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COMPARATIVE STUDY ON SELECTED PHYSICAL FITNESS PARAMETERS BETWEEN INTERCOLLEGIATE LEVEL MALE FOOTBALL AND HANDBALL GOALKEEPERS

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ABSTRACT

The study was designed to find out the comparison of selected physical fitness parameters between inter-collegiate level football and handball goalkeepers. To achieve this purpose of the study, fifteen football goalkeepers and fifteen handball goalkeepers who were participated in Bharathiar University inter collegiate level tournaments was selected as subjects, their age ranged between 18 and 25 years. The following tests were performed to measure the physical fitness parameters: 50m Dash test - To measure speed, Shuttle run (4 x 10m) test -To measure agility, vertical jump – To measure leg explosive power. The data was statistically analyzed by using 't' ratio at 0.05 level of confidence.

KEYWORDS : Football, Handball, Goalkeepers, speed, Agility, Leg Explosive Power.

INTRODUCTION

The position of a goalkeeper is a specialist one, which requires tailored practiced sessions and individual coaching. The first and primary task of goalkeeper is to stop shots which are fire at his goal. There is no magic to goalkeeping. Efficiency is based on correct technique. Of all the11 individuals in a football team, the goalkeeper is the most important. If his performance is poor, he can and does lose matches on his own account. If his performance is good, he will give his team-mates confidence and often inspire them to play above themselves. It is, therefore, surprising that goalkeepers are so frequently neglected in coaching sessions. It is equally surprising that when they are given practice it is often in a goal marked by tracksuits or corner flags. Perhaps the most incongruous sight of all is a goalkeeper defending a small five-a-side goal **(SHARMA, 2007).**

The goalkeeper is not only the "Last Line of Defense", he is also the "First Line of Attack". There is no point in being able to make great saves if you are only going to give the ball back to the opposing team with poor distribution. Solid distribution is extremely important if you want to be a top goalkeeper. One of the goalkeeper's main ways to distribute the ball over a long distance is the punt, or drop-kick. This technique is best used when the pitch conditions are poor (uneven, potholes, etc.) or during wet weather.

Good goalkeeping takes years of dedication and practice. All good goalkeepers share certain skill sets and quality traits. Goalkeepers have quickness and toughness. They have leaping, catching, and kicking ability. And they take charge and lead the team. One of the most important skills for any goalkeeper is positioning. Knowing where to be, where to go, and when to move is truly the art of goalkeeping.

The goalkeeper is the last line of defender, in charge of doing whatever possible to keep the ball out of the net. As goalie, you can use your entire body, including your hands and arms, to stop the ball. The best way for a goalie to catch the ball is to form a "W" with your thumbs and index fingers, with your hands open

and palms facing away from you. This will help you catch a ball traveling at a high speed without it going through your hands. The other fundamental skill for goalies is punting, which is how you distribute the ball up field after making a save. Hold the ball over your dominant foot, and then drop the ball as you swing your foot, making contact and sending the ball through the air. Land on your "shooting" foot on your follow through like you are taking a shot.

Quickness is essential, the goalkeeper must be quick, they need quick feet, quick hands, and a quick min, they must be able to get from a standing position to a laying position in less than a second. And back up again just as fast. They must be able to block a speeding shot, then another, then another, before you even blink. They must be able redirect your entire body in a moment.

Determined never to give up. While an ideal goalkeeper is agile, flexible, and man enumerable, with long arms, large hands, a slender torso, and powerful legs, every goalkeeper must be determined never to let a ball hit the net, never determined to hang his head, never determined to be afraid and always determined to make the save.

A goalkeeper must be tough, falling towards the ground, diving from side to side, sliding, colliding, and slamming into aggressive opponents are all the normal part of the game. A goalkeeper hits the ground more times throughout a match than any other player. And collisions with breakaway offenders hit the hardest.

All goalkeepers must be leapers, they must be able to cover the length of the goal in one dive, elevate their head above the crossbar, and rise up above the heads of all opponents. Goalkeepers leap during almost every save, especially when catching or clearing a corner kick.

METHODOLOGY

The study was based on the comparison of physical fitness parameters between inter-collegiate level male football and handball goalkeepers. Fifteen football goalkeepers and fifteen handball goalkeepers who were participated in Bharathiar University inter collegiate level tournament was selected as subjects, and their age ranged between 18 and 25 years. The following tests were performed to measure the physical fitness parameters: 50yard Dash test - To measure speed, Shuttle run (4 x 10m) test -To measure agility, vertical jump test– To measure leg explosive power.

STATISTICAL ANALYSIS

To compare the selected physical fitness parameters between inter-collegiate level male football goalkeepers and handball goalkeepers paired‘t’ test was used. The level of significance was set at 0.05 level of confidence.

Table

COMPARASION OF ‘t’ RATIO ON SPEED, AGILITY AND LEG EXPLOSIVE POWER BETWEEN INTER COLLEGIATEL EVEL MALE FOOTBALL AND HANDBALL GOALKEEPERS

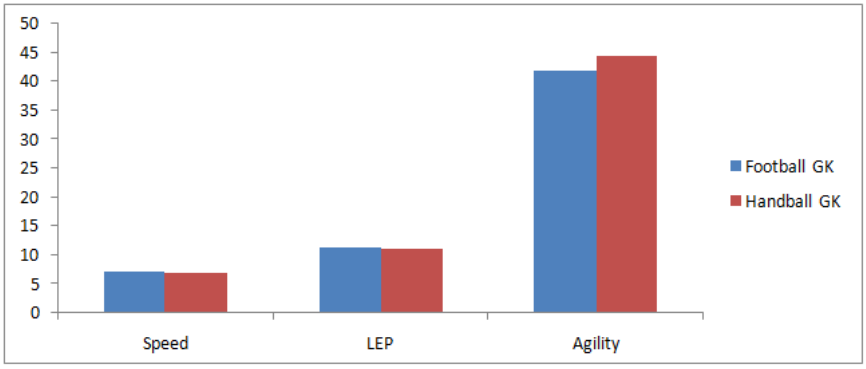
Parameters	Players	N	Mean	S.D.	S.E.M	t -value
Speed	**Football**	15	7.21	0.32	0.08	**1.88**
	Handball	15	7.05	0.43	0.11	
Agility	**Football**	15	11.41	0.21	0.56	**3.35***
	Handball	15	11.14	0.22	0.58	
Explosive power	**Football**	15	41.86	3.11	0.80	**2.00**
	Handball	15	44.40	3.77	0.97	

Table shows that mean value of speed for football players was 7.21 and handball players was 7.05 respectively, mean value of agility for football players was 11.41 and handball players was 11.14 respectively and mean value of Vertical jump for football players was calculated 41.86 and handball players was 44.40

respectively. The obtained t-value on speed was 1.88 , agility was 3.35 and leg explosive power was 2.00. Speed and leg explosive power was lesser than the required table value of 2.145. The result shows that there is a no significance difference exit on speed and leg explosive power between football and handball goalkeepers. The obtained t value of agility was greater than the required table value of 2.145 thus it shows significant difference between football and handball goalkeepers.

FIGURE

BAR DIAGRAM SHOWS THAT THE MEAN VALUE OF SPEED, AGILITY AND LEG EXPLOSIVE POWER BETWEEN INTER COLLEGIATE LEVEL MALE FOOTBALL AND HANDBALL GOALKEEPERS



DISCUSSION AND FINDINGS

Physical fitness variables are very important in both football and handball goalkeepers to form a condition for higher performance. Depending upon the demand of the game each factor of physical fitness parameters should be optimally developed. The finding of the present study had similarity with the findings of the investigators referred in this study, the results of this study shows that there was no significant difference in speed and leg explosive power between football and handball goalkeepers but there was significant difference on agility between football and handball goalkeepers.

Thus the result reveals that handball goalkeepers produce greatest performance in Agility than that of football goalkeepers. **Mahipal** *et al.,* **(2016**) **A** comparative study of selected physical fitness variables amo ng state level athletes and football players of district. The result shows that athletes showed greater sprinting ability and explosive power than the footballers. There was no significant difference was found on the variable muscular strength between athletes and football players. **Keshav** *et al .,* **(2014)** A comparative study of physical fitness variables of male volleyball players and football players, the result shoes that it was concluded that the physical fitness football players is better than volleyball players, as football players have performed better then volleyball players. **Deepla** *et al.,* **(2011)** made a study on the physical fitness among athletes and football players of schools in Hyderabad. The results indicated that football players are having good in pull ups, sits ups, shuttle run, standing broad jump compare to athletes who were good in 50 yards & 600 yards run. **Maurya** *et al .,***(2010)** made a comparative study of physical variable (muscular strength) football players & athletes of school levels. They found that there were no significant difference was found in football players and athletes of school level in regards of muscular strength variable. **Dal Pupo J et.al. (2014)** showed excellent test-retest reliability for the maximal jump height, mean vertical jump height and fatigue index. Peak lactate showed moderate reliability. Large correlations were found between the mean height of the first four jumps of CJ30 and the peak power of the Wingate, between the mean vertical jump height of CJ30 and the mean power of the Wingate and between the lactate peak of CJ30 and Wingate. A moderate correlation of fatigue index between CJ30 and the Wingate was found. The continuous jump is a reliable test and measures some of the same anaerobic properties as WAnT. The correlations observed in terms of anaerobic indices between the tests provide evidence that the CJ30 may adequately assess anaerobic performance level.

CONCLUSION

- The result of the present study concluded that the Handball goalkeepers were found better performance in agility when compared with football goalkeepers.
- The result of the present study concluded that there was no significant difference in speed and leg explosive power between football and handball goalkeepers.

REFERENCE

Mahipal (2016) A Comparative Study Of Selected Physical Fitness Variables Between State Level Athletes And Football Players Of District, Times International Journals of Research ISSN 2349-4867.

Kohli Keshav, Singh Harmandeep (2014) A Comparative Study of Physical Fitness Variables of male Volleyball Players and Football Players, Research Journal of Physical Education Sciences Vol. 2(1), 5-7, ISSN 2320– 9011.

Deepla K and Raj T.Rajinder (2011), "A study on the physical fitness among athletes and football players of schools in Hyderabad" Asian journal of Physical education and Computer Science in Sports Vol. 5 No. 1 pp – 105

Maurya D.C. et al (2015) "A comparative study of Physical variable (Muscular strength) football players and athletes of school levels." Vol.3(8), p 1-4.

Dal Pupo J1, Gheller RG2, Dias JA2, Rodacki AL3, Moro AR2, Santos SG2. Reliability and validity of the 30-s continuous jump test for anaerobic fitness evaluation. J Sci Med Sport. 2014 Nov;17(6):650-5.doi:1016/j.jsams.2013.09.007. Epub 2013 Sep 19.