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EFFECT OF YOGIC PRANAYAMA ON RESTING PULSE RATE AMONG COLLEGE STUDENTS

Jagannadhan C
Assistant Professor of Physical Education, Government College, Chittur, Palakkad, Kerala

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Abstract:

The purpose of this study was to find out the effect of yogic pranayama on resting pulse rate of college women. To achieve the purpose of the present study, thirty college women students from Government College, Chittur were selected as subjects at random and their age ranged from 18 to 21 years. The subjects were divided into two equal groups. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n= 30) were randomly assigned to two equal groups of fifteen subjects each. The groups were assigned as yogic pranayama group and control group in an equivalent manner. Analysis of covariance (ANCOVA) was used. It was observed that the six weeks of yogic pranayama practices have significantly decreased resting pulse rate of college women students.

Key Words: Yogic Pranayama, Resting Pulse Rate, College Students.

Introduction:

College students are vulnerable to a critical period in developmental maturation, facing rigorous academic work, and learning how to function independently. Physical activities such as running and bicycling have been shown to improve mood and relieve stress. However, college students often have low levels of physical activity. Yoga is an ancient physical and mental activity that affects mood and stress. Aerobics is a type of physical activity that incorporates rhythmic aerobic exercise with stretching and strength training routines with the aim of enhancing all elements of fitness, endurance, muscle strength, and cardiovascular fitness. Students, especially in higher education, now spend most of their time with college friends and outside of home for various purposes and work. Hence, in the current scenario, the best place to include recreational activities in one's life is one's place of education rather than at home. This not only provides a chance to include recreations in one's life, but also helps students to socialize and become less dependent on one's parents (Indla & Pandurang, 2011).

Methodology:

The purpose of this study was to find out the effect of yogic pranayama on resting pulse rateof college women.To achieve the purpose of the present study, thirty college women students from Government college, Chittur were selected as subjects at random and their age ranged from 18 to 21 years. The subjects were divided into two equal groups. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n= 30) were randomly assigned to two equal groups of fifteen subjects each. The groups were assigned as yogic pranayama group and control group in an equivalent manner. Analysis of covariance (ANCOVA) was used in the study.

Results:

Table 1: Computation of Mean and Analysis of Covariance of Resting Pulse Rate on Experimental and Control Groups

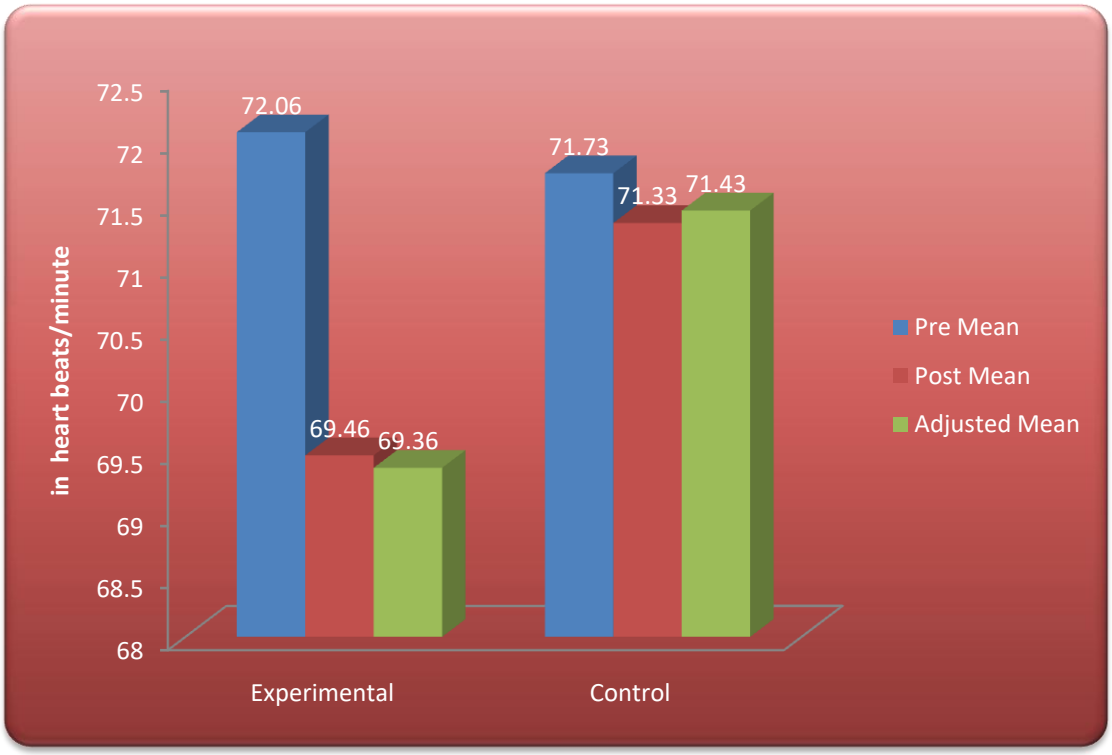
	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	72.06	71.73	BG	0.83	1	0.83	0.61
			WG	37.86	28	1.35	
Post Test Mean	69.46	71.33	BG	26.13	1	26.13	19.74*
			WG	37.06	28	1.32	
Adjusted Post Mean	69.36	71.43	BG	31.42	1	31.42	31.14*
			WG	27.24	27	1.00	

* Significant at 0.05 level

Table value for df 1, 28 was 4.20, df 1, 27 was 4.21

The above table indicates the adjusted mean value of resting pulse rate of experimental and control groups were 69.36 and 71.43 respectively. The obtained F-ratio of 31.14 for adjusted mean was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on resting pulse rate. The above table also indicates that both pre and post test means of experimental and control groups also differ significantly.

Figure 1: Shows the Mean Values on Resting Pulse Rate of Yogic Pranayama and Control Groups



Discussion:

The study supports the findings ofSaroja (2012) designed a study to find out the effects of complex training and the combined effects of complex training and yogic practices on selected physical and physiological variables among college boys. The variables such as speed, strength, explosive power were the physical fitness variables and resting pulse rate, blood pressure were physiological variables. All the subjects were tested on before and after the training period of six weeks. The analysis of covariance was used to analyse the data. It was concluded that combined effects of complex training and yogic practices significantly improved the selected physical and physiological variables greater in magnitude than the complex training alone among the college male students

Conclusion:

It was observed that the six weeks of yogic pranayama practices have significantly decreased resting pulse rate of college women students.

References:

1. Barry, L. J. & Jack, K. N. (1971). Practical Measurement for evaluation in Physical Education. Burgess Publishing Company, Minneapolis.
2. Chandrasekar K (2003). Yoga for Health, Delhi; Khel Sathiya Kendra.
3. Clarke, H. H & David, H. C. (1986). Application of Measurement to Physical Education. (6th ed) Englewood Cliffs, New Jersey: Prentice Hall: P.52-103.
4. Cordain, Loren, Tucker, Alan and Moon, Debbie, (1990) Lung volumes and Maximal Respiratory Pressures in Collegiate Swimmers and Runners", Research Quarterly for Exercise and Sport, 61. 70-74.
5. Indla, D. & Pandurang, N. (2011). Effect of Yoga on Heart Rate and Blood Pressure and Its Clinical Significance, Int J Biol Med Res. 2(3): 750-753.
6. Indranil Manna, Gulshan Lal Khanna and Prakash Chandra Dhara (2010). Effect of Training on Anthropometric, Physiological and Biochemical Variables of Elite Field Hockey Players. International Journal of Sports Science and Engineering. Vol. 04. No. 04, pp. 229-238.
7. Iyengar, B.K.S. (1968). Light on Yoga. London: George Allen and Unwin Ltd.
8. Joshi.K (2001). Yogic Pranayama, New Delhi: Orient Paper Backs.
9. Kraemer, R.A, (1986). The effects of Marathon running on blood components and pulmonary function", Completed Research, 28, 87.
10. Lakhera, S.C, Kain, T.C and Bandopadhyaya. P, (1994). Changes in lung function during adolescence in athletes and non athletes", Journals of sports medicine and Physical fitness, 34, 258-262.
11. Saroja, M. (2012). Effects of Complex Training and the Combined Effects of Complex Training and Yogic Practices on Selected Physical and Physiological Variables among College Boys. Yoga Mimamsa. XLIV, 3:206-215.