

Influence of bahirang yoga on respiratory and circulatory variables

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■ ABSTRACT

The purpose of the study was to find out the influence of bahirang yoga on respiratory and circulatory variables. The study was conducted on one hundred male subjects randomly selected from school of Nagpur. Based on their initial performance they were divided into four groups. Group-I Ujjayi, group-II Bhastrika, group-III combined (Ujjayi and Bhastrika) practice and group-IV control, who didn't undergo any treatment. From intra-group comparison, it can be concluded that variables was improved by the training of selected bahirang yoga (Pranayama). From the inter group comparison, it can be said that group-I, II, III were the best in improving of subjects, so training of bahirang yoga to determine between pre and post-test of different groups for different variable, 't' test was used and to find out differences among the groups F- test was used.

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Physiological health and physical fitness can be achieved and maintained only through participation in selected yogic, physical activity and sports (Chatterjee, 1966). Pranayama plays an important role in the development of respiratory system, and out of many automatic functions in the body (Kavalayanand, 1966). It is only the respiratory activity which goes on continuously and which is partially under our control, involving a good number of skeletal muscles. It also influences very many automatic functions like the activity of the heart, circulation and digestion, directly as well as indirectly. Naturally then, any control of respiration is likely to have a far-reaching effect on the whole psycho-physiological system. From the oldest times, it has been claimed that Pranayama leads to the eradication of the flows of psycho-physiological reactivity.

Bahirang yoga:

Yama, Niyama, Asana, Pranayama and pratyahara are five steps of bahirang yoga.

■ METHODOLOGY

One hundred male subjects studying in school of Nagpur was selected as subject for the purpose of this study. The age group of subjects was ranged between 14 to 17 years. The subjects were assigned randomly into four groups each containing twenty five subjects viz. (experimental groups practiced the selected bahirang yoga that means Pranayama) experimental group- I (Ujjayi), experimental- group- II (Bhastrika), experimental group- III (Combined group, means both Pranayama (Ujjayi and Bhastrika) and control group- IV.

Selection of the variables:

The following variables were selected:

- Respiratory rate – It was measured by stop watch per minute.
- Vital capacity – It was measured with the help of wet Spiro meter.
- Positive and negative breath holding time – It was measured by stop watch.
- Systolic and diastolic blood pressure – It was