

Analysis of Forced and Unforced Errors in Different Skills of Volleyball among Four Semifinalists Teams of RIO Olympic Games

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Abstract – The purpose of the study was to make analysis of forced and unforced errors in different skills of volleyball among four semifinalist teams of Rio Olympic Games. The subjects for the study were forty eight players of best four teams which had qualified for semi-final matches of Rio Olympics Games, 2016 by defeating their opponents in the qualifying matches. It may be concluded that maximum percentage of forced errors are found to be in skills like blocking, underhand pass and touch out among all the four teams playing at semifinal of Rio Olympic Games. It may further be concluded that maximum percentage of unforced errors are found to be in skills like spiking, blocking and service among all the four teams playing at semifinal of Rio Olympic Games.

INTRODUCTION

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.

A forced error is where one player hits a good shot, putting the opponent into a tight spot. For example, carefully angled smash, drop shots, or a sudden change in pace may lead to forced errors. In these situations, the receiver may have to hustle to the ball, become off balance, or set up ball incorrectly in his haste. Since the error was due to that great smash from the opponent, it would be considered a forced error.

A forced error is like a winner, except you get to it and can touch it, but you cannot successfully get it back in play. It is caused by the aggressive play of your opponent. It can be caused by placement, or by spin, or by pace or a combination of all above. The difference between a forced and unforced error is exactly as it sounds; one you can’t help but making an error and the other you can. A forced error is when

someone smashes a ball that is strong enough to force you to miss your reception or not touch it at all. A forced error is a smash from opponent that you aren’t expected to make back.

An unforced error can be more controversial. Typically an error is unforced if the player has time to get in position and setup for the smash but still misses. An unforced error is made/ provoked by yourself in an easily manner. It is like getting a ball into net while doing service. The other type of mistake it is not provoked by yourself, but due to game of your opponent who is making a service with great force and you are not able to put the ball back into play. Unforced error is an in a service or return shot that cannot be attributed to any other factor than poor judgment and execution by the player himself. Forced error is an Error caused by an opponent’s good play. Sometime a player will make an error because of the strong opponent on the other side of the net. Sometime a player will make an unlikely error because of fatigue caused due to playing for many hours. These two types of errors play important role in deciding the winner of a match in the game of volleyball.

METHODOLOGY:

The subjects for the study were forty eight players of best four teams which had qualified for semi-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 Semi-finals matches. 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 comparing the unforced and forced errors between winning and losing team in volleyball at semi-final matches 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 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 semi-final matches. 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 percentage analysis of forced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games is presented in table no. 1.

Table -1

PERCENTAGE ANALYSIS OF FORCED ERRORS IN DIFFERENT SKILLS OF VOLLEYBALL IN A MATCH BETWEEN BRAZIL AND RUSSIA TEAM IN SEMIFINAL MATCH AT RIO OLYMPIC GAMES

S. No.	Various Forced errors in different skills of volleyball	No. of forced errors of Brazil team	Percentage of forced errors of Brazil team	No. of forced errors of Russia team	Percentage of forced errors of Russia team
1.	Blocking	16	22.54%	13	18.31%
2.	Underhand pass	11	15.49%	11	15.49%
3.	Drop	02	2.82%	01	1.41%
4.	Overhead pass	00	00	00	00
5.	Touch out	09	12.68%	08	11.26%
6.	Common ball attacked by the both teams on net	00	00	00	00
7.	Total no. of forced errors and percentage	38	53.53%	33	46.47%

It is evident from the above results that Brazilian volleyball team committed 53.53% of forced errors while playing against Russian team in the semifinal match at Rio Olympic Games. On the other hand, Russian team committed only 46.47% forced errors in the same match. The difference between both the teams in the forced errors was 7.06%. It is further clear from the analysis of the data that Brazilian team committed maximum no. of forced errors in blocking i.e. 22.54% followed by underhand pass i.e. 15.49%. On the other hand the Russian team committed maximum errors in blocking i.e. 18.31% followed by under hand pass i.e. 15.49%. It is further clear that both teams did not commit any forced errors in overhead pass and common ball attack at the net. The graphical representation of forced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games is given in figure no.1.

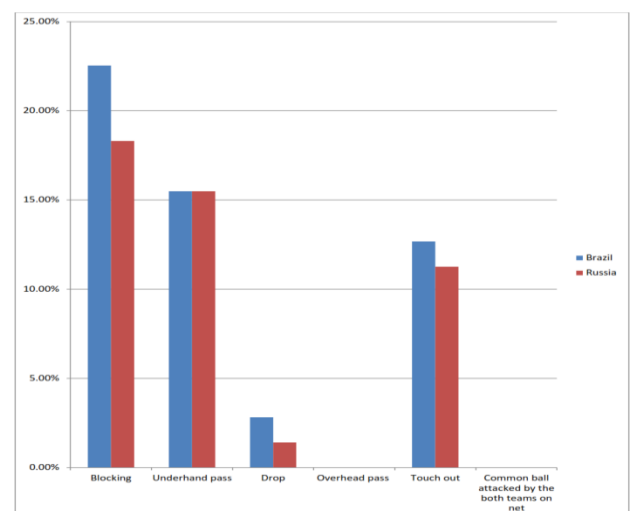


Figure No. 1:- The graphical representation of forced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games.

The percentage analysis of unforced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games is presented in table no. 2.

Table -2

PERCENTAGE ANALYSIS OF UNFORCED ERRORS IN DIFFERENT SKILLS OF VOLLEYBALL IN A MATCH BETWEEN BRAZIL AND RUSSIA IN SEMIFINAL AT RIO OLYMPIC GAMES

S. No.	Various Unforced errors in different skills of volleyball	No. of Unforced errors of Brazil team	Percentage of Unforced errors of Brazil team	No. of Unforced errors of Russia team	Percentage of Unforced errors of Russia team
1.	Service	04	6.45%	12	19.35%
2.	Underhand pass	02	3.23%	00	00
3.	Overhead pass	00	00	01	1.61%
4.	Spiking	07	11.29%	16	25.81%
5.	Blocking	05	8.06%	09	14.52%
6.	Drop	00	00	00	00
7.	Misconduct	00	00	00	00
8.	Net touch foul	02	3.23%	03	4.84%
9.	Line cut foul	00	00	00	00
10.	Technical foul	00	00	00	00
11.	Rotation foul	00	00	00	00
12.	Overlap foul	00	00	00	00
13.	Reception foul	00	00	00	00
14.	Holding foul	00	00	00	00
15.	Double touch foul	00	00	01	1.61%
16.	Early movement foul	00	00	00	00
17.	More than three touch	00	00	00	00
18.	Total no. of forced errors and percentage	20	32.26%	42	67.74%

An examination table 2 clearly reveals that Russian team committed 67.74% unforced errors while the Brazilian team committed only 32.26% unforced errors in semifinal match of volleyball at Rio Olympic Games. It is further evident that Russian team committed maximum no. of unforced errors in spiking i.e. 25.81% followed by service i.e. 19.35% respectively. On the other hand that Brazilian team committed maximum no. of unforced errors in spiking i.e. 11.29% followed by blocking i.e. 8.06% respectively. It is evident from the table that Russian team committed 1.16% unforced error of double touch. It is evident from the table that Brazilian team committed 3.23% unforced errors in underhand pass.

It is also evident from the table that there are no unforced error by the both the teams in drop, misconduct, line cut foul, technical foul, reception foul, overlap foul, holding foul, early movement foul and more than three touch. The graphical representation of unforced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games is presented in figure no. 2.

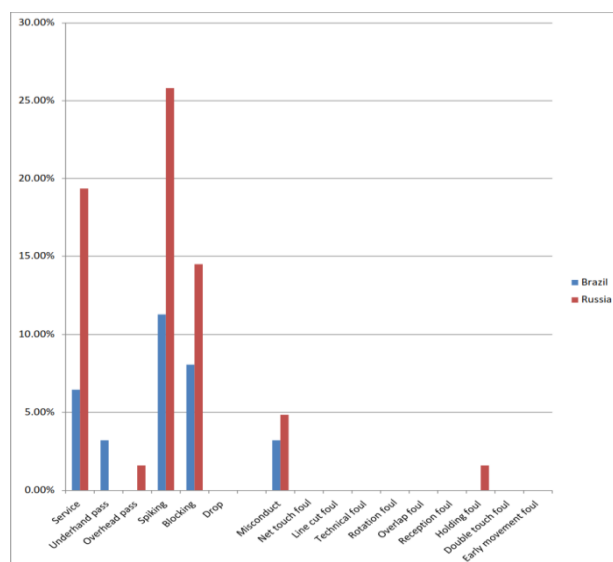


Figure No. 2:- The graphical representation of unforced errors in different skills of volleyball in a match between Brazil and Russia team in Semi-final match at Rio Olympic Games.

The percentage analysis of forced errors in different skills of volleyball in a Semi-final match between Italy and USA team at Rio Olympic Games is presented in table no. 3.

Table -3

PERCENTAGE ANALYSIS OF FORCED ERRORS IN DIFFERENT SKILLS OF VOLLEYBALL IN A SEMI FINAL MATCH BETWEEN ITALY AND USA TEAM AT RIO OLYMPIC GAMES

S. No.	Various Forced errors in different skills of volleyball	No. of forced errors of Italy team	Percentage of forced errors of Italy team	No. of forced errors of USA team	Percentage of forced errors of USA team
1.	Blocking	18	18%	15	15%
2.	Underhand pass	17	17%	20	20%
3.	Drop	03	3%	02	2%
4.	Overhead pass	00	00	00	00
5.	Touch out	13	13%	12	12%
6.	Common ball attacked by the both teams on net	00	00	00	00
7.	Total no. of forced errors and percentage	51	51%	49	49%

It is evident from the above results that Italian volleyball team committed 51% of forced errors while playing against USA team in the semifinal match at Rio Olympic Games. On the other hand, USA team committed only 49% forced errors in the same match. The difference between both the teams in the forced errors was 2%. It is further clear from the analysis of the data that Italian team committed maximum no. of forced errors in blocking i.e. 18% followed by 2nd maximum no. of forced errors in underhand pass i.e. 17%. On the other hand, the USA team committed maximum errors in underhand pass i.e. 20% followed by blocking i.e. 15%. It is further clear that both teams did not commit any forced errors in overhead

pass and common ball attack at the net. The graphical representation forced errors in different skills of volleyball in a match between Italy and USA team in Semi-final at Rio Olympic Games is given in figure no. 3.

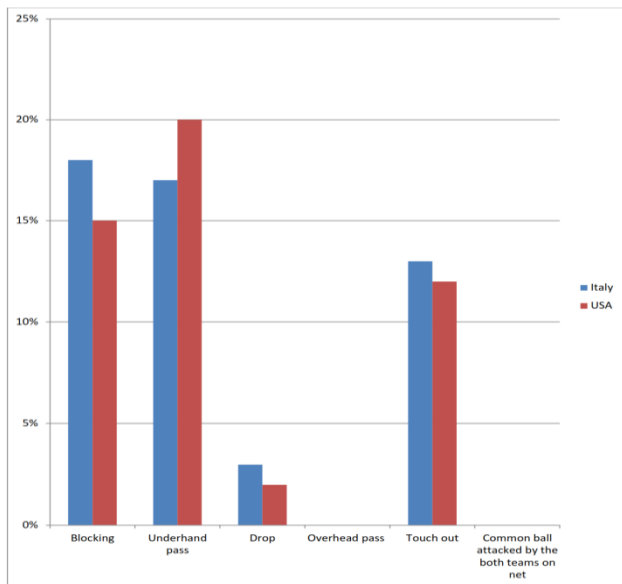


Figure No. 3:- The graphical representation of forced errors in different skills of volleyball in a match between Italy and USA team in Semi-final at Rio Olympic Games.

The percentage analysis of unforced errors in different skills of volleyball in a Semi-final match between Italy and USA at Rio Olympic Games is presented in table no. 4.

Table -4

PERCENTAGE ANALYSIS OF UNFORCED ERRORS IN DIFFERENT SKILLS OF VOLLEYBALL IN A SEMI FINAL MATCH BETWEEN ITALY AND USA AT RIO OLYMPIC GAMES

S. No.	Various Unforced errors in different skills of volleyball	No. of Unforced errors of Italy team	Percentage of Unforced errors of Italy team	No. of Unforced errors of USA team	Percentage of Unforced errors of USA team
1.	Service	19	16.24%	18	15.38%
2.	Underhand pass	05	4.27%	03	2.56%
3.	Overhead pass	00	00	00	00
4.	Spiking	24	20.51%	18	15.38%
5.	Blocking	10	8.55%	14	11.98%
6.	Drop	01	0.86%	00	00
7.	Misconduct	00	00	00	00
8.	Net touch foul	02	1.71%	03	2.56%
9.	Line cut foul	00	00	00	00
10.	Technical foul	00	00	00	00
11.	Rotation foul	00	00	00	00
12.	Overlap foul	00	00	00	00
13.	Reception foul	00	00	00	00
14.	Holding foul	00	00	00	00
15.	Double touch foul	00	00	00	00
16.	Early movement foul	00	00	00	00
17.	More than three touch	00	00	00	00
18.	Total no. of forced errors and percentage	61	52.14%	56	47.86%

An examination of table 4 clearly reveals that Italian team committed 52.14% unforced errors while the USA team committed only 47.86% unforced errors in semifinal match of volleyball at Rio Olympic Games. It is further evident that Italian team committed maximum no. of unforced errors in spiking i.e. 20.51% followed by service i.e. 16.24% respectively. On the other hand, the USA team committed maximum no. of unforced errors in spiking & Service i.e. 15.38% in each skill.

It is also evident from the table that there are no unforced errors by the both the teams in overhead pass, misconduct, line cut foul, technical foul, rotation foul, overlap foul, Reception foul, holding foul, double touch foul, early movement foul and more than three touch. It is evident from the table that Italian team committed 4.27% unforced errors in underhand pass. The graphical representation of unforced errors in different skills of volleyball in a match between Italy and USA in Semi-final match at Rio Olympic Games is presented in figure no. 4.

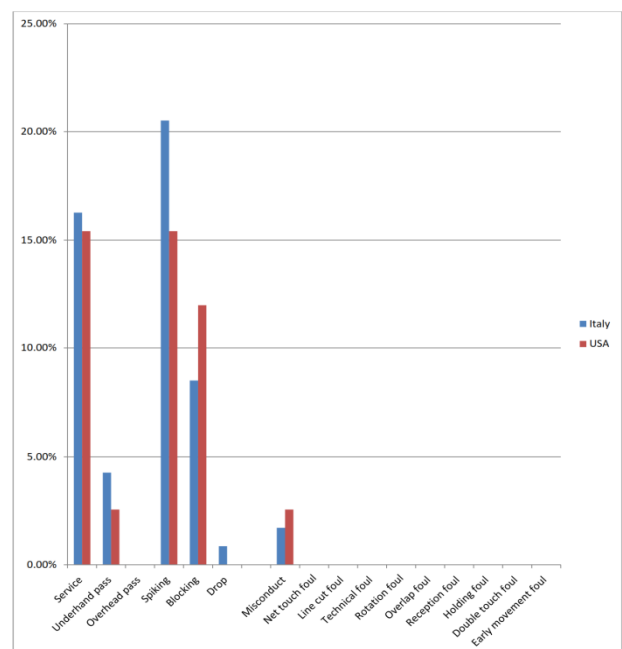


Figure No. 4:- The graphical representation of unforced errors in different skills of volleyball in a match between Italy and USA in Semi-final match at Rio Olympic Games.

CONCLUSIONS:

1. It may be concluded that maximum percentage of forced errors are found to be in skills like blocking, underhand pass and touch out among all the four teams playing at semifinal of Rio Olympic Games.
2. It may further be concluded that maximum percentage of unforced errors are found to be in skills like spiking, blocking and service among all the four teams playing at semifinal of Rio Olympic Games.

3. It may further be recommended that more emphasis be given in training of blocking, underhand pass, touch out and service to the volleyball teams.

REFERENCES:

1. **Csataljay, Gabor; O'Donoghue, Peter; Hughes, Mike; Dancs, Henrietta (2009).** "Performance Indicators that Distinguish Winning and Losing Teams in Basketball", International Journal of Performance Analysis in Sport, Volume 9, Number 1, pp. 60-66(7)
2. **D.R. Mohar and M.J. Haverstock (1956).** "Relationship between Height, jumping ability and Agility to volleyball skills." Research Quarterly 27: pp. 74-78
3. **Dan Alexandru Szabo (2015).** "Study On Improving The Service Unforced Errors In Volleyball Game By Using A Statistical Software" April 23-24, 2015.
4. **Dr. Rajender singh and Avishesh Kumar Singh (2014).** "Comparative analysis of unforced and forced errors among winner and loser female volleyball players of national level of India" Vol No. 7, Issue no. 13, July, 2014. ISSN No. 2231-3745

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