

Significance of Body Height and Skills Used by National Level Kabaddi Player

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Abstract

Purpose of this study was to study the significance of body height and it's relation with skill used by national level Kabaddi player participated at "12th Shiv Chatrapati Chashak Competitions" organised by Maharashtra State, India during 23rd to 27th March 2010. The research material included the video recordings of 162 kabaddi player's that was taken during tournament. The players were surveyed about their height. Using the criterion $\bar{x} \pm 0.5$ SD, the players were divided into tall (above 180 cm), medium (174.1 cm to 180 cm) and short (below 174 cm) category. The analysis covered Bonus, Hand touch, Toe touch and Kick skills performed during competition and body height of the player. Main findings revealed that hand touch skill was mostly used by the players (43.88%) other skill used Bonus (25.27%), Toe touch (22.52%) and Kick (07.69%). Height wise it was found that overall skill used by the Medium heighted players were more than the tall and short players.

Key words: *Body Height, Skills in Kabaddi, Hand touch, Toe Touch, Kick, Bonus.*

Introduction

Kabaddi is a game which demands for more physical strength but now days due to the changes in the ground measurement and rules has change the requirments of the players of the game. Earlier, more importance was given for using physical strength while playing the game. A lot of changes have been made in the rules to increase scoring opportunities and to make this game more interesting. In the new form of the game, physical strength, agility, flexibility, skill and tactics have now become the important aspect of the game to score the points rather than merely using muscle power.

Raid

In Kabaddi, raid is the focal point. A couple of good raiders in the team can change the whole tempo of the game in minutes with their techniques and tactics. An individual raider has to face seven opponents or less and have to come back

successfully as a safe raid or by scoring points taking bonus or touching the antis in the course of the raid. This is what the raid is all about. Raid is the main tool of the offense for scoring points against the opponent team.

Kabaddi is gathering its popularity in the world. Other Asian and European countries are participating in kabaddi and their teams are gaining recognition by improving their performances, learning new skill, technique. Considering this fact if India wants to remain at number one position Indians also have to improvise on their skill and techniques. Therefore we have to find out suitable players to play specific skills in various game situations. Selection criteria in Games like Volleyball, Basketball are based on the body structure more than the skill expertise. Tall height of the Basketball players helps them to place the ball in the basket and similarly long arms of the volleyball players help them to serve better. In swimming also the advantage of the long arms and legs are to take long and wide strokes. (Health & Lifestyle Updates 2011). Selection of Kabaddi player should also be based on similar criteria's because height is the one essential factor which helps the raider to score maximum points.

Method

Participants

The entire participant from the 12th Shiv Chatrapati Chashak Kabaddi Tournament held at Baramati, Maharashtra from 23rd to 27th March 2010 were the population for this study. Sample was taken from all the 15 teams who participated in the competition. Since the study was done on whole population therefore the population itself was a sample but only the raid (when the situation was 6 or 7 players playing as a anti-raider) were consider as a sample for this study. About 182 such raids were taken during the entire tournament.

Tool for Data Collection

[Stadiometer](#) was used to take height and Video Shooting Camera was used to shoot the matches for the collection of data. Main tool was the record sheet designed by the researcher with the help of experts.

Procedure

All the matches were played at a single venue. Researcher had taken prior permission from the organizers for the collection of data. The team coaches and players were briefed about the study. A standardized tool was used to measure

the height of the subjects. Height and the jersey number of the players were recorded before the match during the warm up. Every time when there was change in the jersey number of the player, the change was recorded and taken into consideration. The video shooting of the live match was done. After the recording of entire matches, researcher observed the skill performed by the player and the skills were recorded on the record sheet of the respective player, whose height and jersey number was already recorded. The scoring was done by observing the player's chest number.

Data Analysis

The study was on skill performed by the Kabaddi players with respect to their height. Height was divided in to three categories namely Short (M=171.39, SD=2.928), Medium (M=177.86, SD=1.829) and Tall (M=183.55, SD=4.006). The height category was decided by calculating the mean value and standard deviation that is $X + 0.5SD$ & $X - 0.5SD$.

Table 1
Descriptive Statistics for Height

Height Category	Subjects (n)	Mean (cm)	Standard Deviation
Short	61	171.39	2.928
Medium	81	177.86	1.829
Tall	40	183.55	4.006
Total	182	176.94	5.308

Results

- The height of players playing in tournament were ranged between 165 cm to 195cm. further it was classified short - Equal to or below 174cm , Medium 175cm to 180cm and Tall 181cm and above.
- The skills executed by the players during the game were Bonus (25.30%), Hand Touch (44.4%), Toe Touch (22.4%), and Kick (7.6%).
- In this study, medium heighted players had attempts (44.50%), Short height players (30%) and tall players (22%) respectively.

- During execution of skill study highlighted about the players attempts (52.19%), gain success (30.55%) and unsuccessful (17.58 %).
- Skills used by the players at left zone (37.77%), center zone (40.73%) and right zone (21.47%).

Table 2
Overall skill used with respectively height

SN	Skills	Ht. Short		Ht. Medium		Ht. Tall		Total	
		N	%	N	%	N	%	N	%
1	Bonus	14	7.7	21	11.53	11	6.044	46	25.30
2	Running Hand Touch Front	16	8.8	19	10.4	18	4.4	43	23.60
3	Toe Touch Side	10	5.5	5	2.7	2	1.1	17	9.30
4	Toe Touch Back	5	2.7	5	2.7	4	2.2	14	7.70
5	Hand Touch Front	3	1.6	6	3.3	5	2.7	14	7.70
6	Hand Touch Side	1	0.5	6	3.3	3	1.6	10	5.50
7	Running Hand Touch Side	2	1.1	3	1.6	2	1.1	7	3.80
8	Toe Touch Front	2	1.1	2	1.1	3	1.6	7	3.80
9	Back Kick	1	0.5	3	1.6	2	1.1	6	3.30
10	Running Front Kick	1	0.5	4	2.2	0	0	5	2.70
11	Hand Touch Back	3	1.6	1	0.5	0	0	4	2.20
12	Running Hand Touch Back	2	1.1	1	0.5	0	0	3	1.60
13	Running Toe Touch front	0	0	2	1.6	0	0	2	1.10
14	Running Back Kick	0	0	2	1.6	0	0	2	1.10
15	Front Kick	1	0.5	0	0	0	0	1	0.50
16	Running Toe Touch Side	0	0	1	0.5	0	0	1	0.50
	Total	61	34	81	44	40	22.00	182	100

Discussion

Researcher found that bonus skills were used more often by the raider in the tournament. While performing the bonus skill, more than 50% attempts were converted into success. The results showed that Medium heighted players achieved success more often than the shorter and taller players. It was seen that

the Tall players attempted the skill more no time. The researcher is of the opinion that this may be because when a short raider attacks, the anti raiders play on the touch line to save a bonus point.

From the analyzed data the researcher found that, in Hand Touch skill, short and medium heighted players attempted the skill more often in comparison to the tall players. As discusses earlier, since the anti-raiders play on the touch line, the short raider unable to get a bonus, attempts for a hand touch.

With reference to the findings of the toe touch skill, the Medium height players were found to be using this skill more number of times than the others. Here, the players are taking advantage of their height and speed to make the antis out with the help of leg.

About kick only medium height player are using this skill may be they are getting advantage of both short for running and tall for long strides.

Researcher also studied skill used by the player at different playing position of anti-raider it found as below.

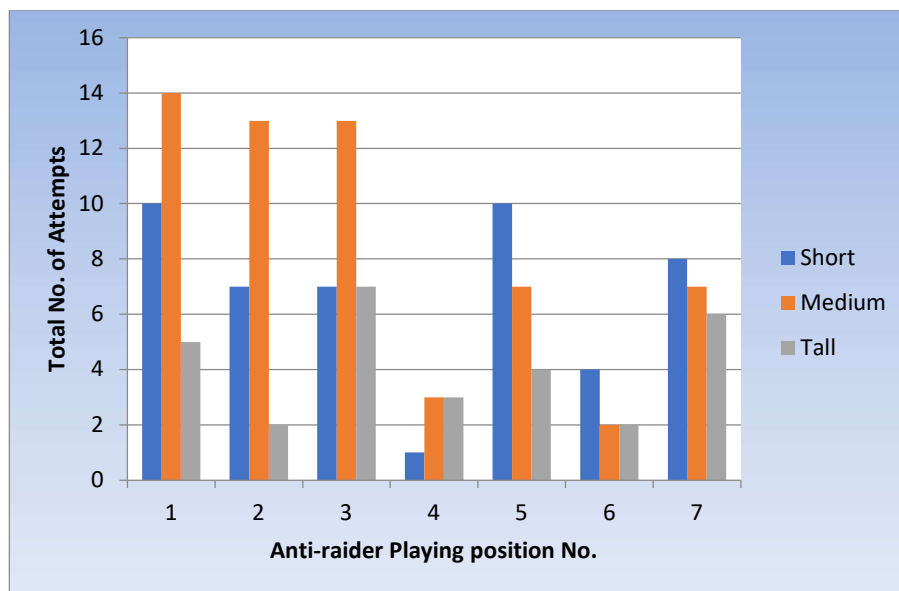


Fig no. 1: Height wise Execution of Skill at Playing Position

The number of time skill used by raider at left corner (21.48%), at Left corner supporter (16.29%), at Left cover (20%), at Center (5.18%), Right cover (15.55%), Right Corner Support (5.92%) and Right Corner (15.55%).

Attempts were more at Left and Middle zone it may be because most of the raiders are right handed and they prefer to use their right hand and right leg to score the point. Raider right side is the anti-raider left side.

Conclusion

On the basis of the result obtain by this study; the investigator has drawn the following conclusion:

- The study revealed that the medium heighted players uses various Skill comparatively more number of time than the other two.
- Medium height player get advantage of both short and tall player this may be help the player to execute more skill.
- Player will get the benefit of this study while attempting the opponent. And also while planning the strategy of the game.

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