



Effect of Yogic Exercises on Selected Physical Fitness Components

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Abstract

The purpose of the study was designed to examine the effect of yogic exercises on selected physical fitness components such as shoulder strength, strength endurance and flexibility. To achieve this purpose of the study thirty men students studying in the Mahatma Gandhi University College of Teacher Education, Thottakad, Kottayam, Kerala 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 yogic exercises 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 shoulder strength and strength endurance 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 change on selected physical fitness components due to yogic exercises.

Keywords: Yogic Exercises, Shoulder Strength, Strength Endurance, Flexibility.

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Introduction

Training is the process of preparation for some task. The term "training is widely used in sports. But there is some disagreement among coaches and sports scientists regarding the meaning of the word. According to Iyengar yoga is the true union of our will with the will of god. Hence, patanjali is known as the father of yoga. He discussed the nature of enlightenment, the means of attaining it, the obstacles and problem of practice and way of overcoming them. He has formed a number of yoga sutras regarding yoga. Patanjali enumerated the eans of yoga as the eight limbs or Ashtanga yoga or stages of yoga for the quest of the soul.

Methodology

The purpose of the study was designed to examine the effect of yogic exercises on selected physical fitness components such as shoulder strength, strength endurance and flexibility. To achieve this purpose of the study thirty men students studying in the Mahatma Gandhi University College of Teacher Education, Thottakad, Kottayam, Kerala 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 yogic exercises 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 shoulder strength and strength endurance 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 yogic exercises on each criterion variables were analysed separately and presented below.

Shoulder Strength

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

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Table I. Analysis of covariance of the data on shoulder strength of pre and post tests scores of yogic exercises and control groups

Test	Yogic Exercises group	Control Group	Source of Variance	Sum of Squares	Df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	15.2	14.3	Between	0.83	1	0.83	
S.D.	0.81	0.92	Within	30.17	28	1.078	0.769
Post Test							
Mean	17.3	14.4	Between	45.66	1	45.66	
S.D.	0.79	0.92	Within	1.189	28	1.189	37.85*
Adjusted Post Test							
Mean	17.7	14.7	Between	51.87	1	51.87	
			Within	33.01	27	1.222	42.45*

* 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 adjusted post-test means of yogic exercises group and control group are 17.7 and 14.7 respectively on shoulder strength. The obtained "F" ratio of 42.45 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 shoulder strength. The results of the study indicated that there was a significant difference between the adjusted

post-test means of yogic exercises group and control group on shoulder strength.

Strength Endurance

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

Table II. Analysis of covariance of the data on strength endurance of pre and post tests scores of yogic exercises and control groups

Test	Yogic Exercises 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 II shows that the adjusted post-test means of yogic exercises 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 yogic exercises group and control group on strength endurance.

Conclusions

1. There was a significant difference between yogic exercises group and control group on shoulder strength and strength endurance.
2. And also it was found that there was a significant improvement on selected criterion variables such as shoulder strength and strength endurance due to yogic exercises.

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