

EFFECT OF YOGIC PRACTICES THERAPEUTIC EXERCISE AND COMBINED PRACTICES ON RESTING PULSE RATE AMONG LOW BACKACHE MEN

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Abstract

The purpose of the study was to investigate the effect of yogic practices, Therapeutic exercise practices, and combined practices on resting pulse rate among low backache men. To facilitate the study, 60 low backache men were selected at random in the age group of 30 to 40 years from Magesh Physiotherapy Clinic, Annanagar, Chennai city. In this study Yogic practices were given to experimental group I and Therapeutic exercise practices were given to experimental group II and combined practices (Yogic practices and Therapeutic exercises) were given to experimental group III for the period of twelve weeks. The control group did not participate in any of the practices. The pre-test and post-test scores were determined by analysis of covariance (ANCOVA). The level of significance was fixed at 0.05 level of confidence for the cases to test the hypothesis. The combined practices group showed significant improvement on resting pulse rate than the other experimental and control groups.

Keywords: Yogic Practices, Therapeutic Exercises, Resting pulse rate, low backache.

Introduction

Low back ache is one of the most common pain disorders today. It is a chronic condition characterized by a persistent dull or sharp pain per the lower back. It may be also associated with burning, stiffness, numbness or tingling with the pain shooting down the buttocks and the legs. The people should not be surprised that backache is so common when we understand the highly complex mechanics involved in the functioning of the spinal column. Since man became

a biped, the center of gravity (COG) has become narrowed to a small zone (the area of one foot) as compared to the wide area of the center of gravity when we were four legged animals. The brunt of the weight of entire body has to be borne by the spinal column. While having to do this the spinal column also has to allow for enormous degree of flexibility. This is ensured by a highly complex organization of various anatomical structures such as bones, discs, ligaments, tendons, nerves, blood vessels and strong muscles. Any one of these structures could be injured or affected by diseases or subjected to excessive stress and strains thus contributing to pain in most mobile parts of the spine namely the neck and lumbar region (Bukowski, et al. 2006).

Methodology

The purpose of the study was to investigate the effect of yogic practices, Therapeutic exercise practices and combined practices on resting pulse rate among low backache men. To facilitate the study, 60 low backache men were selected at random in the age group of 30 to 40 years from Magesh Physiotherapy Clinic, Annanagar, Chennai city. In this study Yogic practices were given to experimental group I and Therapeutic exercise practices were given to experimental group II and combined practices (Yogic practices and Therapeutic exercises) were given to experimental group III for the period of twelve weeks. The control group did not participate in any of the practices. The pre-test and post-test scores were determined by analysis of covariance (ANCOVA). The level of significance was fixed at 0.05 level of confidence for the cases to test the hypothesis.

Results

TABLE I
COMPUTATION OF ANALYSIS OF COVARIANCE OF PRE-TEST, POST- TEST
AND ADJUSTED POST-TEST ON RESTING PULSE RATE OF YOGIC
PRACTICES, THERAPEUTIC EXERCISE PRACTICES
AND COMBINED PRACTICES
 (Total Scores in Beats/min)

	EX.GR. I	EX.GR. II	EX.GR. III	Control GR.	Source of Variance	Sum of Squares	df	Mean Squares	Obtained F
Pre-Test Mean	78.40	79.60	79.07	78.93	between	10.93	3.00	3.64	1.24
					within	165.07	56.00	2.95	
Post Test Mean	76.40	76.53	74.27	79.20	between	183.73	3.00	61.24	9.15*
					within	374.67	56.00	6.69	
Adjusted Post Test Mean	76.32	76.61	74.28	79.19	between	182.90	3.00	60.97	9.02*
					within	371.66	55.00	6.76	

Mean Diff	2.00	3.07	4.80	0.27					
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Table value at 0.05 level of confidence for 3 and 56 (df) is 2.77, 3 and 55 (df) is 2.77.

* Significant at 0.05 level.

Table I shows that the pre-test mean scores of Resting Pulse Rate Experimental group I –Yogic practices was 78.40. Experimental Group II– Therapeutic exercise was 79.60; Experimental Group III Combined practices (Yogic

practices and Therapeutic exercises) was 79.07and control group was 78.93. The post- test means showed differences due to Twelve weeks of Yogic practices, Therapeutic exercise practices and Combined (Yogic practices and Therapeutic exercises) and mean values recorded were 76.40, 76.53, 74.27 and 79.20 respectively.

The obtained F value on pre-test scores 1.24 was lesser than the required F value of 2.77 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post-test scores analysis proved that there was significant difference between the groups as the obtained F value at 9.15 was greater than the required F value of 2.77. This proved that the differences between the post-test mean at the subjects were significant.

Taking into consideration the pre and post-test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 9.02 was greater than the required F value of 2.77. This proved that there was Significant differences among the means due to Twelve weeks of yogic practices, Therapeutic exercise, and combined practices on the Physiological variable Resting pulse rate.

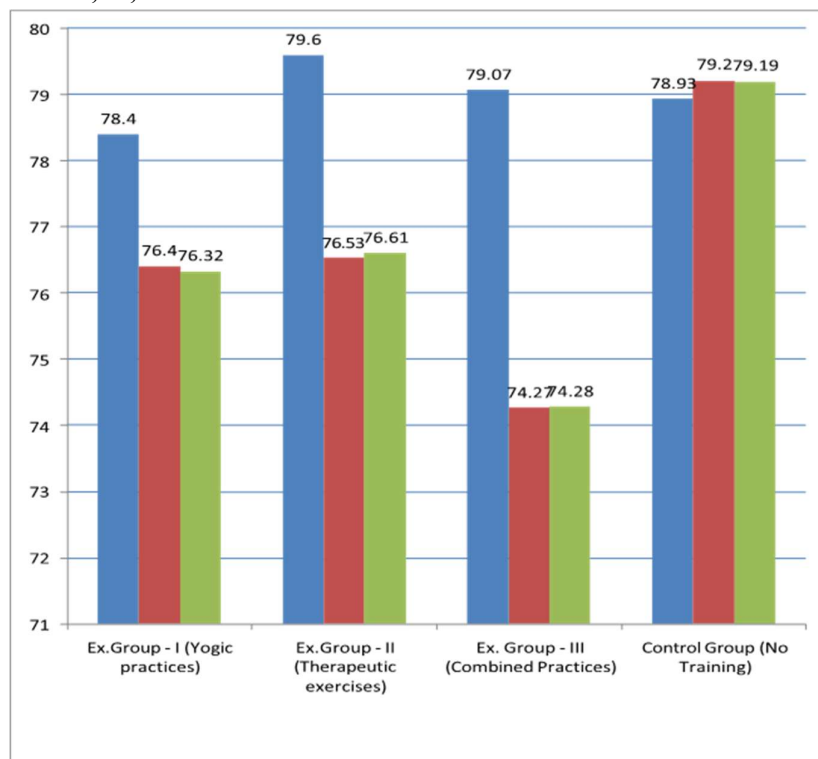
TABLE - II
SCHEFFE’S POST-HOC TEST FOR RESTING PULSE RATE

Control Group	Experimental Group – I (Yogic practices)	Experimental Group – II (Therapeutic exercises)	Experimental Group – III (Combined Practices)	Mean Difference	CI
79.19	76.32	--	--	2.87*	2.03
79.19	--	76.61	--	2.58*	
79.19	--	--	74.28	4.92*	
--	76.32	76.61	--	0.30	
--	76.32	--	74.28	2.04*	
--	--	76.61	74.28	2.34*	

* Significant

Table- II shows that there was significant difference between Yogic practices and control group and Therapeutic exercise group and control group, Combined practices (Yogic practices and Therapeutic exercises) group and control group.

FIGURE - 1
BAR DIAGRAM SHOWING PRE AND POST-TEST VALUES OF EXPERIMENTAL GROUP I, II, III & CONTROL GROUP ON RESTING PULSE RATE



Conclusion

1. The combined practices group showed significant improvement on resting pulse rate than the other experimental and control groups.

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