



# Comparative Study of Physical Fitness Components of Hockey and Volleyball Players.

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**Abstract-** *Physical fitness is one of the main objectives of physical education and the evaluation of physical fitness has been a constant challenge to this profession. General test norms have been evolved to assess the physical or motor fitness throughout the world. Numerous normative studies confirm the need of norms for specific target population. Physical fitness in on a continuum and is often defined in relation to a person's life style and energy needs. Physical fitness is commonly defined as the ability to handle normal physical demands of life, to have ample energy to perform variety of leisure time activities, and still be able to function effectively in emergency situations.*

**Key Words-** National Physical Efficiency Drive, 100 Meters, Long Jump, Shot Put, High Jump, 800 Meters

**Introduction-** National Physical Efficiency Drive Was launched in 1959-60 by the Union Ministry of Education with an aim to create fitness consciousness and enthusiasm amount the people of our country for better and healthy living. In order to put the scheme on more scientific lines and on sound footing. It was entrusted to the Lakshmibai National College of Physical Education, Gwalior, in the year 1972. This scheme was renamed as "National Physical Fitness programme" (NFPF) to make it more effective in the country.<sup>1</sup>

The World Health Organization has set a target that every person in the world should become health-conscious by 2000 A.D.; and it is a right step in the realization of the objective, 'health for all', The International Olympic Committee has signed an agreement with W.H.O for furthering the cause of 'health for all' and 'sport for all' by 2000 A.D. This agreement is clearly directed towards attaining total fitness of all individuals by the end of the century. To attain this objective the citizens of the world are to be made healthy and, fitness-conscious and for this purpose, scientific programmes and criteria to evaluate fitness are to be formulated to cater to all individuals belonging to both sexes and of all ages.<sup>2</sup>

The American Association of Health Physical Education and Recreation defines fitness as a state. This characterizes the degree to which a person is able to function efficiently. Fitness is an individual matter. It implies the ability of each person to live most effectively within his potentialities. Ability to function depends upon the physical, mental, emotional, social, moral and spiritual components of fitness all of which is related to each other and is mutually interdependent.<sup>3</sup>

History points out that the people and communities which cared for their physique and engaged in various physical activities remained strong and prosperous, whereas those which neglected the health and fitness aspect had waned and perished. The great Roman civilization crumbled and came to an ignominious end precisely because its people became disproportionately affluent and took to a life of wanton luxury. They lost touch with physical exercises and sports and became soft in mind, flesh and spirit. The lesson is borne out in Rome as it has been in many other civilization, which have fallen along the way that for a nation to remain strong and to endure it must be physically as well as morally fit.<sup>4</sup>

**Objective of the study-** To find out the measure of variable such as explosive power of leg, speed, arm explosive power, muscular endurance and cardiovascular respiratory endurance of Hockey and Volleyball players of Kanpur University, Uttar Pradesh.

**Methodology-** To achieve the purpose of the study, the investigator was randomly selected 60 male players (30 Hockey and 30 Volleyball). In order to measure variables such as Speed, Explosive power of leg extensor muscles, shoulder muscle strength, National Physical Efficiency Drive test were used to collect the data.

Sl. No.	Items	Purpose of Test
1.	100 Meters	Speed
2.	Long Jump	Explosive Power of Leg
3.	Shot Put	Arm/Shoulder Muscular endurance
4.	High Jump	Leg explosive power
5.	800 Meters	Circulatory, Respiratory endurance

### Result and Discussions-

Sl. No.	Test items	Hockey Players	Volleyball Players	Mean Difference	Standard Error
1	100 Meters	12.50	12.99	0.49	0.699
2	Long Jump	5.70	5.01	0.69	0.506
3	Shot Put	9.89	9.90	0.01	1.067
4	High Jump	1.60	1.55	0.05	0.788
5	800 Meters	2.40	3.01	0.61	0.440

0.05 Level of Significance

**100mt. Run-** Hockey players reveal better than Volleyball players. There was significant difference between the speed of Hockey players and Volleyball players were found statistically better than Hockey players.

**Long Jump-** Hockey players were better than Volleyball players. There was significant difference between the leg power of Hockey and volleyball players. Hockey players showed better leg power.

**Shot Put-** Hockey players showed better arm/shoulder explosive power than Volleyball players. There was no significant difference between arm/shoulders muscular power of Hockey and Volleyball players.

**High Jump-** Volleyball players showed better explosive leg power. There was significant difference between the explosive power leg of Hockey and Volleyball players for jump to height.

**800mt. Run-** Both Hockey and Volleyball players showed better Circulatory, Respiratory endurance. There was no significant difference between endurance of Hockey and Volleyball players.

**Conclusions-** The result presented on five different tests (variables) such as Explosive power of leg, Speed, Arm explosive power, Muscular endurance and cardiovascular respiratory endurance is better of Hockey players.

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