ISSN 2277-8721

Electronic International Interdisciplinary Research Journal (EIIRJ)
Bi-monthly Reviewed Journal May/June 2013

A SURVEY STUDY OF PHYSICAL FITNESS VARIBLES FOR TELENT IDENTIFICATION OF HOCKEY PLAYERS

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Introduction

Some people associate ‘good physical fitness with being with being good at sports and games. It does take a certain degree of fitness to excel in these activities but being able to perform specific skills may not be a good indicator of total physical fitness because some sports require only specific aspects of fitness.

Historically physical fitness has often been is represented at times identified exclusively with skill in sports at other times identified to closely with only one of the many aspects of physical fitness .For example in previous decades fitness for men was often associated with muscles strength, this is evidenced by the popularity of program such as Charles Atlas Dynamic tension program advertised widely in magazines and comes books. In the 1960s and 1970a with the popularity of jogging and other forms of aerobic exercise many people associated physical fitness almost exclusively with cardiovascular fitness , recently research and popular literature has brought considerable attention to flexibility as on important component of fitness , It is true that each of these is important but it can not be overemphasized that physical fitness is not a single entity but it consists of a number of different characteristics of strength , cardiovascular fitness and flexibility, Each of the specific components of fitness is critical for developing optional physical fitness and for achieving the benefits associated with being optimally fit.

In the field of sports hockey is a very old game although some game are also playing for long time but the importance of hockey is that it plays in a large number of countries.

Hockey was introduced first in Greece. England is responsible to produce modern Hockey in the world .In ancient Indian hockey was known as "Khido" .It was also played in other European countries.

The basic idea of bringing revolutionary changes in the game of hockey was to give greater opportunities and more advantage to young stars to participate in vigorous activities and to be fit.

Hockey is a skilled game requiring the ability to master a ball with a stick physical strength particularly in the fore arms and wrists plays and wrists plays an important role in developing of speed of movement over short distance.

Hockey is a game in which required to play one game is 70 min's hence it is very necessary for a player to have Endurance as the other skills of this game are concerned such as dribbling, scooping and tackling it's necessary and must for a player to have "Flexibility" to perform the above mentioned skills efficiently and here mainly there should be "Hip flexibility" and similarly in "Hitting" one should have Power and Strength i.e. Shoulder strength and also it is very necessary to have "speed" , while chasing the ball and whenever during a play there is a counter attack "Agility" is a must for a player also it is necessary for a player to have reaction time.

Methodology

The purpose of the study was to find out that which component are useful for a hockey player i.e. cardio-vascular fitness, flexibility, strength, power, agility, endurance, speed, dynamic balance & reaction time.

The subjects were 18 – 25 years male hockey player of Hoshangabad District who participated in at least Inter collegiate Tournament. Eleven test of physical fitness component were taken on subjects. There were 1 test for cardio-vascular fitness, 1 test for flexibility, 1 test for strength, 2 test for power, 1test for agility, 2 test for endurance, 1 test for speed, 1 test for

dynamic balance, 1 test for reaction time were taken on the basis of their achievement and performance in different level of tournament and for this a marking table was used by researcher.

TWELVE – MINUTE RUN – WALK TEST

Objective: To measure cardiovascular fitness.

Scoring: The score in yard is determine by multiplying the number of complete laps times the distance each lap, club the number of segments of an incomplete lap, plus the number of yards stepped off between a particular segment.

MODIFIED SIT- AND – REACH TEST

Purpose: to measure the development of hip and back flexion as extension of the hamstring muscles of the legs. The object is to see how for you can extend your finger tips beyond your foot line with the leg straight.

Scoring: the Scoring is taken three best trails measured to the nearest quarter of an inch is test score.

BENT KNEE SIT- UPS

Objective: To measure the endurance of the abdominal muscles.

Scoring: The Scoring will be taken the total number of repetition is recorded for the score.

HALF SQ UAT JUMP TEST

Objective: To measure the endurance of the muscles of the muscles of the legs.

Scoring: Scoring will be taken one point is scored for each correct repetition.

STRENGTH PULL – UPS

Objective: To measure the strength of the arms and shoulders in the pull – up movements.

Scoring: Will be taken the best two trials.

L. S. U. AGILITY OBSTACLE COURSE

Objective: To increase various kinds of agility in one test involving zigzag, dodging and shuttle running and squat thrusts due to the specificity of agility it is believed that the inclusion of several different types of agility in one test provides a more accurate assessment of overall agility performance.

Scoring: The score will be taken in seconds to the nearest tenth of a second.

MODIFIED BASS TEST OF DYNAMIC BALANCE

Objective: To measure the ability to jump accurately and maintain balance during movement and after movement.

Scoring: Scoring will be taken for each mark successfully landed on is 5 points and in addition 1 point is awarded for each second. The balance is held up to 5 seconds.

VERTICAL JUMP

Objective: To measure the power of legs in jumping vertically upward.

Scoring: Scoring will be taken as the number of inches between the reach and the jump marks measured to the nearest half inch to the score.

TWO HAND MEDICINE BALL PU

Objective: To measure the power of the arm and shoulder girdle.

Scoring: The Scoring will be taken the best of three trials measured to the nearest foot is recorded as the score.

NELSON SPEED OF MOVEMENT TEST

Objective: To measure the combined speed and reaction of the hand.

Scoring: The Scoring will be taken for the combined response movement is read from the timer at the point just above the upper of the hand after the catch. The average of the middle ten trials. After the slowest and fastest five trials have been discarded is recorded.

50 YARD DASH

Objective: To measure speed.

Scoring: The Scoring will be taken the elapsed time from the starting signal until the runner crosses the finish line is measured to the nearest tenth of a second.

The criterion measure was the composite score of the skill of hockey assigned independently by three hockey experts. For assessing the scientific authenticity of the test score correlation statistics was used.

Analysis of Data and Results Of The Study

For analyzing the physical fitness components for talent search in hockey of students of Hoshangabad District. Product movement correlation was applied their correlation value are presented in table No.1

Correlation Coefficient of Related Physical Fitness Test Of the Student of Hoshangabad District

	Cardio Vascular Fitness	Flexi-lity	Endu-ance E1	Endu-ance E2	Stren-th	Agility	Dynamic Balance	Power P1	Power P2	Reactio Time
Criteria Measure	.86*	.47*	.60*	.56*	.60*	.72*	.87*	.64*	.73*	-.08

***significant at 0.05 level**

'r' needed for significant at .05 level with (19) df =0.43

The correlation coefficient between criterion measure and cardio-vascular fitness of students of Hoshangabad District is found significant as the table indicated the value of "r" =0.86. The 'r' needed for significant at 0.05 level with df (19) =0.432

It indicate that there is a second high significant positive relationship exist between criterion measure and cardio-vascular fitness of students of Hoshangabad District.

The correlation coefficient between criterion measure and flexibility of students of Hoshangabad District is found significant as the table indicated the value of 'r' = 0.47.

The 'r' needed for significant at .05 level with df (19) =o.432 high. It is indicate that there is a 8th positive relation between criterion measure and flexibility of the student of Hoshangabad District.

The correlation coefficient between criterion measure and endurance (E1) and (E2) of students Hoshangabad District is found significant as the table indicated the value of E1 'r' =0.60 and E2 'r' = 0.56the level with df (19) =o.432.

The correlation coefficient between criterion measure and strength of students of Hoshangabad District is found significant as the table indicated the value of 'r' =0.60. The 'r' needed for significant at 0.05 level with df (19) =0.432. It indicate that there is a 6th significant positive relationship between criterion measure and strength of student of Hoshangabad District.

The correlation coefficient between criterion measure and agility of student of Hoshangabad District is found significant as the table indicated the value of 'r' =0.72. The 'r' needed for significant at 0.05 level with df (19) =0.432.

It indicates that there is a 5th significant positive relationship exist between criterion measure and agility of student of Hoshangabad District.

The correlation coefficient between criterion measure and dynamic balance of students of Hoshangabad District is found significant as the table indicated the value of 'r' = 0.87. The 'r' needed for significant as 0.05 level with df (19) =0.432.

It indicates that there is a 1st high significant positive relationship exists between criterion measure and dynamic balance of student of Hoshangabad District.

The correlation coefficient between criterion measure and power 1st and 2nd (P1P2) 0f students of Hoshangabad District is found significant as the table indicated the value of P1 = r = 0.64 and P2 =r =0.73. The 'r' needed for significant at 0.05 level with df (19)n=0.43.

It indicated that there is a significant 4th high positive relationship exists between criterion measure and power of student Hoshangabad District.

The correlation coefficient between criterion measure and relation time of student of Hoshangabad District is not found significant as table indicate the value of 'r' =-0.08. The 'r' needed for significant at 0.05 level with df (19) = 0.432.

It indicate that there is no significant relationship between criterion measure and reaction time because significant value is much more then the calculated 'r'.

The correlation coefficient between criterion measure and speed of student of Hoshangabad District is found significant as the table indicate the table indicate the value of 'r' = 0.76.

It indicate that there is a 3rd significant positive relationship between criterion measure and speed of students of Hoshangabad District.

CONCLUSION

On the basis of analysis of data, it is concluded that a Dynamic balance, cardio-vascular Fitness, Speed, Power, Agility, Endurance, Flexibility show a high positive correlation with sport performance but the contribution of reaction time didn't show positive correlation with sports performance.

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