

Effect of Yogasanas on Physical Fitness Performance of College Level Women Players

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Abstract

The present study was an experimental study conducted on 80 college level women players with an aim to find out the effect of yogic asanas on their physical fitness components and performance abilities. Eighty women college level players of different games were selected on random selection basis for the experiment. Further the sample was divided in two equal groups of 40 each. One group was given the training of selected yogic asanas for the duration of 12 weeks and the other group was kept under control. Physical fitness of both the groups was pre and post training were measured and for the purpose aaper youth physical fitness test battery was used. The data were collected, calculated and presented for results. Mean, s.d and t value statistical technique was applied for significance of results.

Results of study concluded that regular practice of yogic asanas exercises has improved physical fitness components such as strength and agility where as no contribution of these exercises were found towards the development of speed and endurance physical fitness components, so it can be said safely that yogasans improved some physical fitness components while some had no effect of yogasana training. The results and conclusions of the present experimental study could be the hall mark in providing guidelines for formulating and executing effective training programmes for developing peak performance in various competitive sports/games without causing undue health hazards and contraindications to sports persons vigor and vitality.

Keywords: physical fitness, yogasanas.

Introduction

Today games and sports have become highly competitive. Success in the competitive sports places high physical and psychological demands on the participants. The

sportsmen of 21st century have to be highly vigilant alert and in control of their nerves for better performance. Cratly (1973) comments future records will be broken primarily because of increased physical capabilities & psychological abilities. It can be said that physical fitness as well as maintenance of it is the key concern of every sportsmen. Yoga which has become an integral part of life plays an important role in maintaining this physical fitness. Signifying yoga as a great source of health and fitness. Dr. Salk Nobel Prize winner rightly says "Medicine is science of diseases where as yoga is science of health. How can than modern medicine examine claims of yoga? The word 'Yoga' is derived from the Sanskrit root 'Yuj' meaning to bind; join; and attach. It is true union of our will to will of God. The practice of yoga makes the body strong and flexible. It was collected co-ordinated and systematised by Patanjali in his classic work Kavalaisa scientifically proved the benifits of yog in 1924. Since than a lot of research studies have been conducted to find out the effect of yogasanas on physical fitness and well being of sportspersons or persons in general. For example Larson and Yocom (1951) tested components of physical fitness, Hettinger and Muller (1983), Mathews and Krauze (1957), Berger (1962) and Bhole (1972) conducted studies on yoga and physical fitness. Gharote (1973) Baljit Singh; Dolly (2004) and L. Muthukrmar; R. Elangavan (2011) conducted studies on yoga and physical fitness proved significant benifits of yoga expertises.

Keeping in view the benefits of yog asanas for achieving and maintaining physical fitness or harmonious development the investigator was motivated to investigate the effect of yogasanas on college level female players.

Objective: The objective of this study was to find out the effect of yogic practice on the physical fitness components of college level women players.

Methodology: This experimental study was conducted on 80 female college level players of Hisar district selected on random selection basis. The pre and post test experimental design was followed for collection of data. Eighty female players of college level were devided in to two equal groups of 40 subjects each i.e. experimental and controlled group. The experimental group was given yogic practice of selected asanas five day in a week for 12 weeks duration in supervision of scholar and experts. The subjects of the control group were not engaged in any activity during this yogic training period. Yogic training was given in morning for one hour and subjects were asked to come for training with an empty stomach. Both the group were pre tested and post tested after 12 weeks training programme on physical fitness components. Physical fitness components of strength, agility, speed and endurance. The AAPHER youth fitness test battery was used.

Result and Discussion

The data were collected strictly as per instructions of Mannual and Mean, S.D, and t.values were calculated and presented in the following tables to find out the significance of results.

Table I: Pre-test Mean score of controlled and experimental groups: N-40 each.

Sr. No.	Variables of Physical fitness	Controlled Group	Experimental Group
1	Flex Arm Hang	8.96	8.98
2	Sit-ups	20.35	20.43
3	Shuttle Run	12.26	12.14
4	50 Yard Dash	9.60	9.80
5	600 Yard Run & Walk	2.77	2.74

Table-1 predicts the pre test mean score of experimental and controlled groups on flex arm hang, sit-ups, shuttle run, 50 yard dash and 600 yard run walk. Mean of score in the table-1 shows that both the groups registered almost equal mean score on variables of physical fitness. Results of table-1 clearly confirm that initially before imparting the yogic training to experimental group subjects of both the groups were almost equal on the chosen physical fitness variables.

Table II: Significance of difference between pre and post test Mean scores of controlled group and experimental group.

N-40 each

Sr. No.	Variable of Physical Fitness	Control Group			Experimental Group		
		Pre	Post	't' value	Pre	Post	't' value
1	Flex Arm Hang	8.96	9.05	2.10	8.98	10.60	27.00*
2	Sit-ups	20.35	20.52	1.77	20.43	22.00	14.84*
3	Shuttle Run	12.26	12.14	0.218	12.14	11.95	6.46*
4	50 Yard Dash	9.60	9.55	0.874	9.80	9.77	0.22**
5	600 Yard Run & Walk	2.77	2.72	1.86	2.74	2.70	1.38**

*Significant at 0.05 level of significance

**Significant at 0.01 level of significance

Table No. II predict pre and post test mean score of control and experimental groups. No statistically significance difference has been found between pre and post test mean score of controlled group subjects. However, its t-value on flex arm hang was found 2.10 due to participation in various type of sports activities. On flex arm hang, sit-ups, shuttle run significant differences were found in pre and post mean scores of experimental group at 0.01 level of significance. However, it was found no significant difference was found on 50 yard dash and 600 yard run and walk test of experimental group subjects. Results of table-II clearly indicate that practice and training of yogasanas confirmly effect on the components of physical fitness. However, the degree of effect differed from variable to variable.

Table III: Significance of difference between post test Mean scores of Control group and Experimental group:

N-40 each

Sr.No.	Variables of Physical fitness	Controlled Group	Experimental Group	't' value
1	Flex Arm Hang	9.05	10.60	33.84*
2	Sit-ups	20.52	22.00	11.38*
3	Shuttle Run	12.14	11.95	6.46*
4	50 Yard Dash	9.55	9.77	1.58**
5	600 Yard Run & Walk	2.72	2.70	0.72**

*Significant at 0.05 level of significance

**Significant at 0.01 level of significance

Table-III presuits the significance of difference between post test mean score of controlled group and experimental group on all the chosen variables of physical fitness. Statistically significant differences have been found between experimental and controlled group on variables of flex arm hang, sit-ups and shuttle run whereas before the training these were almost same where as non significant and slightly improved differences were found on variables of 50 yard dash and 600 yard run & walk. Significant difference of 33.84, 11.38 and 6.46 on variables of flex arm hang, sit-ups and shuttle run clearly indicate that yogasanas had positive effect on the development of physical fitness components.

Conclusions: On basis of above significant results and discussion it is concluded that regular practice of yogasanas has improved the physical fitness components of strength, and agility. However, its contribution towards the development of speed and endurance was not found significant which over all shows that yoga training has no effect on these variables of physical fitness.

The findings of study are supported by many studies such as Hettinger and Muller (1983), Baljit Singh & Dolly (2004) and L. Muthu Kumar; R. Elangovan (2011) in conclusion of their findings.

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