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A study of anaerobic capacity among physical education students of Punjab and Jammu & Kashmir states

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■ **ABSTRACT**

The purpose of the present study was to determine the anaerobic capacity between physical education students of Punjab and Jammu Kashmir states. To obtain data for this study, the two hundred (n=200) subjects were selected out of which one hundred (n=100) from Punjab state and one hundred (n=100) from Jammu Kashmir state who were studying in SKR College of Physical Education, Bhagoo Majra Kharar, Mohali, Department of Physical Education, Punjabi University, Patiala (Punjab) and Government College of Physical Education, Ganderbal, Department of Physical Education and Sports, University of Kashmir (J&K). The age of the subjects ranged from 21 to 28 years. To collect the required data for the present study and to measure the Margaria Step Test was used. T test was applied to determine the significance of difference and direction of difference in mean scores of variables between Punjab and Jammu Kashmir states. The level of significance was set at 0.05. The results revealed, no significant difference between physical education students of Punjab and Jammu Kashmir states on the variables of anaerobic capacity.

■ **Key Words :** Anaerobic capacity, Physical education,

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Physiological systems are highly adoptable to exercise. Each task has its major physiological components and fitness for the task requires effective functioning of appropriate systems. In order to acquire the ability to achieve high level performance, numerous adaptive changes of the structure and function of the body are required (Mathew and Fox, 1971). Not only to develop a relatively efficient leverage system for mobility of the various body parts but certain physiological modifications are also necessary so that exercise capacity can be increased. According to Mathew and Fox (1976), the efficiency of an individual in performing physical activities depends basically on cardio-respiratory changes and training causes development of the cardio-respiratory efficiency. The aim of the present study was to determine the anaerobic capacity between physical education students of Punjab and Jammu Kashmir states.

Objective of the study :

To find out the significant difference between physical education students of Punjab and Jammu Kashmir states on the variable cardio-respiratory endurance.

Hypotheses of the study :

There will be significant difference between physical education students of Punjab and Jammu Kashmir states on the variable cardio-respiratory endurance.

■ METHODOLOGY

To obtain data for this study, two hundred (n=200) subjects were selected out of which one hundred (n=100) from Punjab state and one hundred (n=100) from Jammu Kashmir state who were studying in S.K.R. College of Physical Education, Bhagoo Majra Kharar, Mohali; Department of Physical Education, Punjabi University, Patiala (Punjab),

Government College of Physical Education, Ganderbal, Department of Physical Education & Sports, University of Kashmir (J&K). The age of all subjects ranged from 21 to 28 years. To measure the anaerobic capacity, Margaria Step Test was used. "T" test was applied to determine the significance of difference and direction of difference in mean scores of variable between physical education students of Punjab and Jammu Kashmir states. The level of significance was set at 0.05.

■ OBSERVATIONS AND DISCUSSION

A glance at the result depicted in Table 1 shows the mean and standard deviation values of Punjab and Kashmir students of the variable anaerobic capacity. The mean score of the Punjab was found to be 96.79 and S.D.=18.12, respectively and the mean of the J&K was found to be 96.91 and S.D.= 15.13, respectively. Calculated t value was found 1.04 which was found to be non-significant (Fig. 1).

Table 1 : Mean, standard deviation and t value of Punjab and J&K students on anaerobic capacity

Sr. No.	Group	n	Mean	Std. deviation	Std. error mean	Std. error difference	t value
1.	Punjab	100	96.79	18.12	1.281	.0945	1.04
2.	Jammu & Kashmir	100	96.91	15.13	1.693		

*Significant at 0.05 level of confidence 't' >1.96 (df=198)

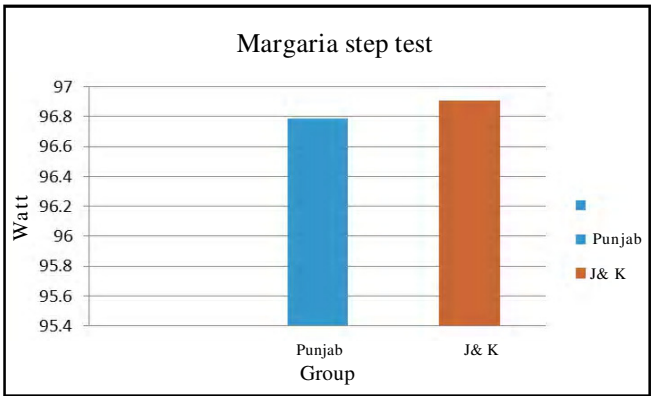

Fig. 1 : Comparison of mean of anaerobic capacity between Punjab and Kashmir

Conclusion :

It is concluded that no significant difference was found between physical education students of Punjab and Jammu Kashmir states on the variables anaerobic capacity.

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