



Effect of Yogic Practices on Selected Physiological Variables among University Men Students

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Abstract

The purpose of the study was to find out the effect of yogic practices on selected physiological variables such as breath holding time and resting pulse rate. To achieve this purpose of the study, thirty men students studying in Department of Physical Education and Sports Sciences, Annamalai University, Annamalai Nagar, Tamil Nadu, India were selected as subjects at random. The age of the subjects were ranged from 18 to 20 years. The selected subjects were divided into two equal groups of fifteen subjects each, such as yogic practices group (Group I) and control group (Group II). The yogic practices group (Group I) underwent their respective training programme for five days per week for twelve weeks. Group II acted as control in which they did not undergo any special training programme apart from their regular physical education programme. All the subjects of two groups were tested on selected criterion variable such as breath holding time and resting pulse rate at prior to and immediately after the training programme by using holding the breath for time and radial pulse respectively. The analysis of covariance (ANCOVA) was used to analysis the significant difference, if any in-between the groups. The level of significant to test the 'F' ratio obtained by the analysis of covariance was tested at .05 level of confidence, which was considered as an appropriate. The results of the study revealed that there was a significant difference between yogic practices group and control group on selected physiological variables such as breath holding time and resting pulse rate. Significant changes on selected criterion variables namely breath holding time and resting pulse rate were also noticed due to yogic practices.

Keywords: Yogic Practices, Physiological, Men.

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Introduction

The word 'Yoga' is derived from the root "Yuj" or Yoke that means union or merger. The merger of soul with God and the experience of oneness with him are meant by yoga. Patanjali stated that "Yoga Cittavrtti nirodha". It means stilling the minds' movement. It is also explained as seeing yourself in yourself by yourself. Yoga is a timeless Pragmatic science evolved over thousands of years dealing with the physical and spiritual being of man as a whole. The fundamental requirement of the body is good health in order to attain the four objectives of human existence, namely, acquisition of religious merits (dharma), wealth for living in comfort and generousness (artha), gratification of permissible pleasures and fulfillment of desires (kama), and lastly the Endeavour to obtain liberation from the shackles of mundane cycles of births and deaths (moksha).

Methodology

The purpose of the study was to find out the effect of yogic practices on selected physiological

variables such as breath holding time and resting pulse rate. To achieve this purpose of the study, thirty men students studying in Department of Physical Education and Sports Sciences, Annamalai University, Annamalai Nagar, Tamil Nadu, India were selected as subjects at random. The age of the subjects were ranged from 18 to 20 years. The selected subjects were divided into two equal groups of fifteen subjects each, such as yogic practices group (Group I) and control group (Group II). The yogic practices group (Group I) underwent their respective training programme for five days per week for twelve weeks. Group II acted as control in which they did not undergo any special training programme apart from their regular physical education programme. All the subjects of two groups were tested on selected criterion variable such as breath holding time and resting pulse rate at prior to and immediately after the training programme by using holding the breath for time and radial pulse respectively. The analysis of covariance (ANCOVA) was used to analysis the significant difference, if any in-between the groups. The level of significant to test the 'F' ratio obtained by the analysis of covariance was tested at .05 level of confidence, which was considered as an appropriate.

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Analysis of the Data

The influence of yogic practices on each physiological variable were analyzed separately and presented below.

Breath Holding Time

The analysis of covariance on breath holding time of the pre and post test scores of yogic practices group and control group have been analyzed and presented in Table 1.

Table 1

Analysis of covariance of the data on breath holding time of pre and post tests scores of yogic practices group and control group

Test	Yogic Practices Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	42.93	43.47	Between	2.13	1	2.13	1.28
S.D.	1.29	0.96	Within	46.67	28	1.67	
Post Test							
Mean	48.13	44.13	Between	120.00	1	120.00	23.10*
S.D.	1.20	0.88	Within	145.47	28	5.20	
Adjusted Post Test							
Mean	48.24	44.02	Between	127.69	1	127.69	196.25*
			Within	17.57	27	0.65	

* Significant at .05 level of confidence.

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

The table I shows that pre-test means on breath holding time of yogic practices group and control group are 42.93 and 43.47 respectively. The obtained "F" ratio of 1.28 for pre -test means is less than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on breath holding time. The post-test means on breath holding time of yogic practices group and control group are 48.13 and 44.13 respectively. The obtained "F" ratio of 23.10 for post-test means is more than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on breath holding time. The table I further shows that the adjusted post-test mean values on breath holding time of yogic practices group and control group are 48.24 and 44.02

respectively. The obtained "F" ratio of 196.25 for adjusted post-test means is greater than the required table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on breath holding time. The results of the study indicated that there was a significant difference between the adjusted post-test means of yogic practices group and control group on breath holding time.

Resting Pulse Rate

The analysis of covariance on resting pulse rate of the pre and post test scores of yogic practices group and control group have been analyzed and presented in Table 2.

Table 2

Analysis of covariance of the data on resting pulse rate of pre and post tests scores of yogic practices group and control group

Test	Yogic Practices Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	72.33	71.87	Between	1.63	1	1.63	1.82
S.D.	0.94	1.14	Within	25.07	28	0.90	
Post Test							
Mean	69.67	71.40	Between	22.53	1	22.53	10.61*
S.D.	0.88	1.08	Within	59.47	28	2.12	
Adjusted Post Test							
Mean	69.51	71.55	Between	29.30	1	29.30	30.29*
			Within	26.12	27	0.97	

* Significant at .05 level of confidence.

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

The table 2 shows that pre-test means on resting pulse rate of yogic practices group and control group are 72.33 and 71.87 respectively. The obtained “F” ratio of 1.82 for pre -test means is less than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on resting pulse rate. The post-test means on resting pulse rate of yogic practices group and control group are 69.67 and 71.40 respectively. The obtained “F” ratio of 10.61 for post-test means is more than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on resting pulse rate. The table II further shows that the adjusted post-test mean values on resting pulse rate of yogic practices group and control group are 69.51 and 71.55 respectively. The obtained “F” ratio of 30.29 for adjusted post-test means is greater than the required table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on resting pulse rate. The results of the study indicated that there was a significant difference between the adjusted post-test means of yogic practices group and control group on resting pulse rate.

9. Swami Kuvalayananda, (1977), Asana, (India: Lonavala: Kaivalyathama).

Conclusions

1. There was a significant difference between yogic practices group and control group on breath holding time.
2. There was a significant difference between yogic practices group and control group on resting pulse rate.
3. And also it was found that there were significant changes on selected criterion variables such as breath holding time and resting pulse rate due to yogic practices.

References

1. Gharote, M.L. (1976). Guidelines for Yogic Practices, Lonawala: Medha Publications, p.51.
2. Iyengar, B.K.S. (1991). Light on Yoga, Gopsons Papers Ltd., Nodia, India.
3. Iyengar, B.K.S. (1999). The Gift of Yoga, Harpers Collins Publications India Pvt Ltd., New Delhi.
4. Joshi, K.S. (1992) *Yogic Pranayama - Breathing for Long Life and Good Health*, (New Delhi: Orient Paper Backs,), p. 14.
5. Mahadev Desai (1972), Introduction to Gita, Bombay. Vakils Printing House.
6. Ockene IS, et.al.(2004), “Seasonal Variation in Serum Cholesterol Levels” Arch Intern Med. 164:863-870.
7. Sharma, P.D. (1984), Yogasana and Pranayama for Health Bombay, India: Navneet Publication, pp. 10-11.
8. Strukic, P.J, (1981). Basic Physiology, New York: Spring Ervellong Inc., p.23.