

Abstract

The purpose of the current investigation, in brief, was to determine an effect of continuous and alternate pace endurance training on selected physical and physiological variables of long-distance runners. To achieve this purpose, ninety (n=90) male long-distance runners from the Surat district who have competed at least once in distance running competitions longer than 3000 meters were selected at random and they were in 17 to 22 years of age. The selected subjects were divided randomly into three equal groups of thirty (n=30), including experimental and control groups. Group - I (n = 30) participated in slow continuous training, Group - II (n = 30) participated in alternate pace endurance training, and Group - III (n = 30) served as the control group. Physical and Physiological variables name as; speed endurance, cardio respiratory endurance, endurance, abdominal strength endurance, leg strength, heart rate, vital capacity and blood pressure. The two experimental groups were participating in the training given 3 days a week for 8 weeks. The regular curriculum was offered to the control group. All groups were retested on all selected variables after the conclusion of the eight-week training programme, and the results were kept as a post-test score. The collected data were analysed using analysis of covariance (ANCOVA) and the post hoc pair wise comparison using the LSD test analysis. For testing the hypothesis, the level of confidence was set at 0.05 levels. The result of the study showed that there was as significantly improvement was found in physical and physiological variables among the experimental group when compared with control group. The result also so that the alternating pace endurance training had a significantly stronger impact on the group concerned than the slow continuous training in enhancing the performance of speed endurance, endurance, cardio respiratory endurance, abdominal strength endurance, leg strength and vital capacity and slow continuous training group's considerable improvement in systolic and diastolic blood pressure than the alternating pace endurance training.

Key Words: Continuous training, alternate pace endurance training, physical, and physiological