

Number of ball touches in professional football

(Carlsen, K.H. 2009. Oslo: KC Print)

Introduction

The aim of this study was to gather information about how many touches professional football players use when they play a game at a top level. The study looked at the average number of touches the players used, and the distribution of 1, 2, and 3 touches. This could be of interest for coaches in which way and degree they choose touch limits when practicing, and when they are trying to convince their players that ball speed and good 1.touch skill is crucial for success in football. Moreover, this statistics can also tell us something about different styles of play.

Methods

A total of eight games at professional level and one game at amateur were analyzed. Six games from respectively the top division in England, Spain, Italy, Brazil, and Norway, one game from the Champion League, one game from English 1.division, and one game from Norwegian 2.division were included. The latter game was included because the author works as a football coach in this club, and wanted a comparison between professional and amateur level. In most of theses games the number of touches was analyzed for the first half of the game and divided equal between the two teams.

The data were collected using direct match analysis. This means that no video recorder was used. The number of touches was counted for every situation where a player had control of the ball, and had the opportunity to make a choice with the ball, and the choice of using one or more touches. Situations where one player got hit by the ball, did an “emergency” defence act or just had the opportunity of using one touch were not counted. Further, the number of touches when starting with a set play was not included. Neither were the touches for the goalkeepers included. Further, if a player obvious tried to use one more touch, but lost the ball just before touching it again, it was counted as a touch. The main reason for this is that the player tried to use one more touch, and that it in some situations were difficult to decide if he actually touched the ball or not. However, in the majority of situations it was easy to count the numbers of touches. The most

difficult situations were when there were many fast combinations of one or two touch after each other, and in games with many duels.

Results

Table nr. 1: Statistics of the analyzed matches and the distribution of ball touches. The ball touches was categorized into a) 1 touch, b) 2 touch, c) 1 + 2 touch, d) 1 + 2 + 3 touch, and e) 4 or more touches.

Game	Date and result	Average number of touches	% with 1 touch	% with 2 touch	% with 1 and 2 touch	% with <3 touch	% with 4< touches
Arsenal – Man U	5.5.2009 0-3	2,5	29 %	37 %	66 %	80 %	20 %
Barcelona – Deportivo ¹	18.1.2009 5-0	2,5	26 %	36 %	62 %	79 %	21 %
Man U – Tottenham ²	25.1.2009 2-1	2,5	29 %	34 %	63 %	78 %	22 %
Racing – Villa Real	15.1.2009 1-1	2,2	37 %	33 %	70 %	85 %	15 %
Inter Milan – AC Milan	15.2.2009 2-0	2,5	32 %	32 %	64 %	78 %	22 %
Barueri – Portuguesa	28.2.2009 2-1	2,7	25 %	32 %	57 %	77 %	23 %
Rosenbor – Fredrikstad	3.5.2009 1-0	2,2	35 %	35 %	70 %	85 %	15 %
Preston – Sheffield United	8.5.2009 1-1	2,2	43 %	27 %	70 %	85 %	15 %
Kjelsaas – Boede/Glimt ³	14.4.2009 2-0	1,9	48 %	30 %	78 %	94 %	6 %
Total		2,4	34 %	33 %	67 %	82 %	18 %

1) Only the number of ball touches for Barcelona was registered. Barcelona also had superior 64 % versus 36 % in ball possession.

2) The author was also interested to examine if there was any different in the average number of touches when the teams had ball possession on the opponents half. When taking this into account the results show the following:

Average touches = 2.4, % with 1 touch = 29 %, % with 2 touch = 42, % with 1 + 2 touches = 71 %, % with 1+2+3 touches = 81 %, and % with 4< touches = 18 %.

3) Only the ball touches for the home team (Kjelsaas) was registered.

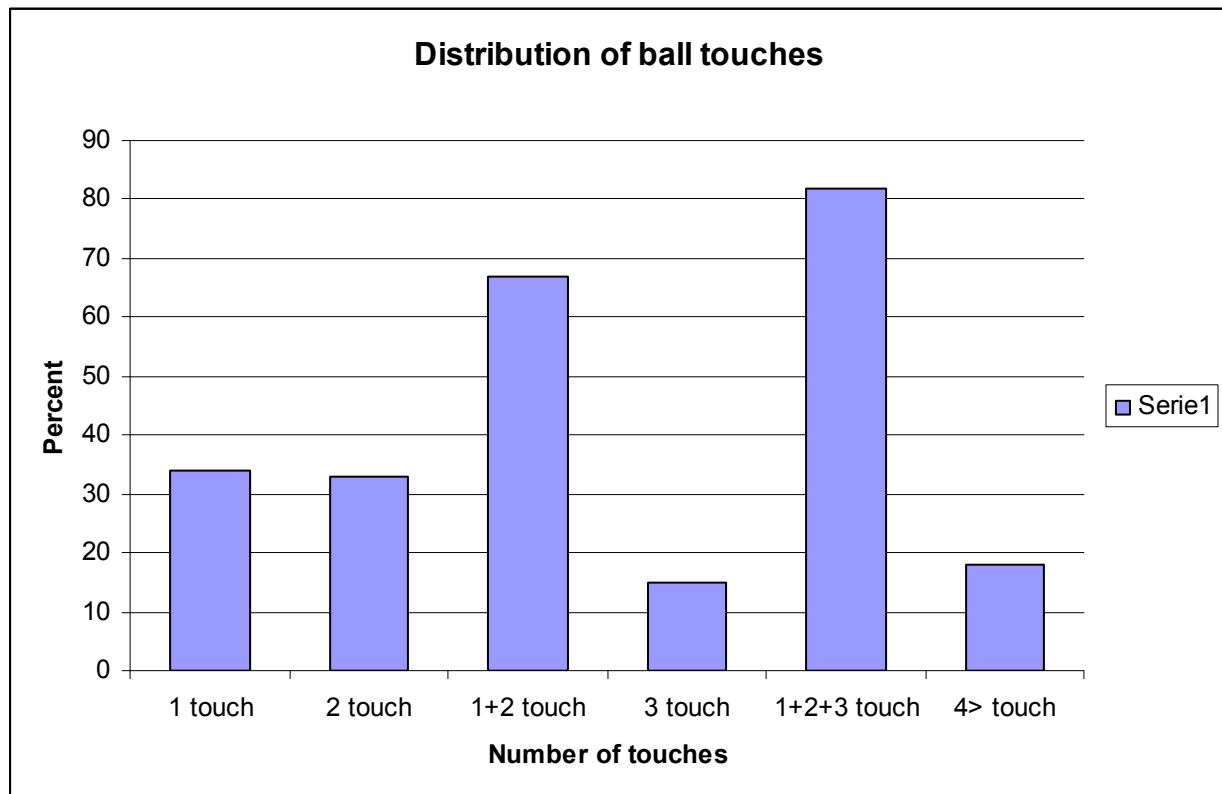


Figure nr. 1: The distribution of ball touches in the nine analyzed matches.

Discussion

All of the games were analyzed using direct match analysis and the study therefore has some limitations. There were situations where the author was in doubt of how many touches that were used or if the touch(es) should be registered. As stated earlier, only situations where a player had control of the ball, and had the opportunity to make a choice with the ball, and the choice of using one or more touches were registered. That means that there were some situations where players touched the ball which were not included in this statistics. In regard then number of situations where the players use one touch is a little higher than the data here. However, in the majority of the games it was not so difficult to count the number of touches used. This is especial true for the high level games. The author experienced that it was a little more difficult to count

the number of touches used in the lower level games. The latter means the last three games in table number 1. Which are Rosenborg against Fredrikstad (Norwegian top division), Preston against Sheffield United (English 1.division), and Kjetsaas against Boede/Glimt 2 (Norwegian 2.division). In these three games the average number of touches was also lower than for the other games, and the frequency of one touch was higher.

In general the average number of touches is low. In average the players used 2.4 touches on the ball every time they had ball possession. Moreover, the most frequent used numbers of touches were one and two touch. In Champion League and the top division games in three of the major leagues in Europe, the most frequent used number of touch was two touch. However, the game between Racing and Villa Real had a lower average number of touch and higher percentage with one touch than the other top matches. In the majority of the five first games in table number one, the distribution of ball touches were quite equal. The author suggests that the difference between the Racing – Villa Real game and the other games can be due to a very high ball speed. The space available in this game might be higher than in the other top levels games. However, the author will state that the quality and speed in this game was impressive.

Beyond the latter case, there were four more interesting findings. First, looking closer at the last three matches in table number one, we see a clear difference from the other games. The average number of ball touches decrease and the percentage of one touch increased. This can suggest that the lower level of game played, the more one touch was used. This can be due to both the field, style of play and the skills of the players. The second interesting finding was the game in Brazil between Barueri and Portuguesa. In this game the average number of touches was higher than for all the other games. More, these two teams also used less one and two touch than all the other teams. This can be a result of the style of play in Brazil, where they have a lot on one to one situations and not so much quick combinations as we see in Europe. Third, taking into account the number of touches used on own and opponent half of the field in the game between Manchester United and Tottenham, we just see a small increase of the use of two touch. The difference is quite small, but can suggest a need of higher ball speed when playing the ball on the opponent half of the field due to less time and space available. Finally, it is worth to mention that Barcelona managed to keep up a high ball speed against Deportivo even when they were superior in both possession and goal score. Again this indicates the importance of high ball speed and good first touch skill.

Conclusion

The aim of this study was to gather information about how many touches professional football players use when they play a game at top level. First, the population size and the validity in this study have some limitations. However, the results in this study can indicate that:

- 1) The average number of touches used is quite low (2.4), and the most frequently used numbers of touches were one and two touch.
- 2) Both the average number of touches and the distribution of touches seemed to be quite equal between top teams in three of the major leagues in Europe.
- 3) The lower the level of game played, the more one touch was used.
- 4) To success at a high level of football the players need to possess good first touch skill and good passing skills with one and two touch. However, it seems like they also need to possess skills to maintain the ball in their team, to calm down, and to make fast combination play in small areas.