

Effect of yogic exercises on physiological and psychological variables among college men

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Received : 12.03.2012; Revised : 29.06.2012; Accepted : 03.07.2012

■ ABSTRACT

The purpose of the study was to find out the effect of yogic exercise on physiological and psychological variables among college men. To achieve this purpose, 30 male students studying diploma courses in Yoga from the Centre for Yoga studies, Annamalai University were randomly selected as subjects. The age of the subjects ranged from 18 to 25 years. The subjects were further classified at random into two equal groups of 15 subjects each. Group - I underwent yogic exercise for five days per week for eight weeks and group - II acted as control. The selected criterion variables namely, vital capacity, resting pulse rate, self-confidence and stress were assessed before and after the training period. The collected data were statistically analysed by using Analysis of Covariance (ANCOVA). From the results of the study, it was found that there was a significant change on vital capacity, resting pulse rate, self-confidence and stress among the yogic exercise group when compared with the control group.

■ **Key Words** : Yogic exercise, Physiological and psychological variables, Vital capacity, Resting pulse rate

■ **How to cite this paper** : Thillaigovindan, C., Subramanian, A. and Sivaraman, P. (2012). Effect of yogic exercises on physiological and psychological variables among college men. *Internat. J. Phy. Edu.*, 5 (2) : 129-131.

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The concept of physical fitness in general athletic terms means the capability of the individual to meet the varied physical and physiological demands made by a sporting activity without reducing the person to an excessively fatigued state (Boucher and Malina, 1993). Physical training is any bodily activity that enhances or maintains physical fitness and overall health and wellness (Singh, 1991). Athletes are facing with many challenges and it includes their physical, physiological, technical, tactical and psychological skills. The elite level of sports performance requires complete physical, physiological and psychological preparation. The athletes became mentally strong to face any challenges on field. Athletes should have strong psychic power to overcome many psychological obstacles during match. Each day player work hard to improve these skills by many means and methods. Yoga training has become an accepted part of the training regimen to improve psychic powers as well as physical and

physiological skills. Yoga is the science of right living as such, is intended to be incorporated in daily life. It works in all aspects of the person: physical, mental, emotional, psychic and spiritual. Yoga aims at bringing the different functions into perfect coordination so that they work for the good of the whole body (Norris, 1991). Yoga focuses on harmony between mind and body. The fundamental purpose of Yoga is to foster harmony in the body, mind and environment. The ultimate aim of Yoga is to strike a balance between mind and body and attain self enlightenment. Yoga is becoming a common part of the preparation and workout routines in all the sports and games. The sports coaches are considering psychological factors while imparting training to the athletes and also giving psychological tonic during training and also during competition (Myers, 2001). For improving psychological factors the coaches applying many methods and Yoga is one of the training procedures to improve psychic

qualities. Yoga is a form exercise and it provides benefits physically and psychologically. The physiological and psychological benefits of Yoga provide more balanced approach to the individual well being. John Locke aptly pointed out “A sound mind in sound body is a short but full description of a happy state in this world”. Yoga fits this description very well. Yoga appears to be promising tool to improve psychic qualities.

■ METHODOLOGY

The purpose of the study was to find out the effect of yogic exercises on selected Physical and Physiological variables among College men. To achieve this purpose, 30 male students studying diploma courses in Yoga from the Center for Yoga studies, Annamalai University were randomly selected as subjects. The age of the subjects ranged from 18 to 25 years. The subjects were further classified at random into two equal groups of 15 subjects each. Group - I underwent yogic exercise for five days per week for eight weeks. On every training session the subjects practiced pranayama, asanas, and suryanamaskar followed by relaxation techniques for 45 minutes under the instruction and supervision of the investigator and group - II did not participate in the training programme apart from their regular activities and acted as control. The subjects were assessed on selected criterion variables namely vital capacity, resting pulse rate, self confidence and stress before and after the training period. The selected variables were measured by using standard testing procedures (vital capacity: Wet spirometer, resting pulse rate: pulse rate/min, self confidence: Hardy and Nelson

test, stress: Everly and Girdano psychological stress scale). The data collected from yogic exercise and control groups before and after completion of the training period on selected variables were statistically examined by Applying Analysis of Covariance (ANCOVA). All the data were analyzed using SPSS statistical package. The level of confidence was fixed at .05 level of significance.

■ OBSERVATIONS AND DISCUSSION

The Analysis of Covariance on vital capacity, resting pulse rate, self-confidence and stress of the pre-test and post-test scores of yogic exercise and control group have been analyzed and presented in Table 1.

The findings of the study (Table 1) shows that significant difference existed between yogic exercise group and control group on vital capacity, resting pulse rate, self-confidence and stress, since the obtained ‘F’ ratio of 18.08, 19.40, 5.44, and 8.36, respectively for adjusted post-test means were greater than the required table value 4.21 for significance at .05 level of confidence with df 1 and 27. The result of the study shows that yogic exercise has its influence in the physiological and psychological variables among college men.

Conclusion :

Based on the results of the study, it is concluded that there was a significant difference between yogic exercise group and control group on vital capacity, resting pulse rate, self-confidence and stress. The selected variables namely, vital capacity, resting pulse rate, self-confidence and stress had positive changes due to yogic practice among college men.

Table 1 : Analysis of co-variance on selected variables among yogic exercise and control groups

Variables	Test	Yogic exercise group	Control group	SOV.	Sum of square	df	Mean square	‘F’ ratio
Vital capacity	Adjusted post- test mean	1052.42	1036.91	B:	1789.02	1	1789.02	18.08*
				W:	2671.18	27	98.93	
Resting pulse rate	Adjusted post- test mean	68.95	71.58	B:	51.477	1	51.477	19.40*
				W:	71.618	27	2.653	
Self -confidence	Adjusted post- test mean	39.54	35.98	B:	95.09	1	95.09	5.44*
				W:	471.67	27	17.46	
Stress	Adjusted post- test mean	23.59	26.07	B:	45.99	1	45.99	8.361*
				W:	148.55	27	5.50	

*Significant at .05 level of confidence (The table value required for significance at .05 level of confidence for df 1 and 28, 1 and 27 was 4.20 and 4.21, respectively)

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