



COMPARATIVE ANALYSIS OF PHYSICAL FITNESS AMONG FOOTBALL PLAYERS AND HOCKEY PLAYERS OF ANDHRA UNIVERSITY

Om Phani Nichenakolla, Research Scholar, Department Of Physical Education And Sports Sciences, Andhra University, Visakhapatnam.

Dr..N.Vijay Mohan Professor, Department Of Physical Education And Sports Sciences, Andhra university, Visakhapatnam.

Abstract:

This study aims to compare the physical fitness levels specifically speed and endurance among football players and hockey players. The Cooper 12-minute run/walk test and speed test will be used as the primary assessment tool. The study will involve a sample of both football and hockey players and their performance in the run/walk test and speed test will be measured and compared. The findings of this study will provide valuable insights into the differences in physical fitness levels between these two sports and may have implications for training and conditioning programs specific to each sport.

Keywords:Physical Fitness, Endurance, Speed, Football Players, Hockey Players.

INTRODUCTION:

Physical fitness is a multifaceted continuum extending from birth to death, affected by physical activity. It ranges from optimal activities in all aspects of life through high and low levels of different physical fitness to serve disease and dysfunction. The ability to function efficiently and effectively is to enjoy leisure, to be healthy, to resist disease and to cope with emergency situations Health related components of physical fitness include body composition, cardiovascular fitness, flexibility, muscular endurance and strength. Skill related components include agility, balance Coordination, power, reaction time and speed.

The relative importance of each of the components varies for each sport. Physical fitness is not only Sport specific it may also be position specific, combined good health and physical development. The object of any program of physical fitness is to maximize any individual's health, strength, endurance and skill relative to age, sex, body build and physiology. These ends can only be realized through Conscientious regulation of exercise, rest, diet and periodic medical examinations. Exercise should be regular and vigorous, but begun slowly and only gradually increased in strenuousness. Popular exercise methods include jogging, cycling and the use of body-building machines. It is more important that periods of sleep be regular and restful than that they extend any fixed number of hours.

OBJECTIVE OF THE STUDY:

The study is to determine the significant difference of physical fitness between Football player's and Hockey players of Andhra University.

STATEMENT OF THE PROBLEM:

A Study on Physical Fitness Among Football Players And Hockey Players In Andhra University.

SIGNIFICANCE OF STUDY:

The study aims to know the physical efficiency of the players of two games i.e, Football players and Hockey players. The result of the study might help to give an idea to physical education teachers, coaches and players.

HYPOTHESES:

1. There may not be any significant difference between Football players and Hockey players in relation to their Physical fitness Speed.



2. There may not be any significant difference between Football players and Hockey players in relation to their Physical fitness Endurance.

METHODOLOGY:

The study under report focuses on physical fitness, basis of team game players, which is the order of the day in everlasting sports scenario. The study was formulated based on the simple random sampling. The samples were collected from the 50 Men Football players and 50 Men Hockey players in Andhra University in the age group of 18-22 years were considered. Physical fitness test was administrated on University players i.e. the speed (50m run) and endurance(Cooper Test-12minutes run/walk).

RESULT AND DISCUSSIONS:

The results pertaining to the study are present in the following,

Table- 1 Showing the Mean Values, SD, df, 't' value and p-value between Football players and Hockey Players of Andhra University in relation to their speed (50m run).

SPEED (50 M RUN)

| SI. N.o. | Subjects | N | Mean | S.D | t' Ratio | P value |
|----------|------------------|----|------|------|----------|---------|
| 1 | Football Players | 50 | 7 | 0.46 | 2.601 | 0.01 |
| 2 | Hockey Players | 50 | 6.11 | 0.34 | | |

Table-2 Showing the Mean Values, SD, df,'t' value and p-value between Football players and Hockey players of Andhra University in relation to their Endurance (cooper test).

ENDURANCE (Cooper Test-12 minutes run/walk)

| SI N.o. | Subjects | N | Mean | S.D | t' Ratio | P value |
|---------|------------------|----|------|--------|----------|---------|
| 1 | Football Players | 50 | 2016 | 296.76 | 4.01 | 0.01 |
| 2 | Hockey Players | 50 | 2264 | 238.62 | | |

CONCLUSION:

. Physical fitness is the ability to perform vigorous physical activity. It is not measured in terms of achieving specific motor skills, but rather it is assessed in terms of muscle strength, endurance and flexibility. The circulatory and respiratory systems are also involved because of their role in supplying muscles with blood and oxygen.

In considering muscles, strength is the maximum force that can be exerted by a muscle, and endurance is the ability to perform a muscular activity at less than maximum force, for example, in doing a series of Chin-ups. Flexibility is the ability of a joint to move through a normal range of motion. The



components of physical fitness (strength, endurance, flexibility, and capacity of circulatory and respiratory system); can only be maintained through regular exercise. Although the percentage of body fat is not a main factor in physical fitness, it must be considered because of its effect on a person's ability to exercise. There is debate in the fitness community about whether an individual can be considered fit if he or she is overweight.

The body will adapt to a regular exercise program by improving the function of the cardiac and respiratory systems. The blood will have a greater capacity to carry oxygen, which in turn will improve the body's ability to work. The heart and respiratory systems will be more efficient during rest and exercise, and the resting heart rate is usually reduced. These changes take place when a person participates in a rhythmic endurance activity such as walking, running, and cycling, or continuous sports activities

REFERENCES:

1. Duncan MJ, Woodfield L, al-Nakeeb Y. (2006), "Anthropometric and physiological characteristics of junior elite volleyball players" Vol.,40(7),pp.649-51.
2. Edward J. Bruke (1976), "Validity of Related laboratory field test of physical working capacity", Research Quarterly, Vol 47(1)_p.95-104
3. George B. Dintiman (1964), "Effects of various training programme on running speed." The Research Quarterly, Vol.35,p 456.
4. Keen E.N. and A.W. Sloan (1989),"A Modified Harvard step test for women", J. Appl. Physical, Vol.14 (85), p 986.
5. Matsudo VK, Rivet RE, Pereira MH. (1987), "Standard score assessment on physique and performance of Brazilian athletes in a six tiered competitive sports model" J Sports Sci., vol 5(1), p 49-53.
6. Bettogowda, "Assessment of agility in men Hockey and Football Players" (Unpublished Master's Thesis, University College of Physical Education Mysore 1976)pp.25-26.
7. Carl E. Wilgoose, Evaluation In The Health Education And Physical Education (New York: Mc Graw-Hill Book Company Inc., 1961),p.75.
8. Charles and Harrold McCloyt and Norma Dorthy Young, Tests And Measurements In Health And Physical Education (Third Edition, New York, Appleton-century-crofts,Inc.,1979) P.75.
9. Elevyn L. Schurr, Movement Experience For Children (Second edition, Englewood Cliffs, New Jersey, presentice-Hall, Inc,1975) P.211
10. Harold M.Barrow, and Rosemary McGree, A Practical Approach To Measurement In Physical Education(Second Edition, Philadelphia, Lea and Febigar, 1973) P.572
11. Nirmal YS. Comparative Study of Reaction Time, Explosive Arm Strength, Agility, Speed and Coordination between the Soccer Players and Hockey Players. International Journal of Novel Research and Development. 2022;7(2):36-4.