

Research Paper :

Effect of Fartlek training at different altitudes on selected physiological variables and 1500 metres performance

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Accepted : July, 2009

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ABSTRACT

The purpose of the study was to analyze the "Effect of Fartlek training at different altitudes on selected Physiological variables and 1500 metres performance". sixty college men students were selected as subjects from low, medium and high altitude colleges from Kumta (Karnataka). They were divided into three equal groups. The first group was called as a low altitudes fartlek training group, the second group was called as a medium altitudes fartlek training group and the third group was called as a high altitudes fartlek training group. For all the groups initial and final test were measured for the selected physiological variables (Cardio respiratory endurance, Anaerobic power, Breadth hold time) and 1500 meters running performance. Analysis of covariance (ANACOVA) Statistics techniques was used to analyzes the above study.

Key words : Altitude, Cardio respiratory endurance, Anaerobic power, Breadth hold time

Physical fitness as an asset for the ancient has become a liability for the modern. The sound and healthy constitution of physique and elegant functions of the structure they possessed were the nature's gift. The physique visible genotype was the result of interaction of environmental modifications on their invisible genotype. However, there exists a yawning gap between the ancient and the modern. Here echoes the voice of herald calling the masses with wide gestures to take to some sort of physical exercise or physical training, lest the human race is lost in the midst of mental strain, fatigue, agony, pollution etc., which were the evil soon of the modern era.

Jambulingam (1990) conducted a study on the effect of hypoxic training on selected physiological and hematological variables among school boys. In this study 60 subjects were taken from the N.S.D.V.P.S. Devakottai higher Secondary school and their age was from fourteen to sixteen years. The subjects were divided into two equal groups one was control group and another one was experimental group. The experimental group was treated with hypoxic training on alternate days for eight weeks. In this study the following variables were selected such as cardiovascular endurance. Hemoglobin content and red blood corpuscles were administered for both experimental and control groups.

METHODOLOGY

Sixty college men students were selected as subjects from low, medium and high altitude colleges from Kumta, Sirsi and Mundgode (Karnataka). They were divided into

three equal groups. The first group was called as a low altitudes fartlek training group, (Baliga College, Kumta) the second group was called as a medium altitudes fartlek training group (MM Arts and Science College, Sirsi) and the third group was called as a high altitudes fartlek training group (Govt Arts College, Mundgode). For all the groups initial and final test were measured for the selected physiological variables (Cardio respiratory endurance, Anaerobic power, Breadth hold time) and 1500 meters running performance. Analysis of covariance (ANACOVA) Statistics techniques was used to analyze the above study.

OBSERVATIONS AND DISCUSSION

The post test means of cardio respiratory endurance of low, medium and high altitude groups were 2677.5, 2570 and 2747.5 meters respectively the post test obtained F-ratio was 5.77 and table F-ratio was 3.15 at .05 level of confidence for the degree of freedom 2 and 57. The adjusted post test means of cardio respiratory endurance of low, medium and high altitude groups were 2655.82, 2616.13 and 2722.8, respectively (Table 1 and Fig. 1). The obtained F-ratio of adjusted post test means was 3.2 and the table F-ratio was 3.15 at .05 level of confidence for the degrees of freedom 2 and 56.

The post test means of Anaerobic power of low, medium and high altitude groups were 56.06, 55.46 and 51.55 kilograms /meters per second, respectively. The post test obtained F-ratio was 11.33 and table F-ratio was 3.15 at .05 level of confidence for the degree of freedom