



EFFECT OF YOGASANA ON SELECTED PHYSICAL FITNESS COMPONENTS

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ABSTRACT

The purpose of the study was designed to examine the effect of yogasana on selected physical fitness components such as strength endurance and flexibility. To achieve this purpose of the study thirty men students studying UG and PG Diploma in Yoga, Centre for yoga studies, Annamalai University were selected as subjects were randomly selected as subjects. They were divided into two equal groups. each group consisted of the fifteen subjects. Group I underwent yogasana for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables namely strength endurance and flexibility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference between yogasana group and control group on strength endurance and flexibility. And also it was found that there was a significant improvement on selected criterion variables such as strength endurance and flexibility due to yogasana.

INTRODUCTION

Sports training are a scientifically based and pedagogically organised process which through planned and systematic effect on performance ability and performance readiness aims at sports perfection and performance improvement as at the contest in sports competition.

The modern age is the age of science and technology. Man gets all his comforts in life from machines. At this stage of development it is not only difficult to do away with machines but also impossible to keep man alive without them. For this dependence, there has been deterioration in human physical efficiency. Modern man in comparison to his primitive counterpart is poorer and inferior with regard to physical power and skill.

Therefore, in the centres of learning, emphasis is now given on physical activities.

METHODOLOGY

The purpose of the study was designed to examine the effect of yogasana on selected physical fitness components such as strength endurance and flexibility. To achieve this purpose of the study thirty men students studying UG and PG Diploma in Yoga, Centre for yoga studies, Annamalai University were selected as subjects were randomly selected as subjects. They were divided into two equal groups. each group consisted of the fifteen subjects. Group I underwent yogasana for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their

regular physical education programme. The following variables namely strength endurance and flexibility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of

covariance was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate.

ANALYSIS OF THE DATA

The influence of yogasana on each criterion variables were analysed separately and presented below.

Strength Endurance

The analysis of covariance on strength endurance of the pre and post test scores of yogasana group and control group have been analyzed and presented in Table I.

TABLE I

ANALYSIS OF COVARIANCE OF THE DATA ON STRENGTH ENDURANCE OF PRE AND POST TESTS SCORES OF YOGASANA AND CONTROL GROUPS

Test	Yogasana Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	20.4	19.8	Between	0.004	1	0.004	
S.D.	1.12	1.24	Within	3.52	28	0.125	0.032
Post Test							
Mean	24.5	20.1	Between	119.56	1	119.56	
S.D.	1.01	1.22	Within	63.56	28	2.27	52.67*
Adjusted Post Test							
Mean	24.3	19.9	Between	117.69	1	117.69	
			Within	84.72	27	3.14	37.48*

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 1 and 28 and 1 and 27 were 4.20 and 4.21 respectively).

The table I shows that the pre-test mean values on strength endurance of yogasana group and control group are 20.4 and 19.8 respectively. The obtained "F" ratio of 0.032 for pre-test scores is less than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on strength endurance. The post-test mean values on strength endurance of yogasana group and control

group are 24.5 and 20.1 respectively. The obtained "F" ratio of 52.67 for post test scores is more than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on strength endurance.

The adjusted post-test means of yogasana group and control group are 24.3 and 19.9 respectively on strength endurance. The obtained "F" ratio of 37.48 for adjusted post-test means is more than the table value of 4.21 for df 1 and 27 required for significance at .05 level of confidence on strength endurance.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogasana group and control group on strength endurance.

Flexibility

The analysis of covariance on flexibility of the pre and post test scores of yogasana group and control group have been analyzed and presented in Table II.

TABLE II

ANALYSIS OF COVARIANCE OF THE DATA ON FLEXIBILITY OF PRE AND POST TESTS SCORES OF YOGASANA AND CONTROL GROUPS

Test	Yogasana group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	18.2	17.9	Between	0.01	1	0.01	
S.D.	0.21	0.24	Within	11.51	28	0.41	0.02
Post Test							
Mean	25.7	18.2	Between	119.64	1	119.64	
S.D.	0.13	0.22	Within	11.41	28	0.41	291.80*
Adjusted Post Test							
Mean	24.9	18.1	Between	119.67	1	119.67	
			Within	14.68	27	0.54	221.61*

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 1 and 28 and 1 and 27 were 4.20 and 4.21 respectively).

The table II shows that the pre-test mean values on flexibility of yogasana group and control group are 18.2 and 17.9 respectively. The obtained "F" ratio of 0.02 for pre-test scores is less than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on flexibility. The post-test mean values on flexibility of yogasana group and control group are 25.7 and 18.2 respectively. The obtained "F" ratio of 291.80 for post test scores is more than the

CONCLUSIONS

1. There was a significant difference between yogasana group and control group on strength endurance and flexibility.

table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on flexibility.

The adjusted post-test means of yogasana group and control group are 24.9 and 18.1 respectively on flexibility. The obtained "F" ratio of 221.61 for adjusted post-test means is more than the table value of 4.21 for df 1 and 27 required for significance at .05 level of confidence on flexibility.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogasana group and control group on flexibility.

2. And also it was found that there was a significant improvement on selected criterion variables such as strength endurance and flexibility due to yogasana.

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