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RESEARCH ARTICLE

COMPARISON OF SELECTED PHYSIOLOGICAL AND PHYSICAL FITNESS VARIABLES AMONG STUDENTS OF KASHMIR DIVISION

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Abstract

Physical fitness is a dynamic concept and is continuously growing in its importance to everyday life and health. Although being an attribute that has a genetic basis, it is also sensitive to changes in type and amount of physical activity, mortality and injury. The purpose of the present study is to compare the variables among sports students of Kashmir division. During the present study, 50 Sports Students studying in various Colleges of Kashmir division were selected and the sampling was done as per the Random Sampling technique. The variable selected for the study were, Explosive Leg strength, Speed, Agility, Resting pulse rate, Blood pressure (Systolic and dia-Systolic), Breath holding capacity. The Mean, Standard deviation and "T" value of Students was calculated. The results showed significant difference among different students ($p < 0.005$) in case of Explosive Leg strength, Speed, Agility, Resting pulse rate and Blood pressure (Systolic), but no significant difference between Breathing capacity and Diastolic Blood pressure was observed. It is therefore concluded that the Sports students are at higher levels of their physical and physiological fitness levels which enhance their performance in sports and also in daily life activities.

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Introduction:-

Physical fitness is a dynamic concept and is continuously growing in its importance to everyday life and health. Although being an attribute that has a genetic basis, it is also sensitive to changes in type and amount of physical activity, mortality and injury. During history, physical fitness has been always interested in by different people with different perspective. Since the creation of man, physical fitness is being along the man surviving means and to need the necessary daily needs. Fitness has been recognized from time immortal as the greatest wealth. Physiology is the study of functions of the human body. In other words, the mechanisms by which the various organs and tissues carry out their activities are considered. Emphasis is often places on the processes that control and regulate these functions. In order for the body to function optimal, conditions within the body, referred to as the internal environment, must be very carefully regulated. Therefore, many important variables, such as body temperature, blood glucose, oxygen and carbon dioxide contact of the blood, as well as electrolyte balance, are actively maintained within narrow physiological limits. The objectives of the present study were to compare these variables among different Students of Kashmir division.

Physical fitness comprises two related concepts: general fitness (a state of health and well-being), and specific fitness (a task-oriented definition based on the ability to perform specific aspects of sports or occupations). Physical

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fitness is generally achieved through correct nutrition, exercise, hygiene and rest. Physical fitness has been defined as a set of attributes or characteristics that people have or achieve that relates to the ability to perform physical activity.

Methodology:-

During the present study, Simple Random Sampling Technique was employed and the sample size was targeted to 50 colleges in Kashmir division of Jammu and Kashmir. College Students ranged between the age group of 18 to 22 years were selected randomly. The following equipments were used for collection of data during the test. Stop-Watch, Score Cards, Pencil, and 400 Meter /Minimum 200 Meter track, Clipper, Mat or Long Jump Pit, Measuring Tape, Marking Powder, Wooden blocks, Sphygmomanometer, Stethoscope. The variables, equipments and scoring are enlisted in the below table:

S. No.	Variables	Equipments	Scoring
1.	Explosive leg strength	Long jump pit, Measuring tape	Distance
2.	Speed	Minimum 200m track	Distance
3.	Agility	Marking powder and wooden blocks	Time
4.	Blood pressure	Sphygmomanometer meter	Percentage
5.	Resting Pulse rate	Stethoscope	Percentage
6.	Breath holding capacity	Nil	Time

Results and Discussion:-

During the present study the author makes the following observations, The speed of Athlete boys was found to be better than Non-Athlete boys in 60 yard dash and the significant difference between the same was found. The Explosive leg strength of Athlete boys were found to be better than Non-Athlete boys in standing broad jump and the significant difference between Athletes and Non-Athletes was found. Ajmer Prakesh (2008) and Jhonson (1988) observed that the variables are dependent and show the significant effect.

The Agility of Athlete boys were found to be better than Non-Athlete boys in shuttle run and showed the significant difference between Athletes and Non-Athletes. The pulse rate of Athlete boys was found to be better than Non-Athletes and showed the significant difference between Athletes and Non-Athletes. There was no significant difference between Breathing capacity of athletes and non-athletes. The Blood pressure (systolic) of Athlete boys was found to be better than Non-Athletes and showed the significant difference between Athletes and Non-Athletes. There were no significant difference between blood pressure (diastolic) of athletes and non-athletes, same results were observed by Orion (1964) and Ganesh (1998).

Lamb 1988 studied physical fitness and health related fitness as indicators of a positive health state. It is argued that measures of physical fitness are indicators of positive health and such measures are identified under their discrete headings of agility, flexibility, power, speed and reaction time. Tottle 1931 observed that use of the pulse Ratio Test for Rating Physical Efficiency shows the significant results.

Gajendra, P. (1984) studied the Physiological and Physical Fitness Factors of Soccer and Cricket Players and observed with the positive results, the results were supported by Chowdhary S. (1980) and Browning (1935).

Conclusion:-

The statistical analysis revealed that the parameters such as 60 yard dash, standing broad jump, shuttle run, pulse rate and systolic blood pressure significantly differ at 0.05 level of significance between different students of Kashmir division, while as in the parameters breath holding and diastolic blood pressure, there shows no significant difference among the students of Kashmir division. The reason for above results is that the Athletes used to give more stress on their physical fitness and physiological variables as compared to Non-Athletes. Their daily workout helps them to make themselves fit for any kind of daily activity or physical activity.

Bibliography:-

1. Ajmer Prakesh (2008) Essentials of Physical Education, Ludhiana, Kalyan in Singh Publishers.
2. Browning P.M.(1935). A comparison of sprint and Distance Runners on Selected Anatomical and Physiological Field. Research Quarterly, 118.

3. Chowdhary S. (1980). Comparison Of Selected Physiological Variables Of Kho-Kho and Kabaddi Girls Team State. Unpublished Master Thesis, Jiwaji University, Gwalior.
4. Ganesh S.(1998).Holistic Approach of Yoga .Bina,M.P.(ED) Aditya publishers.
5. Gajendra P. (1984) Comparison of Selected Physiological and Physical Fitness Factors of Soccer and Cricket Players”,Unpublished Masters Thesis, Jiwaji University,Gwalior.
6. Jhonson B. L. (1988). Practical measurements for evaluation in physical Education, New Delhi: Surjeet Publication.
7. Lamb (1988) Essentials of Exercise Physiology. Surjeet Publication, Shaver, Delhi.
8. Orion A. R. (1964). Encyclopedias of sports Science and Medicines.
9. Tottle W.B. (1931 The Use Of The Pulse Ratio Test For Rating Physical Efficiency. Research Quarterly, 2: 5.