Critical Analysis of Forced and Unforced Errors of Best Eight Teams of Volleyball of World

Mr. Ravi[1]* Dr. Rajender Singh[2]

[1] Research Scholar, SOS in Physical Education, Jiwaji University, Gwalior

[2] Director, Physical Education, Jiwaji University, Gwalior

Abstract – The main purpose of the study was to make descriptive analysis of forced and unforced errors of best eight teams of volleyball of world playing at Rio Olympic Games. The subjects for the study were ninety six players of best eight teams which had qualified for quarter final matches of Rio Olympics Games, 2016 by defeating their opponents in the qualifying matches. It may be concluded that the teams which had committed less no. of forced and unforced errors against their opponent in a match of volleyball at quarter final matches of Rio Olympic Games had become winner and on the other hand those teams which had committed more no. of forced and unforced errors in the same match became losers.

-------------------------◆----------------------------

INTRODUCTION

The scoring system in volleyball means that it is a game of mistakes. The forced and unforced errors in today's game are worth a point for the opposite team. This is a major change in the game of volleyball when an error by the serving team used to be only a side-out and now it is a point to the opponent team. The mental strength of players and coaches can make the difference when playing in tight games and crucial rallies. To prepare mentally, players must be able to visualize themselves performing a skill correctly, and when a skill is performed incorrectly they must effectively adjust based upon their own observations or feedback from their coach. The players must be able to evaluate the situation in which they find themselves and, if necessary, use a relaxation technique to continue in a positive manner. The players must learn to embrace the very essence of game and relish the opportunity to test their skills and mental toughness against that elusive ball[1].

A forced error is one where the player who commits the error is seems to have a ball that was unreturnable. An unforced error is one where a player has a playable ball and commits a fault or hits the ball into net or outside the court with his return with no mitigating circumstances.

However, the notion of an unforced error is truly problematic when you are in pressure from your opponent. The term "unforced error" attributes nets or faults to the shot maker, but the player's court

coverage and aptitude on the other side of the net might have a lot to do with actually causing the error. The top players benefit from more "unforced errors simply because their opponents are under such pressure to keep the ball low, well-paced, out wide and/ or deep, plays that all increase risk. In other words unforced error is where you lose a point by making a mistake in a situation where you should be in full control.

METHODOLOGY:

The subjects for the study were ninety six players of best eight teams which had qualified for quarter final matches of Rio Olympics games, 2016 by defeating their opponents in the qualifying matches. The actual numbers of players from each team for the study were those who played matches and were not on the substitution bench throughout the match in quarter finals, Semi-finals, hard line match and final match. The matches were played on knockout basis from quarter final to final match. In order to find out number of forced and unforced errors in a match the video recording for each match was displayed on a big screen in the presence of three experts of volleyball. A score sheet was prepared and was given to all the three experts to note down the number of forced and unforced errors in each set of the match in order to assess the mean value of three experts. The video recording of each match was done by the researcher himself during the Olympics Games, 2016. The following criterion measures were selected for critically analyzing the unforced and forced errors among best eight teams of volleyball by consulting three experts of volleyball in India on the basis of type of error committed by players in the matches. The forced errors were Blocking, Drop, Underhand pass, overhead pass, Touch out and Common ball attack

---

[1] Bob Miller, "The Volleyball Handbook" Human Kinetics USA (2005)p.30.

by the both teams on net and the unforced errors were service, underhand pas, overhead pass, spiking, blocking, drop, misconduct, net touch foul, line cut foul, technical foul, rotation foul, overlap foul, reception foul, holding foul, double touch foul, early movement foul and more than three touch foul.

In order to find out number of forced and unforced errors in a match, the video recording for each match was displayed on a big screen in the presence of three experts of volleyball. A score sheet was prepared and was given to all the three experts to note down the number of forced and unforced errors in each set of the match in order to assess the mean value of three experts. The video recording was played in slow motion before the experts to analyze and note the number of unforced and forced errors in each set of a match for each team playing a match at quarter finals, semi-finals, hard line match and final match. The data was recorded on the score sheets as per the errors being committed by the players during the match as pointed out by the referee and umpire of the match during the play and service and point awarded to the respective team. The research scholar made a score sheet to record unforced and forced errors separately for each match. The errors recorded by the experts for the winning and losing team were tabulated on the basis of frequencies for separate skills of the teams.

ANALYSIS OF DATA AND RESULTS OF THE STUDY:

The descriptive analysis of Total no. of forced and unforced errors between various teams playing at quarterfinal matches of volleyball at Rio Olympic Games is presented in table no. 1.

Table – 1

DESCRIPTIVE ANALYSIS OF TOTAL NO. OF FORCED AND UNFORCED ERRORS BETWEEN VARIOUS TEAMS PLAYING AT QUARTERFINAL MATCHES OF VOLLEYBALL AT RIO OLYMPIC GAMES

Q. F. matches No.	Teams	Total no. of forced and unforced errors	Mean	Std. Deviation	Std. Error
Q.F. 1st	Russia	53	2.3043	3.45668	.72077
	Canada	75	**3.2609**	5.22422	1.08933
Q.F. 2nd	USA	65	2.8261	4.32385	.90158
	Poland	75	**3.2609**	5.13648	1.07103
Q.F. 3rd	Italy	65	2.8261	5.44937	1.13627
	Iran	81	**3.5217**	5.45952	1.13839
Q.F. 4th	Brazil	89	3.8696	6.18873	1.29044
	Argentina	92	**4.0000**	6.38891	1.33218
N= 23 (Total no. of skills)					

An examination of the above table clearly reveals that Canada team had a mean score of 3.2609 of forced and unforced errors in comparison to Russian team mean value of 2.3043 in 1st quarter final match of volleyball at Rio Olympic Games. It is interesting to note that mean score of forced and unforced errors of Poland team was much greater i.e. 3.2609 in comparison to USA team whose mean score was 2.8261 in the 2nd quarter final match of volleyball at Rio Olympic games. It is further evident that Iran team mean score of forced and unforced errors mean was 3.5217 in comparison to Italy team whose mean score of forced and unforced errors was much lesser i.e. 2.8261. It is concluded that mean scores of forced and unforced errors of Argentina team was 4.00 which was more than the Brazil team i.e. 3.8696 in the 4th Quarter final match of the Rio Olympic Games in volleyball. It can be concluded that the team which had higher mean score of forced and unforced errors had lost the match of volleyball against the opponent team in quarter final matches.

The descriptive analysis of data of four teams which had qualified for the semifinals of Rio Olympic Games is presented in table no. 2.

Table – 2

DESCRIPTIVE ANALYSIS OF TOTAL NO. OF FORCED AND UNFORCED ERRORS BETWEEN VARIOUS TEAMS PLAYING AT SEMIFINAL MATCHES OF VOLLEYBALL AT RIO OLYMPIC GAMES

S. F. matches No.	Teams	Total no. of forced and unforced errors	Mean	Std. Deviation	Std. Error
S.F. 1st	Italy	112	4.8696	7.72425	1.61062
	USA	105	4.5652	7.24773	1.51126
S.F. 2nd	Brazil	58	2.5217	4.33663	.90425
	Russia	75	3.2609	5.23291	1.09114
N = 23 (Total no. of skills)					

An examination of the above table clearly reveals that the mean score of forced and unforced errors of Italy team was 4.8696 and USA team was 4.5652 in a semifinal match at Rio Olympic Games. The total no. of forced and unforced errors of Italy team is slightly higher than the USA team but Italy defeated USA in the semifinal match. It is attributed to the fact that USA won third set by a score of 25-9 and remaining three sets have been won by Italy with a little margin of 2 to 3 points only in each set. It is because of this reason that the mean score of forced and unforced errors of Italy is little higher than the USA. The table further clearly indicates that mean scores of forced and unforced errors of Russia team was 3.2609 and Brazil team mean score of forced and unforced errors was 2.5217 in a second semifinal match of Rio Olympic Games. In this match Brazil won the semifinal match against Russia. On the basis of less mean score of forced and unforced errors.

Mr. Ravi[1]* Dr. Rajender Singh[2]

The descriptive analysis of data of two teams which have won 3rd and 4th place at Rio Olympic Games in volleyball is presented in table no. 3.

Table – 3

DESCRIPTIVE ANALYSIS OF TOTAL NO. OF FORCED AND UNFORCED ERRORS BETWEEN USA AND RUSSIA VOLLEYBALL TEAM WHICH HAVE WON 3rd AND 4th PLACE AT RIO OLYMPIC GAMES

3rd & 4th place match	Teams	Total no. of forced and unforced errors	Mean	Std. Deviation	Std. Error
	USA	101	4.3913	7.27848	1.51767
	Russia	109	4.7391	7.46030	1.55558
N = 23 (Total no. of skills)					

It is evident from the above table that mean score of forced and unforced errors of USA team was 4.3913 and Russia team was 4.7391 in a hard line match for deciding 3rd and 4th place at Rio Olympic Games. The mean score of forced and unforced errors clearly indicates that Russian team committed more no. of forced and unforced errors in comparison to USA team and hence USA won 3rd place in Olympics.

The descriptive analysis of data of two teams which had qualified for the final match at Rio Olympic Games is presented in table no. 4.

Table – 4

DESCRIPTIVE ANALYSIS OF TOTAL NO. OF FORCED AND UNFORCED ERRORS BETWEEN BRAZIL AND ITALY VOLLEYBALL TEAMS PLAYING AT FINAL MATCH AT RIO OLYMPIC GAMES

Final match	Teams	Total no. of forced and unforced errors	Mean	Std. Deviation	Std. Error
	Brazil	72	3.1304	5.12839	1.06934
	Italy	79	3.4348	5.05885	1.06103
N = 23 (Total no. of skills)					

The descriptive data presented in table 4 clearly indicates that mean score of forced and unforced errors of Brazil team was 3.1304 which was much lesser than the mean score of Italy team i.e. 3.4348. The mean score of forced and unforced errors clearly indicates that Italy team committed more no. of forced and unforced errors in comparison to Brazil team and hence Brazil volleyball team won first place in Olympics.

CONCLUSIONS:

1. It may be concluded that the teams which had committed less no. of forced and unforced errors against their opponent in a match of volleyball at quarter final matches of Rio Olympic Games had become winner and on the other hand those teams which had committed more no. of forced and unforced errors in the same match became losers.

2. It may further be concluded that no. of forced and unforced errors were more in semifinal matches of winner and loser teams in comparison to forced and unforced errors of teams playing at quarterfinal matches of the Rio Olympic Games.

3. It may further be concluded that the differences in total no. of forced and unforced errors between the teams became lesser and lesser as the teams moved from quarter final to final matches.

REFERENCES:

1. **Bob Miller (2005).** "The Volleyball Handbook" Human Kinetics USA (2005) p.30.

2. **Ana Paulo, Frank T. J. M. Zaal, Sofia Fonseca and Duarte Araújo (2016).** "Predicting Volleyball Serve-Reception" Original Research published: 02 November 2016 DOI: 10.3389/fpsyg.2016.01694

3. **Ashok Kumar (1999).** "DPH Sports Series-Volleyball" Discovery Publishing House, New Delhi, pp.2-3.

4. **Avishesh Kumar Singh (2013).** Comparative analysis of unforced and forced errors among winner and loser male volleyball players of national level (Unpublished Ph.D. Thesis, Jiwaji University, Gwalior, 2013)

5. **Ben Rothenberg (2013).** "Unforced Error Is Unloved Statistic Among Tennis Players" the New York edition with the headline (March 19, 2013). P.11

Corresponding Author

Mr. Ravi*

Research Scholar, SOS in Physical Education, Jiwaji University, Gwalior

Mr. Ravi[1]* Dr. Rajender Singh[2]