



EFFECT OF YOGIC PRACTICES ON PHYSICAL FITNESS

(Received on: 19 Jan 2017, Reviewed on: 12 Feb 2017 and Accepted on: 22 March 2017)

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Abstract

Yogic asana help in the prevention and cure of many physical diseases, especially those of the digestive tract by regulating the secretion of various duct and ductless gland. Apart from these yoga is an extremely economic practice. Fitness has been considered as an essential element of everyday life. It involves basic skills like strength, speed, endurance, agility, cardiovascular endurance to remain physically fit. The Purpose of the study was to evaluate the effect of one month yoga practice on selected physical parameters which includes cardiovascular endurance, explosive strength, flexibility, and twenty subjects were selected as subjects for the study. Yogic asana training was administered for one month. The results revealed significant effect on flexibility, explosive strength and cardiovascular endurance of yogic practice.

Keywords: Cardiovascular Endurance, Explosive Strength, Flexibility and Yoga

Introduction

Yoga is a spiritual technique, a method that has something to offer to everyone, religious or the non-religious faith or crime factors find in yoga a way to healthier, happier and harmonious life. Patanjali the father of yoga states in his sutras that the harmonious development of the body, mind and soul can be obtained through the eight limbs of yoga. They are yama, niyama, asana, pranayama, pratyahara, dharma, dhyana, and Samadhi. Yogic asana help in the prevention and cure of many physical diseases, especially those of

the digestive tract by regulating the secretion of various duct and ductless gland. Apart from these yoga is an extremely economic practice. Fitness has been considered as an essential element of everyday life. It involves basic skills like strength, speed, endurance, agility, cardiovascular endurance to remain physically fit. Doctors declare that there is a

close link between physical fitness and mental alertness of that a fit person taking regular exercise is better able to face rigorous, emotional and physical stress of day to day life. Investigated the impact of game specific yogic training on cricket performance among college level cricketers. The analysis revealed that physical field training combined with game and specific yogic training showed significant improvement on the cricket playing ability among cricketers. Shanugam (1993) [4] studied the effect of asanas and jogging on selected physiological and hematological variables among school boys. Asanas were found to be more effective than jogging in improving pulse rate, vital capacity, breath holding time and serum cholesterol.

Methodology

Twenty male students of Tumkur University, Karnataka age ranging from 18-25 years were randomly selected as the subjects for the study. Yogic asana training programme was administered for one month five days a week in the morning and evening time for one hour. The data pertaining to the criterion variable were taken before administering the training



program of three months in relation to the cardiovascular endurance, explosive strength, reaction time, flexibility and hemoglobin. The standard tests were applied to collect data for the above said variables. After pre-test a three month training schedule of yogic practices was administered and after the completion of training a post-test was taken on all the selected variables.

The following tests were administered for data collection on selected variables:

- Harward Step Test

To measure Cardio Vascular Endurance. In this test exercise is given for five minutes on the box. After exercise pulse is measured for the duration of 1 to 1.5, 2 to 2.5, 3 to 3.5, the pulse of all the three time were recorded and was calculated by applying following formula;

Fitness Index =
(Duration of Ex. in sec / Sum of three pulse counts after exercise) X 100

- Standing Broad Jump

To measure Explosive Strength of legs. The best trial was used as the final score of the test item.

- Sit and Reach Test

To measure flexibility of legs.

RESULT AND FINDNGS

't' test was applied to find out the significance of difference between the pre-test and post-test means of the selected variables. The level of significance was chosen to test the hypothesis was 0.05.

TABLE NO. 1
MEAN VALUE COMPARISON OF CARDIOVASCULAR
ENDURANCE BEFORE AND AFTER YOGIC EXERCISE
PROGRAMME

Test	Mean	S.D.	S.E.M	't' Ratio
Pre-test	51.5	9.37	2.09	2.28*
Post-test	60.6	8.43	1.88	

*Significant at 0.05 level of significance

The table-1 reveals that mean, standard deviation, standard error of mean with regard to pre data on cardiovascular endurance were recorded 60.60, 9.375 and 2.096 respectively where is in case of post data the same was recorded as 51.50, 8.431, and 1.885 respectively and the 't' ratio (2.285) was found significant at 0.05 level. Graphical representation of above table is made in fig no. 01.

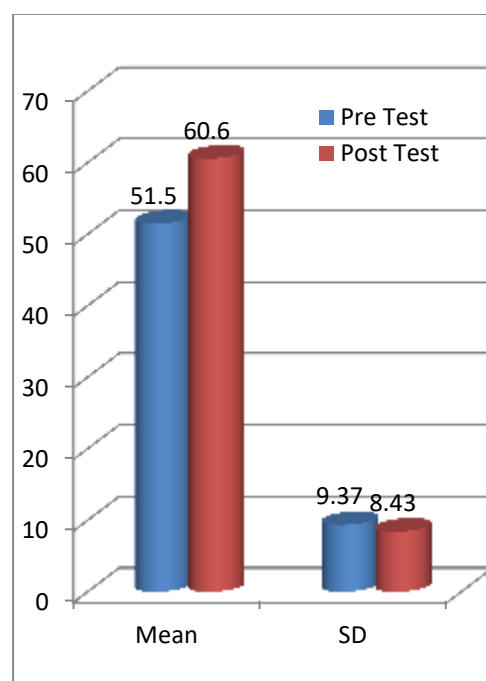


Fig. No. 1: Mean and Standard Deviation values of Pre Post Test of Cardiovascular Endurance



TABLE NO. 2
MEAN VALUE COMPARISON OF FLEXIBILITY BEFORE AND
AFTER YOGIC EXERCISE PROGRAMME

Subject	Mean	S.D.	S.E.M	't' Ratio
Pre-test	1.96	0.05	0.12	2.68*
Post-test	2.46	0.25	0.05	

*Significant at 0.05 level of significance

An examination of table-2 revealed that mean, standard deviation, standard error of mean value with regard to predation sit and reach test were recorded 1.9695, 0.0566 and 0.1265 respectively where as in the case of post-data the same were recorded as 2.4635, 0.2555 and 0.0571 respectively and 't' ratio (2.689) was found to be statistically significant at 0.05 level. Graphical representation of above table is made in fig no. 02.

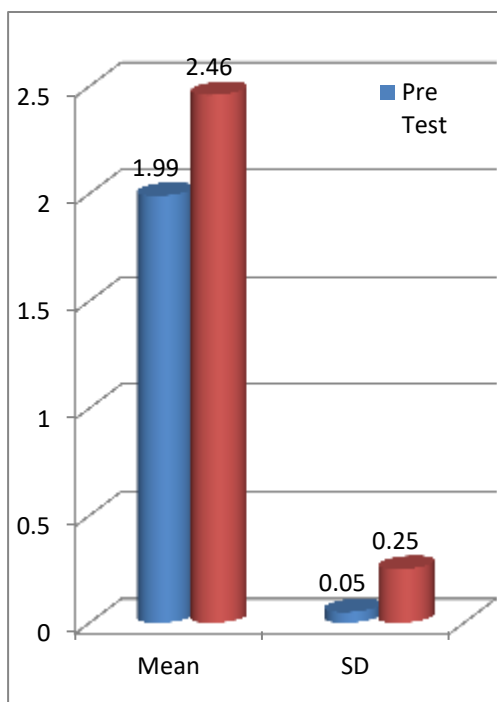


Fig. No. 2: Mean and Standard Deviation values of Pre Post Test of Flexibility

TABLE NO. 3
MEAN VALUE COMPARISON OF EXPLOSIVE STRENGTH
BEFORE AND AFTER YOGIC EXERCISE PROGRAMME

Subject	Mean	S.D.	S.E.M	't' Ratio
Pre-test	1.69	0.41	0.09	2.93*
Post-test	1.76	0.53	0.11	

*Significant at 0.05 level of significance

Table-3. indicates the mean, standard deviation, standard error of mean value with regard to pre-test on broad jump variable were recorded 1.691, 0.413 and 0.092 respectively were as in the case of post-test the same were recorded as 1.763, 0.532 and 0.118 respectively and 't' ratio (2.936) was found statistically significant at 0.05 level. Graphical representation of above table is made in fig no. 03.

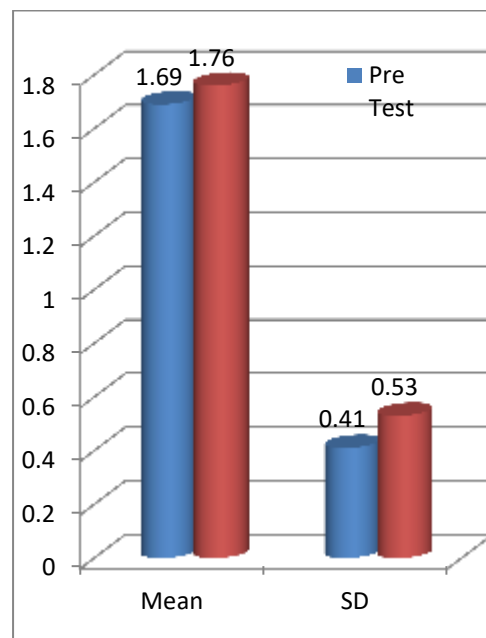


Fig. No. 3: Mean and Standard Deviation values of Pre Post Test of Explosive Strength



CONCLUSION

The results of the study showed that yogic practice have significant effect on flexibility, strength and cardiovascular endurance whereas the variables reaction time and hemoglobin showed no significant difference between pre and post training results. With the help of yogic practice elastic component of muscles can be stretched and consequently develop tension due to its elastic resistance to stretch. This effect is the mechanism in the muscles contribution to contractile force. It is effective in those activities which involve voluntary muscle contraction and elastic recoil (e.g. running, jumping, hopping, agility etc.).The net result of reflex activity is a more vigorous contraction of a given muscle when it is a forcefully stretched (e.g. in the take off leg in long jump).

Yogic practice improves the mental and physical health of the individual.

Systematic and effective practice of yoga increases the flexibility.

Muscular strength of individual also improves after the three months of yogic practice.

Practice of yoga one can notice significant improvement in Explosive strength of legs.

References

- Bharshankar J.R., (2003) Effect of yoga on cardiovascular system in subjects above 40 years, Vol. 47(2):202-6.
- Kalidasan, Samsudeen S. (1998) Specific yogic training and its impact on cricket performance, (Unpublished Master's thesis) Dept. of Physical Education, Bhartidarshan University, Tamil Naidu.
- Kocher, H.C. (1996) Influence of yogic practice on mental fatigue, Yoga Mimasa, Vol. 18:2-13.
- Shanmugam. (1993) Effect of asana and jogging on selected physiological and hematological variables among school boys, Unpublished Ph.D. Thesis, Alagappa University, Tamil Naidu.
- Singh V and Madhu A. (1987) A study of the effect of yogic practice on certain Psychological parameters, Indian Journal of Clinical Psychology, Vol.14:80-83.