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Physical Education

EFFECT OF YOGA PRACTICES AND PHYSICAL TRAINING ON SELECTED PHYSIOLOGICAL COMPONENTS AMONG COLLEGE LEVEL PLAYERS

Dr. V. A. Manickam — Assistant Professor, Department of Physical Education and Health Sciences, Alagappa University, Karaikudi,-630 004, Tamilnadu, India.

Siyad. B. R. — Assistant Professor, College of Agriculture, Vellayani, Trivandapuram, Kerala, India.

ABSTRACT The Purpose of this study was to find out the impact of yoga practices and physical training on selected physiological components among college level players. The study was conducted on forty five (N=45) men College men players who were participated various tournament during the year 2017-2018 were selected as subjects. Subjects were randomly assigned equally into three groups, Group –I underwent Yoga Practices Group (n = 15), Group II underwent Physical Training Group (n=15) and Group-III acted as control Group (n=15). Among various physiological components resting pulse rate only selected as a dependent variable. The data was collected from the Experimental and Control Groups were statically examined with Analysis of covariance (ANCOVA). Resting Pulse Rate showed significant difference between the groups.

KEYWORDS : Physical Exercises, Yoga Practice, Resting Pulse Rate

INTRODUCTION

Modern day exercises, which concentrate only on the body or on the mind, yoga techniques, provide a holistic approach towards ones welfare. Asana help ones to improve your strength and flexibility, so that one can carry out ones daily activities unhindered. Deep breathing techniques help in removal of toxins in the body and aid in relaxation. Yoga can be a great weight loss and toning tool. It helps in healing and nourishing the body. Meditation calms one's mind and gives ones clarity of thought.

Yoga comes from the Sanskrit word “yuj” which means to unite or to join. Even though, people tend to think that yoga is a series of exercises with twisted body poses, it is not so. Basically, it helps you to connect with your inner spirit, which is essentially divine and is connected to the universal spirit or God ***(Amita et al., 2009).***

Yoga makes certain that all the parts of the body receive maximum blood supply. This it does by softly stretching muscles and joints plus massaging the different organs, these aids in the rinsing out of toxins from the system, besides giving nourishment all the way to every nook and cranny of the system.

Yogic exercises help to promote an all- round well being in an individual. They help to recharge the body with cosmic energy. This helps to attain perfect equilibrium and harmony. Yoga helps the aspirant to channelize and harness the cosmic energy for self- Healing. Consequently, it produces peace and positive feelings in the mind of the aspirant. It rejuvenates and energizes the body. Development and healing is brought about from within ***(John Parthiban et al., 2011).***

METHODOLOGY

The study was conducted on forty five (N=45) men College men players who were participated various tournament during the year 2017-2018 were selected as subjects. The age of the subjects ranges from 18-21 years. Subjects were randomly assigned equally into three groups, Group –I underwent Yoga Practices Group (n = 15), Group II underwent Physical Training Group (n=15) and Group-III acted as control Group (n=15). Among various physiological components resting pulse rate only selected as a dependent variable. The training period was limited to twelve weeks. The data was collected from the Experimental and Control Groups were statically examined with Analysis of covariance (ANCOVA). Resting pulse rate was assessed by Radial Pulse manual method.

RESULTS AND DISCUSSION

The data collected from the Experimental group and Control group prior and after experimentation on selected variables were statistically examined by analysis of covariance (ANCOVA) was used to determine differences, if any among the adjusted post test means on selected criterion variables separately. The level of significance was fixed at 0.05 level of confidence to test the 'f' ratio obtained by analysis of covariance.

TABLE – I THE SUMMARY OF MEAN AND DEPENDENT 'T' TEST FOR THE PRE AND POST TESTS ON RESTING PULSE RATE OF YOGA PRACTICES GROUP, PHYSICAL TRAINING GROUP AND CONTROL GROUP

	Yoga Practices Group – (I)	Physical Training Group – (II)	Control Group – (III)
Pre- test mean	74.47	74.67	74.00
Post-test mean	72.27	72.29	74.07
't'-test	4.45*	4.78*	0.08

**** Significant at .05 level.***
(Table value required for significance at .05 level for 't'-test with df 14 is 2.15)

From Table-I the dependent't' test values between the pre and post test means of Yoga Practices Group, Physical Training Group and Control Group, were, 4.45, 4.78 and 0.08 respectively. Since the obtained 't'-test value of Experimental groups are greater than the table value 2.15 with df 14 at 0.05 level of confidence, it is concluded that Yoga Practices Group and Physical Training Group had registered significant improvement in performance of Resting Pulse Rate.

The Analysis of covariance (ANCOVA) on Resting Pulse Rate of Yoga Practices Group, Physical Training Group and Control Group, have been analyzed and presented in Table -II.

TABLE – II ANALYSIS OF COVARIANCE ON RESTING PULSE RATE YOGA PRACTICES GROUP, PHYSICAL TRAINING GROUP AND CONTROL GROUP

Adjusted Post-test Means			Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Yoga Practice Group-(I)	Physical Exercises Group - (II)	Control Group (III)					
72.27	72.14	74.36	Between	48.14	2	24.07	63.34*
			With in	15.63	41	0.38	

**** Significant at.05 level of confidence***
(Resting Pulse Rate Scores in Beats per/ Minute)
(The table value required for Significance at 0.05 level with df 2 and 41 is 3.23)

Table II shows that the adjusted post test mean value of Resting Pulse Rate for Yoga Practices Group, Physical Training Group and Control Group are 229.39, 211.95 and 251.33 respectively. The obtained F-ratio of 104.90 for adjusted post test mean is more than the table value of 3.23 for df 2 and 41 required for significant at .05 level of confidence.

The results of the study indicate that there are significant differences among the adjusted post test means of Yoga Practices Group, Physical Training Group and Control Group on the development of Resting Pulse Rate.

To determine which of the paired means had a significant difference, the Scheffe's test was applied as Post hoc test and the results are presented in Table III.

TABLE – III THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON RESTING PULSE RATE

Adjusted Post-test means			Mean Difference	Confidence Interval
Yoga Practice Group – (I)	Physical Exercises Group – (II)	Control Group - (III)		
72.27	72.14		0.13*	0.10
72.27		74.36	2.09*	0.10
	72.14	74.36	2.22*	0.10

**** Significant at.05 level of confidence***

Table -III shows that the adjusted post test mean difference on Yoga Practice, Physical Exercises Group and Control Group, Yoga are 0.13, 2.09 and 2.22 respectively. The values are greater than the confidence interval value 0.10, which shows significant differences at 0.05 level of confidence.

It may be concluded from the results of the study that there is a significant difference in Resting Pulse Rate between the adjusted post test means of Yoga Practice Group and Physical Exercises Group, Yoga Practice Group and Control Group, Physical Exercises Group and Control Group. However, the improvements of Resting Pulse Rate were significantly higher for Physical Exercises Group than Yoga Practice Group and Control Group.

CONCLUSIONS:

1. The results of the study showed that there is a significant difference among the groups.
2. It may be concluded that Physical Training group is better than Yoga Practices Group and Control Group in decreasing Resting Pulse Rate.

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