

AN ANALYTICAL COMPARATIVE STUDY OF PERFORMANCE VARIABLE DRIBBLING AMONG SOUTHERN REGION MEN HOCKEY PLAYERS IN THE GRAVEL FIELD

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Abstract:

The purpose of the present study was to compare the dribbling performance among the Southern region men hockey players while playing at gravel playfield. To achieve the purpose of this study totally 120 men hockey players who had participated in the Senior South zone and Senior National hockey championships from the Southern Regions (Tamilnadu, Puducherry, Karnataka, Kerala, Andhra Pradesh and Hyderabad) were selected as subjects.

The dribbling performance was measured by "W" Form Dribbling Test for Southern region men hockey players in the gravel field..

To compare the performance variable dribbling among the Southern region men hockey players the statistical calculation One Way Analysis of Variance was employed followed by Scheffe's post hoc test.

KEY WORDS:

Performance Variable Dribbling , Men Hockey Players , science and technology .

INTRODUCTION

The modern age is an age of science and technology and now it is called as computer age. Due to rapid progress in the field, man is blessed with more leisure. In this modern age of micro and macro machines, physical activities in one form or the other are essential for growth and development of human personality. Body and mind movement is the sign of life and activity is the sign of growth and development. Hence sports and games activities should become part of our life. Physical education is expected to develop interest in such activities and provide for participation in an organized way.

HOCKEY

Hockey is a game which calls for strenuous, continuous, thrilling action and therefore attracts the youth all over the World. The skills involved are simple, natural and yet are highly stimulating and satisfying to any child. These skills are dribbling, pushing, flicking, scooping, tackling and dodging the opponent. Hockey is rated as one of the most popular team games in the world. With the involvement of Dhayan Chand, and Dung Dung from India, this sport is getting a dimensional popularity in India, Asian countries and in other European countries as well.

PERFORMACE VARIABLES IN HOCKEY AND ITS SIGNIFICANCE

Hockey is one of the fastest field sports being played on a 91.40/55 meters rectangular play field. The game had a rapid growth and development and switched onto artificial field nowadays. To play on such artificial field requires greater amount of speed, agility, power, endurance and neuromuscular

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coordination besides perfection of techniques or fundamental skills.

There are a number of fundamental skills in hockey namely hitting dribbling, pushing, scooping, stopping, flicking, tackling, dodging and passing. The good performance of a hockey player depends upon the perfection and proficiency of fundamental skills,

DRIBBLING AND ITS IMPORTANCE IN HOKEY

Dribbling chosen for the study is one of the most important skills in the game of hockey. It is an art which will draw the attention of spectators. During the game when the defenders are in dangerous zone, completely covered by the opponents the defenders in position to clear the ball from the dangerous zone, dribbling is so useful and successful. Dribbling helps the forwards at the time of scoring when there is no chance to give pass or to take straight hit into the goal, to control the ball or to make possession of the ball dribbling is so useful. So every player, including the goalkeeper must be perfect in dribbling in all the playfields.

Dribbling is one of the most enjoyable skills and considered as very important performance variables. Dribbling the ball in the artificial ground, gravel and grass field are more or less same but there maybe slight difference in the body position while dribbling the ball in different playfields. The body position while dribbling the ball in the artificial field will differ from the body position while dribbling the ball in the grounds like grass and gravel. The ball moves faster in the artificial fields than the other two playfields.

STATEMENT OF THE PROBLEM

The purpose of the study was to compare the performance variable dribbling among the southern region men hockey players in the gravel field.

HYPOTHESES

Hypothesis says that the Tamilnadu team would be better in the performance variable dribbling in the gravel field than the other southern region men hockey teams.

Southern region Men Hockey Teams

Southern region men hockey teams are those teams which have taken part in the South Zone men hockey championships and Senior National men hockey championships from the Southern Regions. (i.e. Karnataka Tamilnadu, Puducherry, Kerala, Andhra Pradesh, and Hyderabad).

METHODS

The purpose of the study was to compare the performance variable dribbling among the Southern region men hockey players in the gravel field. To achieve the purpose of this study totally 120 men hockey players who had participated in the Senior South zone and Senior National hockey competitions from the Southern Regions were selected as subjects.

The performance variable dribbling was measured for Southern region men hockey players in the gravel field.

To compare the performance variable dribbling among the Southern region men hockey players the statistical calculation One Way Analysis of Variance was employed followed by Scheffe's post hoc test.

“W” form dribbling test

Objective

The purpose of “W” form dribbling test was to measure the subjects speed and ball control.

Equipment

Hockey balls, hockey sticks, measuring tape, whistle 5 flag posts, stop watches and lime powder.

Marking

Three flag posts A, C and B were placed in a straight line at a distance of 5 meters from one another. An arc of 5 meters is drawn from point A and C and C and B and flag post are placed at the intersecting points namely B and D.

Description

The subjects starts from flag A and moves with the ball by dribbling forward on the signal “go” and moves to flag B then takes a left turn move to flag C takes a right turn move to D and takes left turn move to B and return back to the starting point by covering the flag posts D, C, B and A respectively. This test was conducted in all the three playfields.

Score

Two chances were given in each playfields. The watch was operated on the signal “go” and was stopped when the subjects returned back to the starting point flag A. The time was recorded in 1/10th of a second as the score of the subject.

**TABLE-I
ONE WAY ANALYSIS OF VARIANCE FOR DRIBBLING OF SOUTHERN REGION MEN
HOCKEY PLAYERS IN THE GRAVEL FIELD**

SOURCE OF VARIANCE	df	Sum of square	Mean square	F- ratio	't' ratio
Total	N-1 120-1=119	1.356	$1.356/119=0.0113$		
Between the groups	K-1 6-1=5	0.924	$0.924/5=0.1848$	48.63	
Within the Groups	N-K 120-6=114	0.432	$0.432/114=0.0038$		

Significant at 0.05 level

df = 5 and 114

Table value = 2.30 (0.05 level), 3.21 (0.01 level)

The statistical analysis of data from Table-I clearly shows that the obtained 'F' ratio 48.63 was significant at 0.05 level as the table value 2.30 (0.05 level)

3.21 (0.01 level) is less than the calculated 'F' ratio value.

TABLE-II
POST HOC TEST ANALYSIS OF VARIANCE FOR DRIBBLING OF THE SOUTHERN
REGION MEN HOCKEY PLAYERS IN GRAVEL FIELD

Sl. no	Karnataka	Tamilnadu	Puducherry	Andrapradesh	Hydrabad	Kerala	MD	CI
1.	15.33	15.225	---	---	---	---	0.105	.01
2.	15.33	---	15.27	---	---	---	0.06	.01
3.	15.33	---	---	15.364	---	---	0.034	NS
4.	15.33	---	---	---	15.505	---	0.175	.01
5.	15.33	---	---	---	---	15.357	0.027	NS
6.	---	15.225	15.27	---	---	---	0.045	NS
7.	---	15.225	---	15.364	---	---	0.139	.01
8.	---	15.225	---	---	15.505	---	0.28	.01
9.	---	15.225	---	---	---	15.357	0.132	.01
10.	---	---	15.27	15.364	---	---	0.094	.01
11.	---	---	15.27	---	15.505	---	0.235	.01
12.	---	---	15.27	---	---	15.357	0.087	.01
13.	---	---	---	15.364	15.505	---	0.141	.01
14.	---	---	---	15.364	---	15.357	0.007	.01
15.	---	---	---	---	15.505	15.357	0.148	.01

As shown in the above table-II the dribbling mean difference in gravel field obtained from Scheffe's post hoc test was 0.105 between Karnataka and Tamilnadu, 0.06 between Karnataka and Puducherry, 0.034 between Karnataka and Andrapradesh, 0.175 between Karnataka and Hydrabad and 0.027 between Karnataka and Kerala, 0.045 between Tamil Nadu and puducherry, 0.139 between Tamil Nadu and Andrapradesh, 0.280 between Tamil Nadu and Hydrabad, 0.132 between Tamil Nadu and Kerala, 0.094 between Puducherry and Andrapradesh, 0.235 between Puducherry and Hydrabadd, 0.087 between Puducherry and Kerala, 0.141 between Andrapradesh and Hydrabad, 0.007 between Andrapradesh and Kerala and 0.148 between Hydrabad and Kerala.

It was found out from the analysis that the dribbling of Tamilnadu REGION men hockey players were better in gravel field than the other southern regions.

DISCUSSION ON THE RESULTS OF DRIBBLING OF THE SOUTHERN REGION MEN HOCKEY PLAYERS IN GRAVEL FIELD

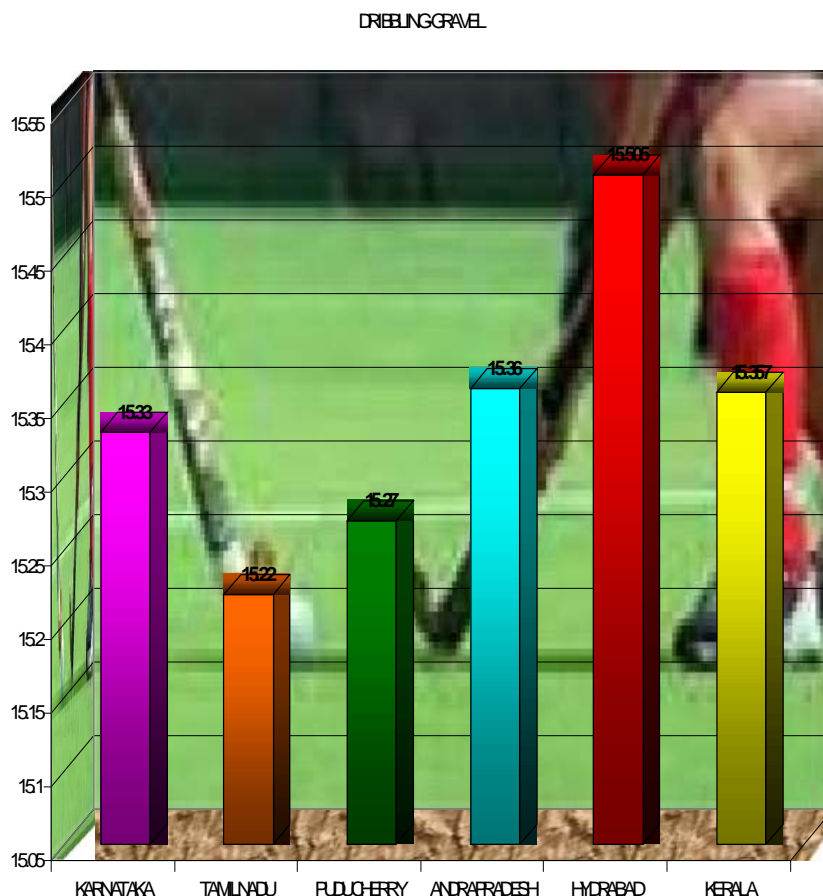
From the above statistical analysis it was found out that the dribbling of the Tamilnadu players were better when compared to other southern regions in the gravel field.

The reason is that during the training session the Tamilnadu players were normally practicing in the gravel field because of the non availability of the artificial field in all the districts. As they were experienced adequately in the gravel field, they were able to perform better dribbling in the gravel field than the other southern regions.

Dribbling plays a vital role for an individual to possess the ball while the opponent tries to tackle the ball from the dribbler. When a player wants to carry or propel the ball for a longer distance, the dribbling helps to do the same.

It is clear that the training in gravel field brings enormous changes in the dribbling performance because the training improves the capacities. Because of the above said reasons the Tamilnadu region men hockey players were found better dribbling performance in the gravel field than the other southern regions.

FIGURE-1
BAR DIAGRAM SHOWING THE DRIBBLING OF THE SOUTHERN REGION MEN HOCKEY PLAYERS IN THE GRAVEL FIELD



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