



Effect of Yogic Practices on Selected Physiological Variables among School Boys Kabaddi Players

R. Ramkumar¹ & Dr. P. Sivaraman²

¹Research Scholar, Department of Physical Education, Annamalai University.

²Assistant Professor, Department of Physical Education, Annamalai University.

Received 24th March 2021, Accepted 25th April 2021

Abstract

The purpose of the study was designed to examine the effect of Yogic practices on resting pulse rate and breath holding time of school boys kabaddi players. For the purpose of the study, thirty school boys kabaddi players from the schools in and around Chidambaram, Cuddalore district were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent Yogic practices 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 resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using radial pulse and holding the breath for time respectively 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 Yogic practices group and control group on resting pulse rate and breath holding time. And also it was found that there was a significant change on resting pulse rate and breath holding time due to twelve weeks of Yogic practices.

Keywords: Yogic practices, resting pulse rate, breath holding time, school boys kabaddi players.

© Copy Right, IJRRAS, 2021. All Rights Reserved.

Introduction

Yogic practices refer to a variety of physical, mental, and spiritual disciplines that originated in ancient India and are associated with the practice of yoga. These practices are designed to cultivate physical strength, flexibility, and relaxation, as well as to promote mental clarity, focus, and inner peace. Some common yogic practices include: Asanas: These are physical postures or poses that are designed to stretch and strengthen the body. Some examples of asanas include downward facing dog, warrior pose, and child's pose. Pranayama: This refers to the practice of controlling and regulating the breath, which is believed to have a powerful effect on the mind and body. Pranayama techniques include deep breathing, alternate nostril breathing, and ujjayi breath. Meditation: This is the practice of focusing the mind on a single point, such as the breath or a mantra, to help cultivate a sense of inner calm and clarity. Kriyas: These are specific purification techniques, such as neti (cleansing the nasal passages) and trataka (gazing at a single point), that are designed to cleanse the body and mind. Mantra repetition: This involves repeating a

specific word or phrase, such as "Om," as a means of focusing the mind and cultivating inner peace. Yoga Nidra: This is a deep relaxation practice in which the body is completely relaxed while the mind remains alert and focused. These are just a few examples of the many yogic practices that are practiced in the tradition of yoga. It's important to note that these practices are not meant to be followed rigidly, but rather to be adapted and personalized to suit the individual's needs and goals.

Methodology

The purpose of the study was designed to examine the effect of Yogic practices on resting pulse rate and breath holding time of college men students. For the purpose of the study, thirty school boys kabaddi players from the schools in and around Chidambaram, Cuddalore district were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent Yogic practices 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 resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using radial pulse and holding the breath for time respectively at

Correspondence

Dr.P.Sivaraman

Annamalai University

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

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 I.

TABLE I
ANALYSIS OF COVARIANCE OF THE DATA ON RESTING PULSE RATE OF PRE AND POST TESTS
SCORES OF YOGIC PRACTICES AND CONTROL GROUPS

Test	Yogic practices Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	75.87	75.73	Between	0.13	1	0.13	
S.D.	2.00	1.92	Within	118.67	28	4.24	0.03
Post Test							
Mean	73.33	75.53	Between	36.30	1	36.30	
S.D.	1.98	1.93	Within	147.37	28	5.26	6.90*
Adjusted Post Test							
Mean	73.27	75.59	Between	40.40	1	40.40	
			Within	11.31	27	0.42	96.42*

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table I shows that the adjusted post-test means of Yogic practices group and control group are 73.27 and 75.59 respectively on resting pulse rate. The obtained "F" ratio of 96.42 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 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.

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 II.

TABLE II
ANALYSIS OF COVARIANCE OF THE DATA ON BREATH HOLDING TIME OF PRE AND POST TESTS
SCORES OF YOGIC PRACTICES
AND CONTROL GROUPS

Test	Yogic practices Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	34.33	33.53	Between	4.80	1	4.80	
S.D.	1.45	1.67	Within	85.07	28	3.04	1.58
Post Test							
Mean	37.60	33.80	Between	108.30	1	108.30	
S.D.	1.89	1.60	Within	188.30	28	6.73	16.10*
Adjusted Post Test							
Mean	37.26	34.14	Between	68.99	1	68.99	
			Within	18.04	27	0.67	103.25*

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table II shows that the adjusted post-test means of Yogic practices group and control group are 37.26 and 34.14 respectively on breath holding time. The obtained “F” ratio of 103.25 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 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.

Conclusions

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

References

1. Kumar A, and Balkrishna A. (2009), “To study the effect of the sequence of seven pranayama by Swami Ramdev on gene expression in leukaemia patients and rapid interpretation of gene expression.”, *Journal Clinical Pathology*. Nov;62(11):1052-3
2. Madanmohan et.al. (2005). “Effect of slow And Fast Pranayams on Reaction Time And Cardiorespiratory Variables.”, *Indian Journal of Physiology and Pharmacy*.49(3): 313-8
3. Madanmohan, et.al. (2008),” Effect of six weeks yoga training on weight loss following step test, respiratory pressures, handgrip strength and handgrip endurance in young healthy subjects.”, *Indian Journal of Physiology and Pharmacy*. Apr-Jun;52(2):164-70.
4. Makwana K,et.al. (1988) “Effect of short Term Yoga Practice on Ventilatory Function Tests.”. *Indian Journal of Physiology and Pharmacy*. 32(3): 202-8.
5. Vyas R, et.al. (2008), “Effect of Raja yoga meditation on the lipid profile of post-menopausal women.”, *Indian Journal of Physiology and Pharmacy*. Oct-Dec;52(4):420-4.
6. Yang K, et.al. (2009), “Utilization of 3-month Yoga Program for Adults at High Risk for Type 2 Diabetes: A Pilot Study.”, *Journal of Alternate Complementary Medicine*. Aug 18.