

AFFLUENCE OF YOGIC PRACTICES ON SELECTED PHYSICAL FITNESS COMPONENTS

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ABSTRACT

The purpose of the study was designed to examine the effects of yogic practices on selected physical fitness components such as strength endurance and flexibility. To achieve this purpose of the study thirty men students studying in the were selected as subjects at were randomly selected as subjects. They were divided into two equal groups of fifteen subjects. Group I underwent yogic practices for five 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 variable. All the subjects of two groups were tested on selected dependent variable at prior to and immediately after the training programme. The analysis of covariance (ANCOVA) was used to analyzed 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 result of the study showed that there was a significant difference between yogic practice 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 yogic practices.

KEY WORDS:

Yogic Practices, Strength Endurance, Physical Fitness, Fitness Components.

INTRODUCTION

Sports training is a scientifically based and pedagogically organised process which through planned and systematic effect on performance ability and performance readiness aims at sports perfection and 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 yogic practices on selected physical fitness components such as strength endurance and flexibility. To achieve this purpose of the study thirty men students studying in were selected as subjects at were randomly selected as subjects. They were divided into two equal groups of fifteen subjects. Group I underwent yogic practices for five 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 variable. All the subjects of two groups were tested on selected dependent variable at prior to and immediately after the training programme. The analysis of covariance (ANCOVA) 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 practices 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 yogic practices 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 YOGIC PRACTICES AND CONTROL
GROUPS

Test Obtained 'F' Ratio	Yogic practice Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square
Pre test						
Mean	20.47	19.83	Between	0.004	1	0.004
S.D 0.032	1.12	1.24	Within	3.52	28	0.125
Post test						
Mean	24.59	20.17	Between	119.56	1	119.56
S.D 52.67*	1.01	1.22	Within	63.56	28	2.27
Adjusted Post Test			Between	117.69	1	117.69
Mean 37.48*	24.30	19.90	Within	84.72	28	3.14

*Significant at .05 level of confidence.

(The table value 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 show that the adjusted post-test mean value on strength endurance of yogic practices group and control group are 20.47 and 19.83 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 yogic practices group and control group are 24.59 and 20.17 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 yogic practice group and control group are 24.30 and 19.90 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 result of the study indicated that there was a significant difference between the adjusted post-test means of yogic practices group and control group on strength endurance.

FLEXIBILITY

The analysis of covariance on flexibility of the pre and post test scores of yogic practices 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 Obtained 'F' Ratio	Yogic practice Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square
Pre test						
Mean	18.24	17.93	Between	0.01	1	0.01
S.D 0.02	0.21	0.24	Within	11.51	28	0.41
Post test						
Mean	25.76	18.27	Between	119.64	1	119.64
S.D 291.80*	0.13	0.22	Within	11.41	28	0.41
Adjusted Post Test			Between	119.67	1	119.67
Mean	24.90	18.10	Within	14.68	27	0.54
221.61*						

*Significant at .05 level of confidence.

(The table value 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 show that the adjusted post-test mean value on flexibility of yogic practices group and control group are 18.24 and 17.93 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 yogic practices group and control group are 24.59 and 20.17 respectively. The obtained “F” ratio of 291.80 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 flexibility.

The adjusted post-test means of yogic practice group and control group are 24.30 and 18.10 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 result of the study indicated that there was a significant difference between the adjusted post-test means of yogic practices group and control group on flexibility.

CONCLUSIONS

1. There was a significant difference between yogic practices group and control group on strength endurance and 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 yogic practices.

REFERENCES

- Gharote, M.L.(1976). Guidelines for Yogic Practices, Lonawala: Medha Publications, p.51.
- Iyengar, B.K.S. (1991). Light on Yogic, Gopsons Paper Ltd., Nodia, India.
- Iyengar, B.K.S. (1999). The Gift of Yogic, Harpers Collins Publication India Pvt Ltd., New Delhi.
- Joshi, K.S. (1992) Yogic Pranayama-Breathing For Long Life And Good Health, (New Delhi: Orient Paper Backs,), p.14.
- Madanmohan et.al.(2005). “Effect of slow And Fast Pranayams on Reaction Time And Cardio-respiratory Variables.”, Indian Journal of Physiology and Pharmacy.49(3): 313-8
- Madanmohan et.al.(2008),” Effect of six weeks yoga training on weight loss following step test, respiratory pressures, handgrip endurance in young healthy subjects.”, Indian Journal of Physiology and Pharamacy. Apr-Jun;52(2):164-70.
- Makwana K,et.al.(1988) “Effect of short Term Yoga Practice on Ventilatory Function Test.” Indian Journal of Physiology and Pharmacy. 32(3):202-8.
- Peng, C.K. et.al.(2004), “Heart rate Dynamics during Three Forms of Meditation”. International Journal of Cardiology 95(1):19-27.