CARDIO-RESPIRATORY FUNCTION, BODY COMPOSITION, ABDOMINAL MUSCULAR STRENGTH ENDURANCE AND FLEXIBILITY AMONG BOYS OF NON-KANDI AREA

*Singh Dalwinder and **Singh Kewal

1. Associate Professor, Department of Physical Education, Panjab University, Chandigarh, INDIA.
2. Associate Professor, Khalsa College, Gardhiwala, Hoshiarpur, Punjab, INDIA.

Email: dalwinder_pu@yahoo.com

(Received June 04, 2012, accepted October 29, 2012)

ABSTRACT

The present study investigated the cardio-respiratory function, body composition, abdominal muscular strength endurance and flexibility among boys of non-Kandi area. In this study, the subjects for data collection were drawn from the different government schools of Non-Kandi areas of Punjab state. Random sampling technique was used to select the subjects. The sample consisted of one thousand five hundred seventy five (N=1575) boys of Non-Kandi areas of Punjab state. To measure maximal functional capacity and endurance of the cardio-respiratory system of the subjects, the 9Minute run test was applied. To evaluate the level of fatness in school boys, the Skinfold caliper was used. To assess the abdominal muscular strength endurance of the subjects, modified sit-ups test was applied. Sit and reach test was used to evaluate the flexibility (extensibility) of the low back and posterior thighs of the subjects. The Analysis of Variance (ANOVA) was applied to find out the significant differences among various age groups/classes of Non-Kandi area boys. Scheffe’s post-hoc test was applied to see the direction and significance of differences where ‘F’ ratio was found significant. The results of Analysis of Variance (ANOVA) of various age groups of Non-Kandi area revealed that group 14-15 years (class 9th) demonstrated significantly better maximal functional capacity and endurance than 13-14 years (class 8th). Similarly class 10th demonstrated significantly better than group 13-14 years (class 8th) on the said variable. But group 15-16 years (class 10th) exhibited better than group 14-15 years (class 9th) though not significantly on the said variable. No significant differences were found on the variable body composition amongst various age groups. Group 14-15 years (class 9th) demonstrated significantly better abdominal muscular strength endurance than 13-14 years (class 8th). Similarly 15-16 years (class 10th) exhibited significantly better than 13-14 years (class 8th) and class 9th on the said variable. Group 14-15 years (class 9th) exhibited significantly better flexibility (extensibility) of the low back and posterior thighs than 13-14 years (class 8th). Similarly 15-16 years (class 10th) demonstrated significantly better than 13-14 years (class 8th) and 14-15 years (class 9th) on the said variable.