

## COMPARATIVE TACTICAL ANALYSIS ON THE OFFENSIVE PHASE BETWEEN REAL MADRID AND FCSB FOOTBALL TEAMS

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### Abstract

The study aimed to identify the essential aspects regarding the technical-tactical organization on the offensive phase between the Spanish football team Real Madrid and the Romanian football team FCSB, to interpret and compare the differences that are noticed between these two football teams, in order to establish a model that will lead to the optimization of the trainings of the Romanian football teams.

The exploratory study involved in the comparative technical-tactical analysis of a top team of Europe and a club team from Romania, started from the premise that the technical-tactical component, represented by behaviors, organization, tactical conception of the game, aspects regarding the collective relations, the forms, the actions that are established between the players, taken as a whole, are defining, essential, determinant in the qualitative evolution, in obtaining the performances, aspects that make the difference between the value level of the football teams.

The research methods used are: bibliographic study method, observation method, comparative analysis method, case study method, statistical-mathematical method, video recording method.

In order to verify the hypotheses we used the nonparametric Mann-Whitney test (U), setting a significance threshold (p) of 0.05. The values obtained by adding the ranks were introduced in the calculation formulas to determine the values of U1 and U2, and subsequently they were compared with the values in the Mann-Whitney table.

The obtained results revealed a significant difference regarding the behavioral organization mode on the offensive phase, aspects revealed both in descriptive and quantitative form.

The interpretation of the results in terms of the notes received by the two teams in all the components of the defensive organization phase were rendered with the help of graphs that showed a clear superiority of the Spanish Real Madrid football team over the Romanian FCSB team.

**Keywords:** offensive organization, technical-tactical, Mann-Whitney test.

### Introduction

Our exploratory study combined both a qualitative and a quantitative research, this approach being supported by a series of specialists in the field.

In this sense, in his opinion (Niculescu M, 2002, p 254) the purpose of qualitative research is to bring information, explanations, arguments regarding a studied phenomenon, to serve, "as a preliminary investigation in order to delimit a research area and profiling advanced hypotheses", to understand the mechanisms that govern it, the essential objective not being the discovery of causes, but the way of expressing behaviors under investigation (Mason J, 2002, p 7).

The information collected in qualitative research is not subject to statistical rules, "clarification of research issues not involving inferential statistical procedures for verifying statistical hypotheses" (Popa M, 2008, p 45), although in the opinion of (Bîrsan M, 2012, p 3), they: "can be converted into quantitative expressions by coding and subjected to processing, counting, comparison to find out the frequency", and in the opinion of (Dușa A, 2014, p 9), for a better understanding of the expression of a phenomenon it is necessary to "study that phenomenon by qualitative

means (observation, case study) and then by quantitative methods."

In the opinion of (Mason J, 2002), qualitative research should not be seen in opposition to quantitative research, but complementary and qualitative research is not inferior to quantitative research, it involves methodological rigor, data collection techniques, ways of interpretation, a valuable research, having as criteria, an argumentation of the choices, an establishment and specification of the limits of reliability and validity.

The exploratory study involved in the technical-tactical analysis of some "top" teams of Europe, started from the premise that the technical-tactical component, represented by behaviors, organization, tactical conception of the game, aspects of collective relations, forms, the actions that are established between the players, taken as a whole, are defining, essential, decisive in the qualitative evolution, in obtaining the performances, aspects that make the difference between the value level of the football teams.

This premise was generated by a series of aspects observed in some football teams that with a good physical and technical training recorded mediocre results mainly due to the lack of organization from a tactical

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point of view.

At the same time, based on the analysis of bibliographic materials we can say that a quantitative analysis is limited in terms of its validity, thus, only a few statistical data providing a significant correlation with the result of a match.

In this sense, we can give as an example a common predictor, namely, the percentage of possession during a game, which does not correlate with the result of the game, the number of passes or their percentage of accuracy which, identically have weak correlations with the result (Hughes and Franks, 2005).

Other essential aspects related to the behavior and technical-tactical organization of a team and make a difference in terms of value in modern football are the "transition phases", in which intercepting the pass and triggering the counterattack are key components, which have proven to be to have a significant correlation in obtaining positive results, (Frenken, et al, 2012), (Turner, .Seyers, 2010), (Tenga, et al, 2010), (McGarry, 2009).

Active pressing, positioning players in relation to opponents (Taylor, et al, 2004), the structural and functional "block", in which the distances between players both horizontally and vertically (Pulling, et al, 2013), (Szczepanski, 2008) represent determining factors for a superior offensive organization.

The analysis of the tactical aspects of the game from the perspective of using qualitative observation tools is very little known (Grehaigine, J et al, 2001), focusing on these means can lead to a better understanding of the association between sports behavior and results (McGarry, et al, 2009), all having as final point the development of high-performance theoretical and practical models (Hugo, S., et al, 2014), which should provide specialists in the field the possibility of increasing performance in the game of football.

Also, the collective tactical organization, the study of behavior in terms of the correlation between the different distances established by players from the team center (Sampaio, J., Macas, V., 2012), revealed the importance of the tactical factor, behavioral organization, which can lead to the opening of new research topics in this field.

Our study, conducted through a comparative analysis between a valuable European football team and a League I team, aims to explore, to identify the essential, defining and constant aspects of behavior and organization in terms of technical-tactical, to bring pertinent information related to the studied phenomenon, to describe, to undertake an analysis and a diagnosis explained in a reasoned manner, in relation to this problem.

The hypothesis of the formulated research is that: there is a significant difference in terms of technical-tactical behavior at the offensive level, between the Spanish football team Real Madrid and the team in League I of the Romanian championship F.C.S.B.

## Materials and methods

The methods used in exploratory research are represented by: bibliographic study method, observation method, case study method, modeling method, comparative analysis method, statistical-mathematical method, video recording method.

The research was based on the observation of the offensive organization of the two teams, during the dispute of 20 matches each, both in the championship and in international competitions, matches played between August 2018 - January 2020.

The analysis of the games was carried out with the help of video recording, a way that could ensure the stopping and development of the game phases in order to make "screenshots", recordings, sketches in graphic form, which could lead to identification and description of research -a detailed and reasoned perspective.

The results obtained were collected in registration sheets, each game studied having assigned a specific case. The registration form contained elements of analysis with information on the defensive organization of each team, during the 20 games played.

Taking into account the fact that the technical-tactical organization of a team is the expression of behavioral manifestations at the collective level, we tried in our analysis to point out these aspects in the context of unitary, coordinated relations of players taken as a whole and not individually (Grehaigine JF, Bouthier D, David B, 1997, p137-149)

In this approach to accompany the descriptive analysis and to "score" graphically the essential aspects we used two applications: "football tactics.net" and "tactical-board", and for a more solid analysis and the desire to render faithfully and argue personal opinions and views, I used the software "Snagit 5.0" for screenshots.

In order for the descriptive aspects of the exploratory research of the technical-tactical behavior to be subject to the verification of the hypotheses and the rigor of the statistical calculations, they required a transformation, from the area of qualitative, descriptive data, to that of quantitative, numerical data. In this sense, we developed a numerical scoring system with scales from 1 to 4, each scale being assigned a rating (insufficient, sufficient, good, very good), to express a certain behavior, technical-tactical behavior, present in the defense phase.

For the verification of the research hypotheses we used the non-parametric Mann-Whitney test, the arguments that were the basis for its choice being simplicity as a method of application, applicability in relation to the existing conditions.

In order to better understand, the research results were presented in both descriptive and graphical form.

## Results

Matches	Build-up	Consolidation	Penetration	Transition	Free kicks	Corners
1.	2	2	2	2	1	1
2.	2	1	2	2	2	2
3.	1	1	2	2	2	2
4.	3	3	2	3	3	2
5.	2	2	3	1	2	3
6.	2	2	2	1	3	2
7.	2	2	3	2	3	3
8.	3	2	3	2	2	2
9.	2	2	3	2	2	2
10.	2	2	1	1	2	2
11.	1	1	1	2	2	2
12.	3	3	3	2	2	2
13.	2	2	1	1	2	2
14.	2	3	3	2	2	3
15.	1	1	1	2	2	2
16.	1	1	1	1	2	2
17.	2	2	3	2	3	3
18.	2	2	1	2	2	2
19.	3	3	3	3	2	3
20.	3	3	3	3	3	3
Amount	41	40	43	38	44	45
Minimum	1	1	1	1	1	1
Maximum	41	40	43	38	44	45
Mean	5,39	5,26	5,65	5	5,78	5,91
STDE						
C	0,68	0,72	0,87	0,64	0,52	0,55
C V	12	13	15	12	9	9

Table no 1. Notes of tactical behavior obtained by the FCSB team on the offensive phase

Table no 2. Notes of tactical behavior obtained by the Real Madrid team on the offensive phase

Matches	Build-up	Consolidation	Penetration	Transition	Free kicks	Corners
4	4	4	4	3	3	3
5	4	4	3	4	3	3
7	4	3	3	3	4	3
9	4	3	3	3	3	3
11	4	3	3	3	3	2
13	4	3	3	2	3	2
15	4	3	2	2	3	2
Mean	4,25	4,15	4,85	4,9	4,2	4,7
STDE	0,545	0,36	0,77	0,57	0,45	0,44

Chart.no 1. The total amount and percentage marks on the offensive phase between the Real Madrid and FCSB football teams

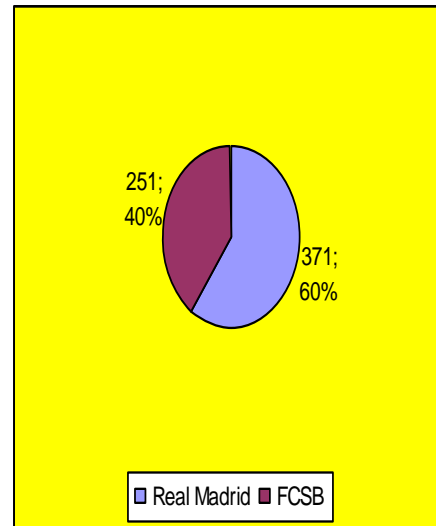


Table.no 3. Mann-Whitney test values

Sample 1
Sume of the ranks: 57
Average levels: 9,5
Estimated sum of ranks: 39
Average rank expectations: 6,5
Value U: 0
Expected U value: 18
Sample 2
Sume of the ranks: 21
Average levels: 3,5
Estimated sum of ranks: 39
Average rank expectations: 6,5
Value U: 36
Expected U value: 18
Sample 1 and 2 combined of the ranks: 78
Average levels:6,5
Standard deviation:6,245

From the study of the graphs, of the marks

1.	4	3	4	4	4	3
2	3	3	1	2	3	2
3	4	3	3	3	3	3
6	4	3	2	3	3	2
8	4	4	4	4	4	3
10	3	2	2	3	3	2
12	3	2	1	1	2	2
14	3	3	3	3	3	3
16	4	3	2	2	3	2
18	4	3	3	2	3	3

allocated for each technical-tactical behavior manifested, one can observe the clear superiority of the Spanish football team Real Madrid, over the Romanian FCSB team.

The big differences highlighted in all the components of the offensive phase, confirm the descriptive aspects we researched, explain the nature and inconsistency of the results, the value between the two teams.

Regarding the analysis of the spread indices, it can be seen that the standard deviation is within normal limits, and in terms of the coefficient of variation, the indices confirm a good degree of spread and therefore an average that is sufficiently representative.

In order to verify the hypothesis by which we believe that there is a significant difference between Real Madrid and FCSB football teams, in terms of offensive behavior, we chose the non-parametric Mann-Whitney (U) test, establishing a significance threshold ( $p$ ) of 0.05. The values resulting from the addition of the ranks were introduced in calculation formulas in order to establish the values of  $U_1$  and  $U_2$ .

In order to reject the "null hypothesis" we calculated the values and they were confronted with the values of  $U$  on the diagonal, and the data that are presented in Table no. 3, support our hypothesis, by which we state that there is a significant difference between the two teams in terms of offensive technical-tactical behavior.

Regarding the descriptive analysis of the offensive organization of the Real Madrid football team, we can deduce the following constants:

Analysis of the offensive organization of the FCSB football team

A pattern of progression is observed on the construction phase, so when the ball is put back into play by the goalkeeper, the central defenders are positioned on the sides of the 16 m square, the defenders climb up to near the middle line, and the midfielders in turn contribute to numerical superiority and game progression.

We could see that in most games in which the players engaged in construction were given an advanced pressing, they had poor coordination choosing as a way to continue the phase long passes to the central striker, who from a position of "pivot" ensures the continuation attack, progression on the so-called "second ball" or by direct engagement of the extremes.

The long distances between the players, between the compartments make the progression of the game impossible, the very large space between the lines does not offer as a way to continue the phase only the long passes so the players using mainly as a way to continue the phase the long passes.

Since in most cases, it is observed that the construction and consolidation phase is excluded, for the hiring of attackers, we could see that when the team meets opponents who do not actively press these phases are not missing, players combining to ensure game progress. The penetration and completion phase is materialized by centers of the ends, for the central striker, envelopments

of the lateral defenders, followed by centers, entrances diagonally to the center of the ends followed by completion by shot at goal.

It was obvious that team FCSB had instructions to attack on the wings instead of in the middle 2 vs 1 after an attack from the right.

Regarding the positive part of the aspects highlighted in the offensive organization of the FCSB football team, one can see the individual quality of the players, the technical-tactical refinement of the procedures used by them, which in many games made a difference, and their contribution, implicitly and the end result, therefore paradoxically, a series of results that could be constantly negative in terms of poor collective organization, were supplemented by the individual quality of the players.

It was noticed that in the attack phase, the FCSB players used mainly for the final phase the entrances from the side to the center followed by the shot on goal, the engagements through long passes on extremes followed by centering and completion, the one-two between attackers which put the players on the central axis in favorable situations.

Another positive aspect highlighted is the fixed phases which were generally properly addressed in terms of both free kicks and corner kicks which demonstrated good positioning, rational occupation of spaces and optimally practiced schemes.

The negative aspects found during the analysis of the matches allocated to the research had as a central starting point a weak collective organization, a precarious construction of the game on the opponent's pressure, which made most players throw the ball through long passes on top, which did not create favorable opportunities for progression. The techniques of fixing the opponent have often been predictable and thwarted by them.

It can be noticed that the FCSB team players on the offensive phase had very few elements, procedures and technical-tactical actions that would put the opponent in difficulty.

Analysis of the offensive organization of the Real Madrid football team

On the construction phase of the attack with the ball put back into play by the goalkeeper, we can play some automatisms, so the team is organized offensively in a 2-3-2-3 system, with central defenders arranged at the edges of the 16m square, lateral defenders nearby in the middle of the field near the edge of the line, the defensive midfielder is positioned centrally creating a triangle with the central defenders and the interiors flanking the defensive midfielder.

This positioning provides a multitude of possibilities for progression because the positioning of the players ensures the formation of various bird angles.

If the opponent makes an advanced pressing, then depending on the area, the side defenders go down and form a triangle with the central defender and the defensive midfielder. It should be mentioned that the goalkeeper, having a good "footwork", can effectively

replace the construction and implicitly counteract the pressing actions of opponents.

On the phase of consolidating the attack, the Real Madrid team is based on engaging all players in possession in order to create color and free space, ensure the progression of the game, create numerical superiority or free teammates from marking opponents. It should be noted that most players who receive the ball perform one or two touches that give fluency to the game.

The central striker ensures the superiority in the left flank by descending in the center of the field where he forms a triangle with the lateral defender and the midfielder.

In this phase of the attack are used a wide range of procedures and technical-tactical actions, among which can be exemplified: "one-two", "envelopes", "player rotation", "passing triangles", change of game direction, long passes, etc.

In the penetration and completion phase, Real Madrid players use a series of techniques, varied, alternately executed to destabilize and confuse the opposing defense system.

Thus, the players position themselves "in a rhombus", seeking to obtain numerical superiority on the central area and through perfectly coordinated passes to create penetration color, envelopments followed by centering, shots on goal from outside the box, color hires.

In this phase of penetration and consolidation of the attack, the application of technical-tactical procedures specific to the context are much facilitated by the adoption of fixing techniques. These involve positions that do not allow the opponent to intervene, because by his action would create spaces or color of penetration. Regarding the positive transition phase, this is a strong point of the team, after recovering the ball, the players preparing the counterattack with very good speed and coordination indices. The fixed phases are also a positive aspect, both for free kicks corners or other fixed phases, the players applying a series of very well coordinated schemes.

The attack is the strong point of the team due to a superior possession, efficient coordination of actions, positioning of players in the functional block, application of fixing techniques, good positive transition, choice of the most appropriate technical-tactical procedures.

The fixed phases also represent a positive aspect, the positioning of the players, the highlighting of their qualities, the efficient application of the schemes and the choice of the best solutions adapted to the context being achieved at a high level.

As for the negative aspects of this phase, it could be seen that the Real Madrid players had a series of problems when they met very well organized opponents in defense, who developed counterattack schemes on vulnerable areas, respectively the side areas left by the side defenders or hires over the line of central defenders arranged very high.

## Conclusions

Following the analysis of the data, the information obtained, and their interpretation both from a descriptive and statistical point of view, we can draw some conclusions: Regarding the technical-tactical behavior of the Real Madrid football team, a remarkable organization can be highlighted at the offensive level. In the attack phase, there is a good construction, good coordination and positioning of the players, which ensures the creation of bird angles and game development. The team is based on a possession game and alternates actions using various technical procedures, and these are correctly chosen and executed in relation to the situational context of the moments in the game. The small distances between the players allow both a good progression on the attack phase and in the defense phase, which contributes to a rapid isolation of the opponent and the creation of numerical superiority. The team's players alternate the game system, frequently resorting to a series of actions or procedures such as: "false demarcations", "fixing the opponent", quick recovery of the ball after losing it, use of "pressing traps" player rotation, exchange of seats, alternating the type of pressing used, which leads to the creation of spaces, free color, a permanent state of confusion, and confusion of the opponent.

In the actions of the team, in both phases, the players participate equally in the game, limit the driving of the ball to two or three touches, promote a vertical, fast game with a good transition. It can be seen that the team has various routes and game schemes for all phases or problems raised by the opponent.

The team is vulnerable to counterattacks by opponents who use teammates to engage on the sidelines or over the defensive line, which is positioned up and on corner kicks, when the choice of marking methods is sometimes wrong, but these mistakes have a small weight and are largely corrected.

In conclusion we can say that the Real Madrid football team is organized at a higher level from an offensive point of view, it is based on a modern game that seeks when it is attacking to position its players, so that in case of loss of possession it can quickly recover the ball.

Regarding the FCSB football team, following the analysis of the matches allocated to the research, we could notice that when the team meets opponents who make an aggressive press, it has no construction solutions, the players are wrongly positioned, slow, predictable, sometimes static, do not use passes from one or two touches, do not coordinate their actions, do not contribute through an active demarcation to support the player with the ball and to provide passing options.

Due to the wide positioning of the players, the gap between the defenders' compartment and the attacking compartment, the players ensure a precarious progression.

It could be seen, as patterns of play on the offensive phase, that the players give up construction and through long passes try to hire the extremes, or the

central striker who from a "pivot" position tries to build on the "second ball".

The team is preoccupied in the attack to create superiority on the flanks, to use the 2-on-1 duels, which if won lead to crosses for the central striker, or the extremes that enter from the side in the center and shoot at the goal.

Regarding the fixed phases, we noticed a good organization of them in the attack phase, which allows us to advance the idea that these phases are well practiced in training.

In conclusion, we can say that the FCSB football team bases its game on the talent and individual value of the players and not on a summed, collective value, there are a multitude of mistakes in the analyzed games, which have as a starting point the precarious organization of technical-tactical view.

The data obtained from the descriptive and statistical analyzes confirm our hypotheses, in the sense that there is a significant difference in the organization at the offensive tactical level between the Real Madrid and FCSB football teams.

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