

Relationship of Selected Motor Fitness Variables to Playing Ability in Football

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Abstract: *Though Football started as a recreation game, but today it has become more technical and complicated with its dynamic movements and stereo-typed strategies on offence and defense skills and governing rules of the game making one of the fastest and competitive games in the world. The proper execution in playing situation is based entirely on scientific biomechanical principles. The motor fitness components such as strength, speed, play a vital role in the Hockey Football ability. Football player today in the scientific age must be very fast, quick mobile, agile and active having enough cardiovascular as well as balanced state of personality.*

The finding of this study will be of significant in the following way

- **The finding of this study will add to the quantum of knowledge in the area of training methods.**
- **The result of the study may provide guidelines, which help the physical educators and hockey coaches in preparing the training schedules for their players.**

The findings of this study might be used as a screening tool and technique in analyzing and classifying the players.

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INTRODUCTION

Games and sports are a popular pastime for the young and old, for boys and girls, and for men and women. Sports are as old as the human society and it has achieved universal status in the modern society. It has enjoyed a popularity which outstrips any other forms of social activity. It has become an integral part of the educational process, as physical education and sports have been included in the regular curriculum. The students are taught various games and sports in the systematic manner. Besides, teaching the students are evaluated in their performance. Many people participate in games and sports for getting enjoyment besides deriving physical, mental, social and emotional benefits.

Sports have become a profession to some with financial benefits linked with high degree of popularity, so that they live in society successfully and lead a fruitful life. Besides, this one learns to use leisure time effectively, now and perhaps more important in later.

REVIEW OF RELATED LITERATURE

James studied the effect of four conditioning on skills developments and cardiovascular efficiency in selected physical activity comes and found that the final skill test in each activity indicated that the skill attained was apparently affected by the supplement treatment.

Schultz studied the effects of direct practice repetitive sprinting and weight training on selected motor performance tests. Six training approaches were used to study the effectiveness upon performance in four selected test of motor skills, speed, coordination's and power. Subjects were 120 men volunteers enrolled in Indiana University service programmer. The subjects were randomly assigned to groups and groups to treatments, short period of training or cessation of training did not effect performance. Except in case of zigzag run. Direct practice of the zigzag run was found to be superior to both weight training and repetitive sprinting in the performance over a nine week period.

The purpose of the Stockton's study was to investigate the effect of selected conditioning methods on physical fitness level of ninth and tenth grade girls. Conclusions

were aerobic conditioning produced significant progress in cardio-vascular efficiency; calisthenics conditioning produced greater performance in muscular strength and muscular endurance.

Lyle conducted a study to compare physical fitness in the San Diego city school. The study concluded that physical fitness performance mean were significantly higher in case of physical education student that of military science student on the test such as sit - ups , pull – ups , standing broad jump , 50 yard dash , 12 minutes run and softball throw.

Lane related the physical fitness and motor ability before and after a physical fitness programme for high school girls. The AAPHER youth fitness test and the Humistor Motor Ability test were administrated to 69 girls. He concluded that the group improved on both test and correlation between physical fitness and motor ability was higher after the planned fitness programme.

Malhotra and Subramaniam have claimed that a high level of general fitness with motor abilities like strength aerobic endurance , speed of movements , jumping ability , agility etc. is essentials qualities required to develop by the basketballer.

Chandershekhar made study to compare the selected physical fitness components that are speed , extent flexibility , leg explosive strength , gross body coordination and cardio-respiratory endurance of football and basketball players. On the basis of analysis of data following conclusion was drawn. The basketball players were found to be higher in explosive strength . Abdominal strength and gross body coordination.

Frank conducted a research study on some physical fitness components and sports of rural , urban and parochial school background. He examined the effects of different elementary school experience upon achievement in certain aspects of physical fitness and sports skills. He tested 85 grade 9th boys (27 with rural background , 38 with urban background and 20 with parochial background) for speed , power muscular endurance and skill in different games. Study of the Total score showed the boys with rural , Parochial or Urban experience did not differ in physical fitness but boys from urban and parochial school were superior in sports club.

STATEMENT OF THE PROBLEM

The purpose of the study is to find out the relationship of selected motor fitness variables to playing ability in Football.

HYPOTHESIS

It is hypothesized that there would be significant relationship with selected motor fitness variables such as muscular power , agility , muscular strength , muscular endurance , cardiovascular endurance , flexibility and speed to playing ability in Football.

DELIMITATION

The study is delimited to 60 male hockey players who have represented Haryana state , agate, between 16-18 years.

It is further confined to the selected motor fitness variables such as muscular , power, agility , muscular strength , muscular endurance , cardiovascular endurance , flexibility and speed.

LIMITATION

Same degree of motivation will be the determining factor during the testing . No effort will be made to control or assess the quantum of the food ingested , life style psychological stresses and factors metabolic functions.

RESEARCH METHODOLOGY

Selection of Subjects

60 male hockey players between 16-18 years of age will be

selected as a subject for the purpose of this study. These players who have at least represented Haryana and are still playing competitive Hockey.

SELECTION OF VARIABLES

The investigator reviewed the available scientific literature pertaining to the game of Hockey from books , journals , scholastic coach and research quarterlies. On the basis of the discussion with experts , feasibility criteria , availability of instruments and the relevance of the variables to the present study , the following variables wee selected:

MOTOR FITNESS VARIABLES

- Muscular Power
- Agility
- Muscular Strength

- Muscular Endurance
- Cardiovascular Endurance
- Flexibility
- Speed

REFERENCES

Barrett: Norman F., "Improving your Hockey" (London : Feber and Feber Ltd., 1950).

Barrow : H.M. and McGee. T. "A Practical Approach to Measurement in Physical Education". Philadelphia : Lea & Febiger , 1979.

Brewer : John , "Fit For What" Hockey Field (November 1990).

Bucher : Charles A., "Foundation of Physical Education" (C.V. Mosby Company 1972.)

Clarke : Harrison and Clarke David H. , "Application of Measurement to Physical Education . " (Prentice – Hall , Inc. , Englewood Cliffs , New Jersey 07632).

Eldred : Vince Eldred , "Basketball Coaching Guidelines" Scholastic Coach 42 (January 1973:146)

Flint : Rachael Neyhoe , Women Hockey (London : Pelham Book Ltd. 1976).

Johnson : Barry L. and Nelson Jack N. "Practical Measurement for Evaluation in Physical Education" (Delhi : Surjeet Publications , 1982)

Matharee : Kirpal Singh , "Fitness of Hockey" Dedicated to fellow Sportsmen (A.P. Super Hockey Ashoka Kalra 19 , Chowk Addea Tanda Jalandhar)

Mathews : Donald K. , "Measurement in Physical Education" (Philadelphia , London , Toronto , W.B. Saunders Company , 1978).

Ramirez Sergio Garvin, "Characteristic Violence in Sports Governed by Criminal Law " Olympic Review 100 (Jan – Feb . 1976) : 44.

Singh : Gain , "Fitness In Hockey" Indian Hockey (September 1966).