Effect of Hypoventilation Training on Blood Pressure of Boxers

Kulwinder Singh
Research Scholar, Department of Physical Education, Panjab University, Chandigarh, Punjab, India

Abstract

The objective of the study was to investigate the effect of hypoventilation training at low lung/pulmonary volume on systolic and diastolic blood pressure of male national level boxers. For this purpose, a total of sixty subjects (N=60) were selected from Chandigarh. The purposive sampling technique was used to select the subjects. The subjects were equally divided into two groups experimental (n=30) and control (n=30) by random assignment. Randomized subjects, pretest-posttest control group design was adopted for the experiment. The age of the subjects ranged between 18 to 25 years. Hypoventilation training at low pulmonary volume variable selected as independent variable for the study. The systolic and diastolic blood pressure were selected as dependent variables for the study. The subjects of both groups were evaluated before and after the 12-weeks of intervention with Dr. Morepen blood pressure monitor on systolic and diastolic blood pressure. Hypoventilation training at low lung volume was given three times (Monday, Wednesday and Friday) in a week only to boxers of experimental group for 12-weeks periods. Shadow boxing, punching bag or pads exercises were carried out as a hypoventilation training (at low lung volume) by the boxers. The control group boxers continued to participate in the normal training program. To find out the effects of hypoventilation on systolic and diastolic blood pressure paired samples t-test was applied. Mean, SD, Mean Difference and Standard error of men were used as descriptive statistics. Level of significance was set at 0.05 level. Result of the study showed that there was significant difference found between pre-test and post-test scores on systolic as well as diastolic blood pressure in experimental group. However, there was no significant difference found between pre-test and post scores on systolic and diastolic blood pressure in control group.

Keywords

Blood pressure, Boxers, Hypoventilation training and Low pulmonary volume.