sufficient rest. Before the industrial revolution fitness was defined as the capacity to carry out the day activities without undue fatigue. Physical fitness is now considered a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypo kinetic diseases, and to meet emergency situations. Fitness is defined as the quality or state of being fit. A comprehensive fitness program

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tailored to an individual typically focuses on one or more specific skills, and on age or health-related needs such as bone health. Physical fitness can also prevent or treat many chronic health conditions brought on by unhealthy lifestyle. Developing research has demonstrated that many of the benefits of exercise are mediated through the role of skeletal muscle as an endocrine organ.

Physiology

Physiology is the study of the functions of the normal human body. Physiology is one of the bio-medical science, it deals with the functions of the living organism, its systems, organs, individual cell and cell structures, as well as with the mechanism regulating the functions and interaction of the organism with the external environment. The goal of physiology is to gain in right in to the machinery of the human organism. The roles and interaction of its parts and the resultant output of these interactions, that is, the overall functioning of the organism.

Methodology

Purpose of the study was to find out the Suryanamaskar Practices on selected physical and physiological variables among college men Kabaddi players. To achieve the purpose of the study 30 men inter collegiate men Kabaddi players were selected from Department of Physical Education, Bharathiar University and Sri Ramalinga Sowdambigai College of Arts and Commerce, Coimbatore. Their age ranged between 18 and 25 years and they were divided into two equal groups consists of 15 each. Group I underwent the Suryanamaskar Practices and Group II acted as control

group. The training was given to the experimental group for 3 days per week for the period of 12 weeks. The control group was not given any sort of training except their routine work. The data collected from the subjects was statistically analyzed with dependent 't' test to find out significant improvement if any at 0.05 level of confidence.

Training Programme

The investigator selected a training that is specific training for kabaddi players which improved certain selected physical fitness variable as Flexibility and physiological variable as breath holding time. During the training period the experimental group underwent the training of selected Suryanamaskar Practices for twelve weeks of period in addition to their daily routine activities as per the curriculum. Experimental group underwent training program on three days per week for twelve weeks period. All the subjects involved in this study were carefully monitored throughout the training program, none of the reported with tear and muscle soreness.

Statistical Analysis

The analysis of data on the effect of Suryanamaskar Practices selected physical and physiological variables was statistically analyzed with dependent 't' test to find out the significant improvement between pre and post test. In all cases the criterion for statistical significance was set level of confidence.

Table 1. Analysis of 't' ratio for the pre and post test of experimental and control group on flexibility and breath holding time

Variables	Group	Test	Mean	SD	MD	SEM	t-ratio
Flexibility	Experimental Group	Pre test	21.70	3.86	1.16	0.09	12.65
		Post test	23.01	3.88			
	Control Group	Pre test	17.70	2.76	0.13	0.26	0.49
		Post test	17.71	2.70			
Breath Holding Time	Experimental Group	Pre test	26.30	0.59	0.15	0.06	2.78*
		Post test	26.45	0.60			
	Control Group	Pre test	26.28	0.78	0.04	0.22	0.20
		Post test	26.32	0.99			

(Significance at 0.05 level of confidence for df of 14 is 2.14)

Table 1 shows that the pre test mean values of experimental group and control group 21.70, 26.30 and 17.70, 26.28 respectively and the post test mean values are 23.01, 26.45 and 17.71, 26.32 respectively. The

obtained dependent t-test between the pre and post test means on flexibility and breath holding time of experimental group and control group are 12.65 and 2.78 respectively. The table value required for significant

difference with degrees of freedom 14 at 0.05 level of confidence is 2.14. The obtained 't' test value of experimental group was greater than the table value. The results clearly indicated that the flexibility and breath

holding time of the experimental group improved due to the Suryanamaskar Practices on college level men kabaddi players.

Figure I. Bar diagram shows the pre and post test mean values of experimental and control group on flexibility

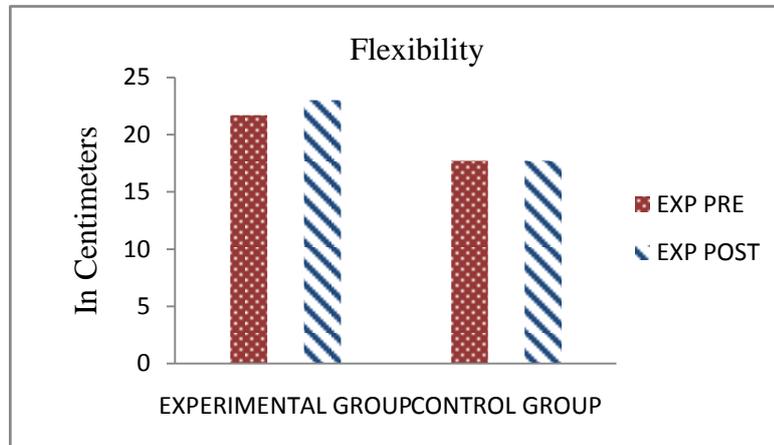
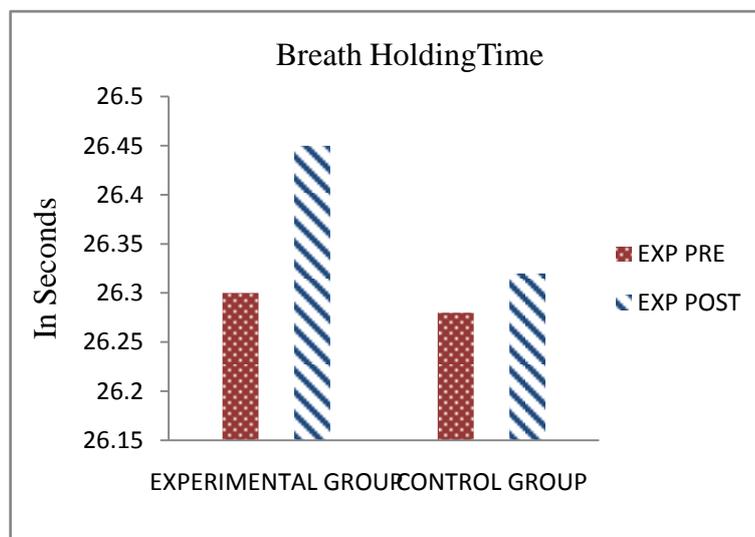


Figure II. Bar diagram shows the pre and post test mean values of experimental and control group on breath holding time



Discussions on Findings

The result of the study on selected physical and physiological variables indicates experimental group (suryanamaskar practices) brought about significant improvement after the suryanamaskar practices. Based on the mean value, the experimental group was found in better increasing on flexibility (Shankar Murthy et al., (2011) and breath holding time (Saravanan et al., (2011) when compared to the control group.

Conclusions

Suryanamaskar practices have lot of movements related with flexibility and while we are doing the suryanamaskar control our breath in each and every posture. So suryanamaskar practices helped to improve

flexibility and breath holding time. The results of the study suryanamaskar practices group had significant improvement on flexibility and breath holding time when compared to the control group.

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