



Number of ball touches in professional football

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Introduction

The aim of this study was to gather information about how many touches professional football players use when they play a match 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. The results indicate that professional football players use 1 and 2 touches in 70 % of the situations.

Methods

Eight matches at professional level and one match at amateur were included in the analysis. Six matches from respectively the top division in England, Spain, Italy, Brazil, and Norway, one match from the Champion League, one match from English 1.division, and one match from Norwegian 2.division. The latter match was included because the author worked as a football coach in this club, and wanted a comparison between professional and amateur level.

The data were collected using direct match analysis without any use of a video recorder was. Every situation where a player had control of the ball, and had the opportunity to make a choice with the ball, was registered. Situations where one player were 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 touches, but lost the ball just before touching it again, it 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 touches after each other, and in matches 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.

Match	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 %
Rosenborg – Fredrikstad	3.5.2009 1-0	2,2	35 %	35 %	70 %	85 %	15 %
Preston – Sheffield U.	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. Now 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.

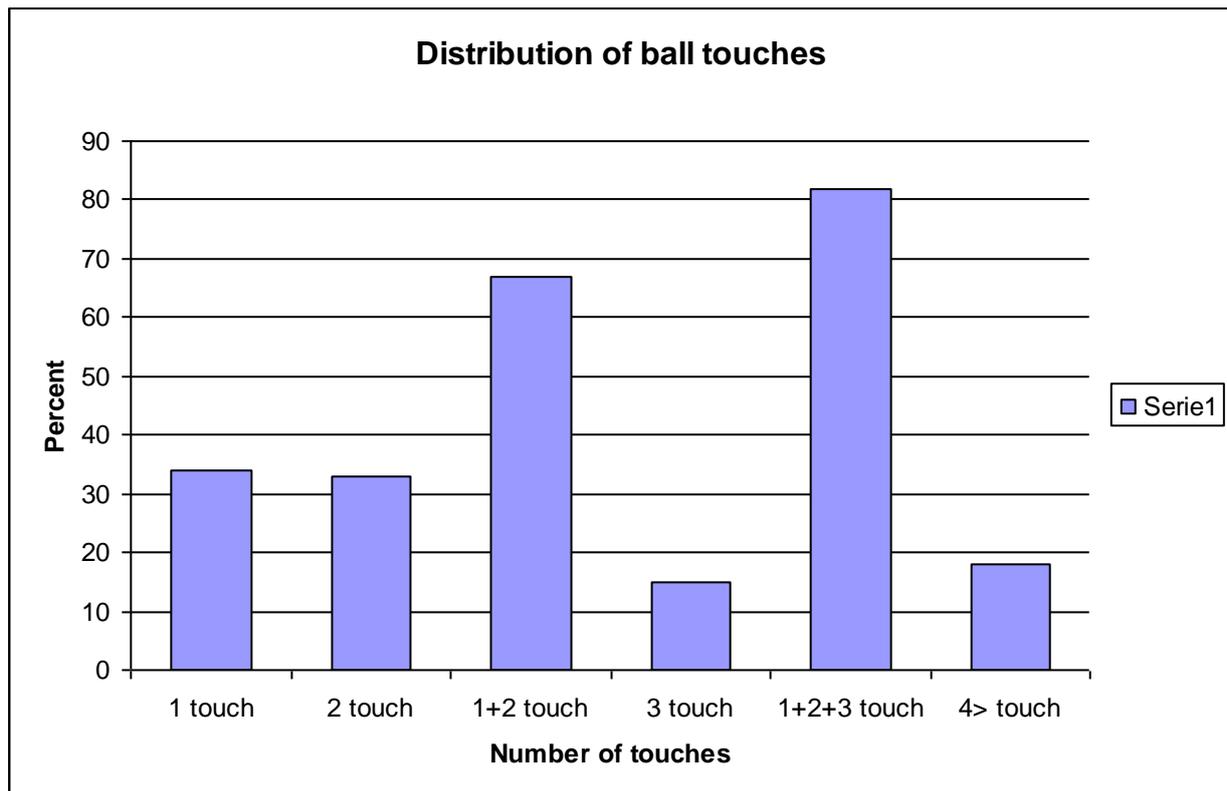


Figure nr. 1: The distribution of ball touches in the nine analyzed matches.

Discussion

All of the matches 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, including the choice of using one or more touches were registered. That means that there were some situations where players touched the ball, but they 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 matches it was not so difficult to count the number of touches used. This is especial true for the matches at the highest level. The author experienced that it was a little more difficult to count the number of touches used in the lower level matches. The latter means the last three matches in table number 1. These are Rosenborg against Fredrikstad (Norwegian top division), Preston against Sheffield United (English 1.division), and Kjelsaas against Boede/Glimt 2 (Norwegian 2.division). In these three matches, the average number of touches was also lower than for the other matches, and the frequency of one touch was higher.

In general, the number of touches used was 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 matches in three of the major leagues in Europe, the most frequent used number of touch was two. However, the match 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 matches in table one, the distribution of ball touches were quite equal. The author suggests that the difference between the Racing – Villa Real match and the other matches can be due to a very high ball speed and less space available. The author will state that the quality and speed in this match was impressive.

Beyond the latter case, there were four other interesting findings. First, looking closer at the last three matches in table number one, we see a clear difference from the other matches. In the three last matches, the average number of ball touches decrease and the percentage of one touch increased. This can suggest that the lower level of game, 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 match in Brazil between Barueri and Portuguesa. In this match, the average number of touches was higher than for all the other matches. 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 match 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 match 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, the more did the players use one touch.
- 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.