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Research Paper :

Influence of selected yogasanas training on physiological parameters

D.DEVAKI AND **R.L.SUDHAN PAUL RAJ**

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See end of the article for authors' affiliations

Correspondence to:

R.L. SUDHAN PAUL RAJ
Department of Physical Education and Sports Sciences, Annamalai University, ANNAMALI NAGAR (T.N.) INDIA

ABSTRACT

The purpose of this study was to investigate the influence of yogasana training on respiratory rate and vital capacity. Forty boys students were selected as subjects and they were divided into 2 equal groups each consisting of twenty male students. Group-I acted as experimental group who under went yogasana practice for twelve weeks and Group-II considered as control group who did not undergo any special training programme. Respiratory rate was measured by expirograph and vital capacity was measured by spiro meter (computerized digital) and pre and post tests were conducted. Tests were statistically examined by employing analysis of covariance (ANCOVA) to find out significant difference. The level of confidence was fixed at 0.05 level .The results of the study showed that there was a significant improvement on respiratory rate and vital capacity due to twelve weeks of yogasana practice.

Key words : Yogasana, Respiratory rate, Vital capacity

The most important benefit of yoga is physical and mental therapy. The aging process, which is largely an artificial condition, caused mainly by autointoxication or self-poisoning, can be slowed down by practicing yoga. By keeping the body clean, flexible and well lubricated, we can significantly reduce the catabolic process of cell deterioration. Moorthy indicated that yoga exercises were more beneficial than the non- yogic to improve minimum fitness of school children in the age group of six to eleven years. Moorthy further stated that both experimental group I and experimental group II for the boys showed significant improvement after six weeks training when compared to the control group. Although the percentage improvement was seen much greater in yogic exercise group than in physical exercise group, the difference between these two systems of exercises was not found to be significant.

Nayar *et al.* (1975) investigated the effect of yogic exercises on human physical efficiency. The studies were conducted on 53 cadets of National Defense Academy (NDA) representing 3 groups, doing routine NDA training, NDA training plus athletics and NDA training plus yogic exercises. Each cadet was assessed both under basal state and during a fixed exercise non-bicycle ergo meter. The parameters of assessment induced ventilation minute volume, rate of respiration, oxygen consumption, pulse rate, blood pressure, mechanical volume, rate of respiration, *viz.*, vital capacity (VC) maximum breathing capacity (MBC), forced expiratory volume (fev10 sec)' and breath holding time. All the 3 groups showed a significant decrease in pulse rate during exercise. The yogic group in addition recorded a highly significant increase in breath holding time (from 54 to 106 sec) and VC (from 1.98 to 2.89) to 1.94 liters per M2 body surface area)

Gopal *et al.* (1973) studied the effect of yogasanas and exercise training on blood pressure, pulse rate and some respiratory function. Two groups of male volunteers, 20-33 years in age and having the same average height and weight were studied. The experimental group consisted of 14 subjects in yoga asana and pranayama for a period of six weeks. The control group consisted of 14 normal untrained subjects, who carried out non-yogic exercise to both the groups before and after training. The results of both the groups were compared. The trained persons had greater vital capacity, more tidal volume and less respiratory rate than the untrained group. The prescribed standard exercise increased the respiratory rate in both groups but the increase was less in the trained group who instead exhibited a corresponding increase in total volume

Objective of study:

The purpose of the study was to find out the effect of yoga asana on physiological parameters of boys student.

METHODOLOGY

Sample:

To achieve the purpose of the study, 40 school boys