

A COMPARATIVE STUDY OF SELECTED MOTOR ABILITIES OF FOOTBALL AND HANDBALL PLAYERS

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ABSTRACT

Motor abilities play important role in achieving proficiency in games and sports. It is assumed that with participation in sports, the level of motor ability also improves. For this study 20 male players each for Football and Handball were selected who had played atleast at district level or Inter College level. The age group of subjects was ranging between 18-21 years. Test by Johnson and Nelson (1982) was used to measure motor fitness components. To find out the difference between means of the Football and Handball groups 't' test was applied. From the study it may be concluded that there is no significant difference in the speed variable of Football and Handball players. Differences were observed on arm power, leg- power and agility variables between Football and Handball players but these were insignificant. It was found that Football players are better in speed, leg power and agility whereas Handball players are superior to Football player on arm power.

Keywords: Football, Handball and Motor Abilities.

INTRODUCTION:

Motor abilities are inherited, relatively stable traits that underlie various sport skills. The notion of abilities is similar to that of intelligence as a predictor of academic performance. Motor skills are deliberate and controlled movements requiring both muscle development and maturation of the central nervous system. The skeletal system too, needs to be strong enough to maintain the movement and weight involved in any new activity, once these conditions are met, children are able to learn new physical skills by practicing them until each skill is mastered. The development of motor skills is important for our daily living, and is a process that involves both inherent abilities and considerable practice during childhood and adolescence. Self selected, unplanned play is important for acquiring motor skill abilities, as well as structured movement instruction. Without this formalized learning, movement performance and improvement is really left to chance. In an article by Smith and O'Keefe (1999) they purport that, this factor is often not recognized and even some professional educators assume that such essential skills will emerge automatically. However, with many skills young children need to learn and practice these skills

until they can proficiently participate in a variety of games and sports. Findings show that when teaching interventions are applied for the learning of fundamental motor skills, children aged four to six years are able to achieve full proficiency (Smith & O'keefe, 1999).

Motor abilities plays important role in achieving proficiency in games and sports. It is assumed that with participation in sports, the level of motor ability also improves. Motor ability has been defined by Barrow (1964) as "the present acquired and innate to perform motor skills of a general and fundamental nature, exclusive of highly specialized sports and gymnastic techniques". Motor ability status would come about relatively slowly and over a period of time. 'Motor ability' and 'Physical fitness' are directly related each other and helps in achieving total fitness. Motor ability components play a vital role in achieving top level performance in different sports disciplines.

METHODOLOGY:

Sample

For this study 20 male players each for Football and Handball were selected who had played atleast at district level or Inter College level. The age group of subjects was ranging between 18-21 years.

Tools used

Test by Johnson and Nelson (1982) was used to measure motor fitness components as described below:

Speed: 50- Yard Dash Run test

Arm Power: Two hand Medicine Ball put test

Leg Power: Standing Broad Jump

Agility: Shuttle run test

Statistical Technique

To find out the difference between means of the Football and Handball groups 't' test was applied.

DISCUSSION AND FINDINGS:

TABLE – 1
MEAN DIFFERENCE BETWEEN FOOTBALL AND HANDBALL PLAYERS ON SPEED

Group	Number	Mean (in Sec.)	S.D.	Df.	't'
Football	20	8.17	0.57	38	0.60
Handball	20	8.29	0.69		

Table value at 0.5=2.02

From table-1 it is clear that that mean and standard deviation values of Football players on the speed variable were 8.17 and 0.57 whereas in case of Handball players it was 8.29 and 0.69 respectively. No significant difference was found between Football and Handball players as the calculated t-value 0.60 was less than tabulated value of 2.02 at 0.05 level of significance.

TABLE – 2
MEAN DIFFERENCE BETWEEN FOOTBALL AND HANDBALL PLAYERS ON THE
ARM POWER

Group	Number	Mean (in Mts.)	S.D.	Df.	't'
Football	20	2.68	0.17	38	1.23
Handball	20	2.75	0.19		

Table value at 0.5=2.02

From table-2 it is clear that that mean and standard deviation values of Football players on the arm power variable were 2.68 and 0.17 whereas in case of Handball players it was 2.75 and 0.19 respectively. No significant difference was found between Football and Handball players as the calculated t-value 1.23 was less than tabulated value of 2.02 at 0.05 level of significance.

TABLE – 3
MEAN DIFFERENCE BETWEEN FOOTBALL AND HANDBALL PLAYERS ON LEG
POWER

Group	Number	Mean (in Mts.)	S.D.	Df.	't'
Football	20	1.62	0.14	38	1.51
Handball	20	1.56	0.11		

Table value at 0.5=2.02

From table-3 it is clear that that mean and standard deviation values of Football players on the leg power variable were 1.62 and 0.14 whereas in case of Handball players it was 1.56 and 0.11 respectively. No significant difference was found between Football and Handball players as the calculated t-value 1.51 was less than tabulated value of 2.02 at 0.05 level of significance.

TABLE – 4
MEAN DIFFERENCE BETWEEN FOOTBALL AND HANDBALL PLAYER ON AGILITY

Group	Number	Mean (in sec.)	S.D.	Df.	't'
Football	20	11.12	0.64	38	1.57
Handball	20	11.45	0.69		

Table value at 0.5=2.02

From table-4 it is clear that that mean and standard deviation values of Football players on agility variable were 11.12 and 0.64 whereas in case of Handball players it was 11.45 and 0.69 respectively. No significant difference was found between Football and Handball players as the calculated t-value 1.57 was less than tabulated value of 2.02 at 0.05 level of significance.

CONCLUSION:

From the above study it may be concluded that there is no significant difference in the speed variable of Football and Handball players. Differences were observed on arm power, leg- power and agility variables between Football and Handball players but these were insignificant. It was found that Football players are better in speed, leg power and agility whereas Handball players are superior to Football player on arm power.

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