



ORIGINAL RESEARCH PAPER

Physical Education

Effectiveness of Skill in Complex I Predict Win in Men Rio Olympic Volleyball Games

KEY WORDS: Volleyball, Team Performance, Complex I

Ms. Bindu

Research Scholar, Amity University, Noida

Dr. Rajesh Dhauta

Assistant Professor, Amity University, Noida

ABSTRACT

The aim of the present study was to present the playing characteristics of the teams in complex I and attempt to determine which of these characteristics led to victory and to the final ranking of the teams. Total 12 teams participated in Rio Olympic 2016 considered as a subject of the study. The subjects were 38 Olympic Volleyball men's games of Rio Olympic 2016. Score sheets used in the matches played in the games used as a tool for the collection of the data. The limitation of the study was due to non-available source of the secondary data was consider as a limitation of the study. The information was tabulated in match wise in the form of the result of the matches played in pools, quarter-final, semi-final, bronze and final. For the presentation of the data descriptive statistical technique was used for the analysis of the data. Descriptive analysis was done for the analysis of the data to find out the subset of the measured variable significantly contributed to the prediction of the winning or losing in Olympic Volleyball teams. After discussion of all the above result we found that Brazil was winner and the team dominated in Spike the effectiveness percentage was 299.72% in comparison to other teams Italy 298% and USA 286% as per result of the matches played in pools, quarter-final, semi-final, and final. On the basis result of the matches Brazil dominated throughout in Spikes. So, we can say that the Spike played a major role in winning the tournament. As, we have seen Rio Olympic 2016 dominated in Spike in Complex I in comparison to other skills setting and serve reception. To the extent alternate components concerned the immediate point from first attack, "ace-point" was the most determinant indicator for groups to win in Complex I. The outcomes reasoned that a "best" and a "decent" administration gathering remained the fundamental condition for setter, in arranging a capable attack and consequently win the point. The same happened in first attack where the more composed it was the all the more intense and compelling it move toward becoming. Obviously the base of an efficient attack was a decent administration gathering which required very much rehearsed beneficiaries, particularly skilled libero, however the attackers' capacity to attack every one of the balls adequately, were additionally remained a power weapon for the group.

Introduction: A sport is the integration of mind, body and soul. This is very true as when any person play any game, it creates peacefulness of his mind. Sports has been a very important part of any society, community or a country not in the modern India but whole world right from the beginning of human race. Sports are generally of two type that is indoor and outdoor. We have chess, table tennis, combat sports and badminton as indoor sports and cricket, football and hockey etc. as outdoor sports. Sports are an important aspect of life. Sports play an important role in the development of physical, mental and social growth of the nation. More young people are taking part in sports as a daily routine of their life. The participation in sports and physical fitness increase an individual productivity, it also promotes social harmony and discipline.

Volleyball is probably one of the most popular sports in the world (Reeser & Bahr, 2003). Despite its universal nature and its official history dating back more than a hundred years, there are still some uncertainties about its techniques and tactics mul- tidimensions (João, Leite, Mesquita, & Sampaio, 2010), physio- logical (Trajkovic, Milanovic, Sporis, Milic, & Stankovic, 2012), nutritional and psychological needs (Valliant, Emplain- court, & Wenzel, 2012). Therefore, there are still some ambigu- ities in the planning of the training process to improve perfor- mance in the competition.

To better understand the constraints that promote sporting success, match analysis (MA) has assumed a very important role in sports games (Carling, Reilly, & Williams, 2009; McGa- rry, O'Donoghue & Sampaio, 2013, O'Donoghue, 2015; O'Do- noghue, & Holmes, 2015). Coaches were always concerned with optimising the performances of their teams given this is part of the competition (Hughes & Franks, 2008; Lago-Balle- steros & Lago- Peñas, 2010). The theme of monitoring performance has also been subjected to a lot of scientific research (Carling & Dupont, 2011; Drikos, Kountouris, Laios, & Laios, 2009; McGarry et al., 2013) and the results highlighted a number of overwhelming questions on performance of a team facing its opponents (Drikos et al., 2009; Jones, James, & Mella- lieu, 2008; Liebermann et al., 2002; Marcelino et al., 2010; O'Donoghue, 2009; Palao, Santos, & Ureña, 2004).

Volleyball an extremely popular team sport, belongs to a group of receiving sports played on teams. Two teams stand on opposite sides of a curt divided into two equal parts by a net. The standard court dimensions (9mx18m), net height (2.24m or 2.43), and the number of players ("6 on 6") may be geared towards actual player development or the meet the needs of particular groups. The game is played to win points, sets, and finally, the match. There is no time limit. Without coming into direct physical contact with the opposing team, each side tries to put the ball into the opponent's court in such a manner that if falls to the floor or cannot be returned over the net. The ball may be played a maximum of three times on each team before it must be played into the opponent's court. Faults result in points being awarded or a change in service. The rotation of players clockwise to the next position when they have regained the service is essential; it ensures that each player on a team plays all positions on the floor and prevents specialization in any one floor position in offence and defense.

Delimitations of the Study

- The study was delimited to the Rio Olympic 2016.
- The study was be further delimited to the male volleyball players.
- The study was also delimited to the results given in the score sheet and video recording of the volleyball matches during the Rio Olympic volleyball matches by FIVB.
- The study was delimited to the Complex I skills of volleyball (serve reception, setting, attack).

Limitation of the Study: Due to non-available source of the secondary data was be consider as a limitation of the study.

Significance of the study

- The study may be helpful for the coaches, Physical education teacher and trainers, who develop the performance of the players.
- The result of the study may be providing normative information regarding the strength profile of the team and players.
- The study may also help the players to develop the skill required in the sport.
- The study may promote a base for planning training program for volleyball player

Selection of Sample

The purpose of the study sample was selected from Rio Olympic 2016. All the 12 teams participated in Rio Olympic 2016 considered as a subject of the study. **Pool A:** Brazil, Canada, Italy, USA, Mexico, France

Pool B: Argentina, Cuba, Egypt, Iran, Poland and Russia.

Total numbers of matches played in Rio Olympic 2016

Table-1

S. No	Phases	Total Matches Played
1	Pool- A	15
2	Pool-B	15
3	Quarter-final	4
4	Semi-Final	2
5	Gold	1
6	Bronze	1
	Total	38

Selection of the Variable: On the basis of review of related literature and expert opinion following variables were selected for the study.

Variable: Complex I

Sub Variable: 1- Service Reception. 2- Setting. 3- Attack

Data Collection and Tools used:

1. Score sheet of the Rio Olympic 2016
2. Video recordings of the matches during Rio Olympic 2016 were used for the collection the data.

Statistical Procedure

Keeping in view the objective of the study secondary data was used for the purpose of the study. The information was tabulated in match wise in the form of the result of the matches. Descriptive statistical technique was used for the analysis and presentation of the data.

Overall performance of the best three teams in the matches played by the Pool, Quarter final, Semi Final, Bronze and Final matches.

Table-2

Overall Performance of the Brazil			
Phases-	Spike	Setting	Serve Reception
	Eff %	Still Set	Success %
Pool	182.71	218	194.57
Quarter Final	42.2	44	39.44
Semi Final	41.03	33	37.5
Final	33.78	34	35.71
Total	299.72	329	307.22

The analysis of data in table 1 clearly reveals that Performance of the Brazil team in the matches played in the Pool, Quarter final, Semi Final, and Final matches who include total effectiveness percentage of spike 299.72%, total number of still set of setting 329 and total success percentage of serve reception 307.22%. The data pertaining to above is graphically presented using bar diagram in figure 1.

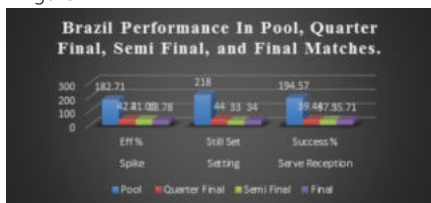


Table 3

Overall Performance of the Italy			
Phases	Spike	Setting	Serve Reception
	Eff %	Still Set	Success %
Pool	190.12	220	215.65
Quarter Final	47.13	28	46.3
Semi Final	22.54	68	37.78
Final	39.19	29	27.87
Total	298.98	345	327.6

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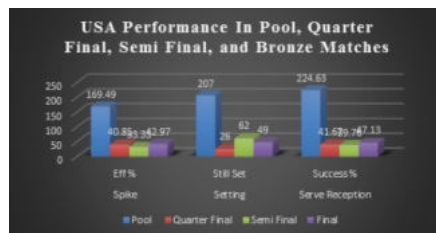
The analysis of data in table 2 clearly reveals that Performance of the Italy team in the matches played by the Pool, Quarter final, Semi Final, and Final matches which include total effectiveness percentage of spike 298.98%, total number of still set of setting 345 and total success percentage of serve reception 327.6. The data pertaining to above is graphically presented using bar diagram in figure 2



Table 4

Overall Performance of the USA			
Phases	Spike	Setting	Serve Reception
	Eff %	Still Set	Success %
Pool	169.49	207	224.63
Quarter Final	40.85	26	41.67
Semi Final	33.33	62	39.76
Final	42.97	49	47.13
Total	286.64	344	353.19

The analysis of data in table 3 clearly reveals that Performance of the USA team in the matches played by the Pool, Quarter final, Semi Final, and Bronze matches which include total effectiveness percentage of spike 286.64%, total number of still set of setting 344 and total success percentage of serve reception 353.19%. The data pertaining to above is graphically presented using bar diagram in figure 3.



Overall performance of the best three teams matches played by them in Pool, Quarter final, Semi Final, Bronze and Final matches

Table-5

Teams	Spike	Setting	Serve Reception
	Eff %	Still Set	Success %
Brazil	299.72	329	307.22
Italy	298.98	345	327.6
USA	286.64	344	353.19

The analysis of data in table 4 clearly reveals that overall performance of the best three team in the matches played by them in the Pool, Quarter final, Semi Final, and Bronze matches which include total effectiveness percentage of spike, total number of still set of setting and total success percentage of serve reception. The data pertaining to above is graphically presented using bar diagram in figure 4.



Discussion of the Findings: This review analyzed the execution of Olympic Volleyball groups in complex I and attempted to figure out which components prompted the victory and also the last groups' positioning. The after effects of the discriminant investigation distinguished there are three components that were fundamentally separated for the diversion results. For administration service-reception skill ability, the best indicator was receiver to have the capacity to make a best reception, so as setter could set a first beat attack, or/and a reception gathering so as setter could set a high set in the outside hitter in zone 4 or 2.

According to the pools, quarter-final, semi-final, final and bronze match's performances of the best three teams are Brazil, Italy and USA. Brazil was winner of the Rio Olympic 2016, Brazil dominates in serve-reception, so as setter could set the ball and first beat attack. The total serve reception percentage was 307.22 among all phase of the Rio Olympic 2016 so, setter set the ball accurately or still set was 329 which was help to first beat attack or effective attack percentage was 299.72 to help in winning of the Rio Olympic 2016. In other hand, Italy was second, it dominated in serve-reception, so as setter could set the ball and first beat attack. The total serve reception percentage was 327.6 among all phase of the Rio Olympic 2016 so, setter set the ball accurately or still set was 345 which was help to first beat attack or effective attack percentage was 298.98 to the opponent of the winner of the Rio Olympic 2016. USA got bronze medal, USA dominate in serve-reception, so as setter could set the ball and first beat attack. The total serve reception percentage was 353.19 among all phase of the Rio Olympic 2016 so, setter set the ball accurately or still set was 344 which was help to first beat attack or effective attack percentage was 286.64 to help in winning of the Rio Olympic 2016.

After discussion of all the above result we found that Brazil was winner and they dominated in Spike with reference of the Table-24 as per result of the matches played in pools, quarter-final, semi-final, and final with help of good serve reception so, setter set the ball which was help to first beat attack for zone 4 and 2. As comparison in best three teams are Brazil, Italy and USA we found that Spikes rate were high in winner team as comparison other teams.

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