



EFFECT OF YOGIC PRACTICES AND HYDROTHERAPY TREATMENT ON THE DEVELOPMENT OF RESTING PULSE RATE AMONG AGRICULTURAL UNIVERSITY OF KERALA

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ABSTRACT

The purpose of the study was to find out the effect of yogic practices and Hydrotherapy Treatment on the development of Resting Pulse Rate among Agricultural University of Kerala. For this study, thirty (N=30) student from Kerala Agricultural University, Thrissur, Kerala India, were selected as subjects at random. The subjects will be divided randomly into three groups of ten each (n=10) namely Group I underwent yoga practices, group II underwent Hydrotherapy treatment and group III acted as control. The training period was limited to twelve weeks and for three days per week. Resting pulse rate was selected as dependent variable and it was assessed by radial pulse method. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables. The data obtained from the Experimental groups before and after the experimental period were statistically analyzed Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post test means was found to be significant, the Scheffe's test was applied as post-hoc test to determine the paired mean differences. The level of confidence was fixed at .05 level for all the cases. The results revealed that there was significant difference among the selected groups.

KEYWORDS : Yogic Practices, Hydrotherapy, Resting Pulse Rate

INTRODUCTION

Fitness is perhaps one of the most controversial aspects in the field of measurement in physical education. It is most elusive quality and has been frequently defined in rather abstract terms. In the dictionary 'Fitness' is defined as having the necessary qualities or a readiness or preparedness. Fitness is operationalized in present day Western Societies with a focus on two goals; performance and health. Performance related fitness refers to those components of fitness that are necessary for optional work to work performance (Bouchard, 1994).

In Sanskrit, Yoga means, "to unite". Primarily an exercise in moral and mental cultivation of poses and practices that aim towards harmonizing your mind, body and soul to achieve a state of oneness with the universe. It is a spiritual practice that does not subscribe nor promote any particular faith; hence all can practice it. A lifestyle choice by many, the universally timeless philosophies of yoga can be incorporated into any belief system. Stress, anxiety, ill health, unhappiness and anger can be transformed into peacefulness, vibrant health, service and love towards all creation. The techniques are important in this process but the goal should be kept firmly in mind (Iyengar, 1981).

In the traditional sense, yoga means union. It is the practice of joining mind, body and soul that culminates into positive and perennial happiness and peace. It is said to be indispensable for the ultimate accomplishment in life that affects not only the conscious self but the subconscious as well. It is an exercise that is easily accessible to everyone-young and old.

When the restlessness of the mind, intellect and self are stilled through the practice of Yoga, the Yogi by the grace of the spirit within himself finds fulfillment. When the senses are stilled, when the mind is at rest, when the intellect wavers not then, say the wise, is reached the highest stage. Yoga has also been described as wisdom in work or skilful living amongst activities with harmony and moderation. Asanas (Postures) should never be practiced immediately after 'Pranayama' (Rhythmic control of breath). If 'Pranayama' is done, first allow some time at least an hour to elapse before starting an asana. All the ancient commentaries on Yoga have stressed that it is essential to work under the direction of a Guru (Master/Teacher).

METHODOLOGY

This study was designed to find out the effect of yogic practices and Hydrotherapy Treatment on the development of Resting Pulse Rate

among Agricultural University of Kerala. For this study, thirty (N=30) student from Kerala Agricultural University, Thrissur, Kerala India, were selected as subjects at random. The subjects will be divided randomly into three groups of ten each (n=10) namely Group I underwent yoga practices, group II underwent Hydrotherapy treatment and group III acted as control. The training period was limited to twelve weeks and for three days per week. Resting pulse rate was selected as dependent variable and it was assessed by radial pulse method. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables. The data obtained from the Experimental groups before and after the experimental period were statistically analyzed Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post test means was found to be significant, the Scheffe's test was applied as post-hoc test to determine the paired mean differences. The level of confidence was fixed at .05 level for all the cases. The results revealed that there was significant difference among the selected groups.

ANALYSIS OF THE DATA

The data collected from the experimental groups and control group on 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. Whenever they obtained f-ratio value in the simple effect was significant the Scheffe's test was applied as post hoc test to determine the paired mean differences, if any. In all the cases .05 level of significance was fixed.

The Analysis of covariance (ANCOVA) on resting pulse rate of yoga practices group, Hydrotherapy and control group, have been analyzed and presented in Table-I.

TABLE – I ANALYSIS OF COVARIANCE ON RESTING PULSE RATE OF YOGA PRACTICES GROUP HYDROTHERAPY GROUP AND CONTROL GROUP

Adjusted Post-test Means			Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Yoga Practice s Group – (I)	Hydrotherapy Group– (II)	Control Group (III)					
73.14	75.01	80.45	Between	287.51	2	143.76	86.60*
			With in	43.12	26	1.66	

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

(Resting pulse rate Scores in Beats per Minute)

(The table value required for Significance at .05 level with df 2 and 26 is 3.37)

Table I shows that the adjusted post test mean values of resting pulse rate for yoga practices group, Hydrotherapy group and control group are 73.14, 75.01 and 80.45 respectively. The obtained F-ratio of 86.60 for adjusted post test mean is more than the table value of 3.37 for df 2 and 26 required for significant at 0.05 level of confidence.

The results of the study indicate that there are significant differences among the adjusted post test means of yoga practices group, Hydrotherapy 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 II.

TABLE - II 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 Practices Group - (I)	Hydrotherapy Group - (II)	Control Group - (III)		
73.14	75.01		1.87*	1.54
73.14		80.45	7.31*	1.54
	75.01	80.45	5.44*	1.54

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

Table II shows that the adjusted post test mean differences on yoga practices group and Hydrotherapy group, yoga practices group and control group, Hydrotherapy group and control group are 1.87, 7.31 and 5.44 respectively. The values are greater than the confidence interval value 1.54, 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 practices group and nature cure therapy group, yoga practices group and control group, Hydrotherapy group and control group. However, the improvements of resting pulse rate were significantly higher for yoga practices group than Hydrotherapy group and control group.

It may also be concluded that yoga practices group is better than Hydrotherapy group and control group in improving Resting Pulse Rate.

CONCLUSION

From the analysis of the data, the following conclusions are drawn.

1. The Experimental groups namely, yoga practices group and Hydrotherapy group had significantly improved in resting pulse rate.
2. Significant differences were also noted between yoga practices group and Hydrotherapy group in resting pulse rate.
3. The yoga practices group was found to be better reduction of resting pulse rate, than the Hydrotherapy group and control group.

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