A Comparative Study on selected psychomotor abilities between Football and Handball Players

MILAN PATRA
RAMSADAY COLLEGE, AMTA, HOWRAH, WESTBENGAL.

Abstract:

The aim of this study is to find out the significant differences of selected Psychomotor Abilities between male Football and Handball players. A total of 30 male Intercollege (15 Football and 15 Handball) players, age ranged between 18-23 years will be selected from Ramsaday College Amta, Howrah. The purposive sampling technique was used to attain the objectives of the study. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. Selected Psychomotor ability score speed, strength, agility, cardiovascular endurance, balance will be taken. For the interpretation of data comparative analysis of the selected variable, the't' test was applied. The data of both groups were collected separately for all the variables. Statistic such as mean and standard deviation was computed. The level of significance was set at 0.05. The results revealed significant differences between Football and Handball players on the sub-variables i.e. Agility and Cardiovascular Endurance. However, no significant differences were noticed with regard to the sub-variables i.e. Speed, Strength and Balance.

Key words: Football, Handball, Speed, Strength, Agility, endurance and Balance.

Introduction:

Game and sports as a part of human education have always existed in the human society. "Sports by their very are enjoyable, challenging all absorbing and required a certain amount of skill and physical fitness". Sports have very prominent role in modern society. Today sports have becomes an inseparable phenomenon of our social life. It is important an individual, a group, a nation and indeed the world. As it is well understood, "Fit body Fit nation". Sports have ever reflected development in society. Sports indeed, have been a mirror of society.

Morden definition of fitness describes ether a person or machine's ability to person a specific function or a holistic definition of human adaptability to cope with various situations. Many different skills and activities require the development of psychomotor abilities. Psychomotor and coordinative ability is one of the importance fitness variables that are defined as the quality of being suitable to perform a particular task. Differentiation stems from beliefs about differences among learners, how they learn, learning performances, and individual interest (Anderson, 2007). Many different skills and activities require the development of psychomotor abilities.

Soccer is the most popular and most attended spectacular game in the world at present. It is not merely a games, it is a part of one's life. It is a vigorous, fast and skilled game for the well-conditioned sportsman, who most possess strength, speed, agility, balance, flexibility, endurance, coordination and many other undefined qualities such as dribbling, kicking for passing and shooting at the goal.

Participation in Soccer is both enjoyable and beneficial to play the game well; one must develop physical stamina and excellent neuromuscular Co-ordination, intellectual alertness and the ability to make adjustments to rapidly changing situations, emotional control, gentlemanly conduct and social graces that promote good interpersonal relationship.

Handball is a modern ball game which belongs to the family of team sports. It combines the best features of different branches of sport, that is, the advantages of physical abilities, technical skills and tactical knowledge. It is a strenuous body contact Olympic team sport that places emphasis on running, jumping, sprinting, throwing, hitting, blocking, and pushing. It's a team sports which require a high standard of preparation in order to complete sixteen minutes of competitive play and to achieve success. In this game movement patterns are characterized as intermittent and change continuously in response to different offensive and defensive situations in which anthropometric characteristics and high levels of strength, muscle power, aerobic capacity and handball throwing velocity are the most important factors that give a clear advantage for successful participation in elite levels of handball leagues (Bobbert and Van Ingen Schenau, 1988).

Methodology:

Subject of the study were selected from the intercollege players Ramsaday College, Amta, Howrah, for the purpose of the study 15 football players and 15 handball players age ranged between 18-23 were selected randomly. The football and handball both the groups were measured on speed, strength, agility, cardiovascular endurance and balance. The football players and handball players speed was assessed by 50m dash test in seconds, strength is measured by push ups in number, agility was measured by Illinois agility test in seconds, cardiovascular endurance was measured by 800meter run in minutes, balance was measured by stork balance stand test in seconds.

Methods of Analysis:

The analysis collected data "T" test was applied to find out the significant difference between Football players and Handball players. The level of significance was set at 0.05 level.

Discussing of Findings:

Table-1

Comparative Analysis of Mean, Standard Deviation and't' value Football and Handball players.

Variables	Group	Mean	SD	"t"
Speed	Football	6.65	0.28	1.185
	Handball	6.78	0.16	

Significance at 0.05 level. Degree of freedom=28(1.701).

Table- 1 Shows that the mean and standard deviation value of Football on the variable of Speed as 6.65 and 0.28 respectively. However Handball had mean and standard deviation value as 6.78 and 0.16 respectively. There were no significant difference found between Football players and Handball players as the calculated 't' value (1.185) was less than tabulation t-value (1.701) at 0.5 level.

Table – 2

Comparative Analysis of Mean, Standard Deviation and't' value Football and Handball players.

Variables	Group	Mean	SD	"t"
Strength	Football	24.9	3.26	0.674
	Handball	25.67	2.66	

Significance at 0.05 level. Degree of freedom=28(1.701).

Table- 2. Shows that the mean and standard deviation value of Football on the variable of Strength as 24.9 and 3.26 respectively. However Handball had mean and standard deviation value as 25.67 and 2.66 respectively. There were no significant difference found between Football players and Handball players as the calculated 't' value (0.674) was less then tabulation t-value (1.701) at 0.5 level.

Table-3

Comparative Analysis of Mean, Standard Deviation and't' value Football and Handball players.

Variables	Group	Mean	SD	't'
Agility	Football	15.4	0.37	3.65
	Handball	15.81	0.30	

Significance at 0.05 level. Degree of freedom=28(1.701).

Table- 3. Shows that the mean and standard deviation value of Football on the variable of Agility as 15.0and 0.37respectively. However Handball had mean and standard deviation value as 15.81 and 0.30 respectively. There significant difference was found between Football players and Handball players as the calculated 't' value (3.65) was more than tabulation t-value (1.701) at 0.5 level.

Table-4

Comparative Analysis of Mean, Standard Deviation and't' value Football and Handball players.

Variables	Group	Mean	SD
Cardiovascular Endurance	Football	3013	0.19
	Handball	3.27	0.13

Significance at 0.05 level. Degree of freedom=28(1.701).

Table- 4. Shows that the mean and standard deviation value of Football on the variable of Cardiovascular endurance as 3.13and 0.19respectively. However Handball had mean and standard deviation value as 3.27 and 0.13 respectively. There significant difference was found between Football players and Handball players as the calculated 't' value (2.61) was more than tabulation t-value (1.701) at 0.5 level.

Table-5

Comparative Analysis of Mean, Standard Deviation and't' value Football and Handball players.

Variables	Group	Mean	SD	't'
Balance	Football	25.02	1.97	1.07
	Handball	25.90	2.42	

Significance at 0.05 level. Degree of freedom=28(1.701).

Table- 5. Shows that the mean and standard deviation value of Football on the variable of Balance as 25.02 and 1.97 respectively. However Handball had mean and standard deviation value as 25.90 and 2.42 respectively. There were no significant difference found between Football players and Handball players as the calculated 't' value (1.07) was less than tabulation t-value (1.701) at 0.5 level.

CONCLUSION

1. There was no significant difference in Speed among the Football and Handball players.
2. There was no significant difference in Strength among the Football and Handball players.
3. There was significant difference in Agility among the Football and Handball players.

4. There was no significant difference in Cardiovascular Endurance among the Football and Handball players.
5. There was no significant difference in Balance among the Football and Handball players.

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