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Influence on Varied Packages of Yogic Practices on Cardio Vascular Endurance Among Physical Education Students

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Abstract

The purpose of the present investigation is to find out the influence of varied packages of yogic practices on Cardio Vascular Endurance among physical education students. To achieve these purpose 90 physical education students were selected at random from Department of Physical Education, Annamalai University, Chidambaram. Their age ranged from 18 to 25 years. They were divided into three equal groups of 30 subjects each and assigned to experimental group-I, experimental group-II and control group. In a week the experimental group I underwent Suryanamaskar, experimental group II underwent Pranayama and Control Group was not given any specific training. All the subjects underwent one area of test namely Cardio Vascular Endurance. They assessed before and after the training period of 12 weeks. The analysis of covariance was used to analyze the data

Keywords: Yogic Practices On Cardio Vascular Endurance.

INTRODUCTION

Yoga is right life, right movement. We live by the union of several Movements and principles. The lungs breathe in union with the air, the lungs live in yoga with the air. The heart beats in union with the blood, the heart lives in yoga with the blood. Our body lives in union with the pure spirit and that in union with the divine. This union is called yoga. All life is verily a yoga. Yoga means union, communion, connection, touch, contact, yoga is yoking of the mind to the soul, the human to the divine in us. In the technical sense, yoga is psychic science showing us how to live in tune with the pure spirit that is our divine essence. Cardio vascular endurance is also frequently called cardio-respiratory endurance, cardiovascular fitness, aerobic capacity, and aerobic fitness or is sometimes more broadly termed "endurance" although endurance may also refer to the ability of the muscle to do repeated work without fatigue. It is also one of the five components of physical fitness

METHODOLOGY

To achieve the purpose of investigation 90 Physical Education students were randomly selected from Annamalai University . The subjects age ranged from 18 to 25 years. The selected subjects were randomly divided into three equal groups, experimental group I underwent Suryanamaskar, experimental group II underwent Pranayama and Control Group was not given any specific training Each group consisted of 30 subjects. All the subjects underwent one area of test namely Cardio Vascular Endurance. They assessed before and after the training period of 12 weeks. The analysis of covariance was used to analyze the data.

DEPENDENT VARIABLE

Cardio Vascular Endurance

INDEPENDENT VARIABLES

Experimental group I – Suryanamaskar

Experimental group II - Pranayama Control group - No Training

COLLECTION OF DATA

The data on Cardio Vascular Endurance collected by administrating Cooper's 12 Minutes Run\Walk Test. Pre-test were collected before the training programme and post-test were collected after the training session. In both the cases,

RESULTS AND DISCUSSION RESULTS OF CARDIO VASCULAR ENDURANCE

The statistical analysis comparing the initial and final means of Cardio Vascular Endurance assessed through Cooper's 12 Minutes Run\Walk Test due to Suryanamaskar & Pranayama Yogic Practice group on Physical Education Students presented in Table I.

TABLE I: Computation of analysis of covariance of Cardio vascular endurance (Scores in Meters)

Test		EXPG-I	EXPG-II	CG	SOV	SS	df	MS	F
Pre	Test	2596	2698	2701	В	40055.32	3	20047.74	0.31*
Mean					W	5658416.6	89	64976.32	
Post Mean	Test	269.1	2563	2766	В	462588.56	2	225689.55	3.31*
Ividan					W	5009416.67	88	57576.51	
Adjust Post	ed Test	2940	2835	2730	В	504832.20	2	252425.21	84.9*
Mean					W	255474.12	86	2970.65	

Significant at 0.05 level of confidence. As shown in table I the obtained F value on the scores of the pre test which proved that the random assign moment of the subject were successful and their scores in Cardio Vascular Endurance before the training were equal and there was no significant differences. The analysis of post test means proved that the obtained F value was greater than the required F value of to be significant at 0.05 levels. Taking in to consideration of the pre test and post test means the adjusted post test means were done and the obtained F value of 84.9 was greater than the required F value of 3.103 hence it was accepted that Suryanamaskar & Pranayama Yogic Practice group significantly increased the Cardio Vascular Endurance. Since the significant differences were recorded, the result was subjected to post hoc analysis using scheffe's confidence interval test. The results are presented in table II.

TABLE II: Scheffe's confidence interval test scores on Cardio vascular endurance

	Means	Mean	Requaired CI	
EXP.GP I	EXP.GP I	Control Group	Differences	
2596.74	2846.05	-	69.58*	34.31
2698.47	-	2635.36	196.58*	34.01
-	2878.25	2730.58	125.63*	34.25

^{*}significant at .05 level of confidence

Table II shows that the adjusted post-test mean difference in cardio vascular endurance between EXP.GP 1 and

EXP.GP 1 and CG and between EXP. GP 2 and control group are 65.72, 181.26 and 115.54, respectively which were statistically significant at 0.05 level of confidence. The ordered adjusted means are presented through bar diagram for better understanding of the result of this study

CONCLUSIONS

EXP. GP 2,

Two yogic practice methods Suryanamaskar helped to increasing the cardiovascular endurance than Pranayama. Systematic 12 weeks of yogic practice system was a suitable training system to improve the cardiovascular endurance among the Physical Education students.

REFERENCES

- 1. McCrudden, Francis H. (2008). Uric Acid. BiblioBazaar.
- 2. Srikanth,S.S. R. Nagarathna, and H. R. Nagendra (2010), **Yoga for Diabetes** 2nd Ed. India: Vivekananda Yoga Prakashana Ltd., 01
- 3. Chaiopanont S. (2008) "Hypoglycemic effect of sitting breathing meditation exercise on type 2 diabetes at Wat Khae Nok Primary Health Center in Nonthaburi province." **J Phys Act Health**. Jan;9(1):53-61
- 4. Chiriac S, et.al. (2002) "The beneficial effect of physical training in hypertension" **Am J Nephrol.** Dec 14;38(6):519-526
- 5. Cirillo P, Sato W, Reungjui S, *et al.* (2006). "Uric acid, the metabolic syndrome, and renal disease". **J. Am. Soc. Nephrol. 17** (12 Suppl 3): S165–8.
- 6. Colberg SR, Castorino K, and Jovanovič L. (2013), "Prescribing physical activity to prevent and manage gestational diabetes.", **World J Diabetes**. Dec 15;4(6):256-262.
- 7. Hagins M, Moore W, and Rundle A (2007), "Does practicing hatha yoga satisfy recomWomendations for intensity of physical activity which improves and maintains health and cardiovascular fitness?". Journal of BMC CompleWomentary Alternative Medicine, 30:7, P.40.