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## COMPARATIVE ANALYSIS OF FAST ATTACK STARTS, BETWEEN THE SOCCER TEAMS REAL MADRID AND INTER MILAN

#### Introduction

Soccer is a modality of complex understanding and strongly influenced by randomness. The increasing research on this game was consolidated, above all, in the realization of studies oriented to the description and explanation of physical and/or physiological or quantification of actions performed, an attempt to quantify the activity of footballers (Lago-Ballesteros & Lago-Peñas, 2010). Traditional approaches to the quantification of team sports have proved to be limited in their ability to identify complex structural regularities that, despite being unobservable, nonetheless underlie the development of the sporting contest between opposing teams (Camerino, Chaverri, Anguera & Jonsson, 2012). It should be noted, however, that the analysis of behavior structures is not being proposed as a substitute for conventional approaches in sports research. Coaches should have as main concern how to collect game information and realize how is it possible to intervene in the processes of teaching-learning and training, becoming more effective/efficient supervising the process applied to the players. The enormous amount of factors that condition the football game, affect deeply its accuracy, without implementation of proper scientific means, the development is dependent on random factors.

Given the need to analyze the game, some researchers have resorted to notational analysis. It represents a significant advance as observational methodology, and demands fulfillment of the requirements of the scientific method along the process. This methodology applied to football context provides unbiased and necessary information for coaches, to promote more adequate processes in the game context. Sequence analysis, has been presented as a model that supplies relevance and innovation, helping to achieve better relations, collective and individual behaviors, in particular in football as revealed by the work of Barbosa (2013), Camerino, et. al (2012), among others. The observational methodology provides a quantitative but also

a qualitative analysis and ultimately helps define the type of behavior in the game context. According to Bakeman & Quera (2011) one of the main reasons for using observational methods is the ability to capture behaviours displayed along the time, which allows sequential analysis to be carried out.

The lag technique, as a classical sequential analysis procedure, dates back to studies by Sackett (1987), completed with subsequent contributions by Bakeman and Quera (2011) and Quera (1993). In particular, in the field of physical activity and sport, there are many studies that use SDIS-GSEQ, mainly with multicode event sequences (Barbosa, Sarmento, Anzano & Campaniço, 2013). There are very few studies that, in this area, consider the temporal dimension with SDIS-GSEQ (Anguera, 2007).

## Methods

The design used was based on an observational methodology for data collecting (Anguera, Blanco-Villaseñor, Losada, & Hernández-Mendo, 2000). The sample was collected using indirect observation, included 24 soccer games of domestic competitions, 12 per team. To collect data, we used an observational instrument developed and validated by Sarmento, Anguera, Campaniço & Leitão, (2010). This tool makes it possible to observe and record the occurrence of perceivable behaviors in natural context and data exporting in multiple formats that suits sequential data analysis with SDIS-GSEQ.

## Results

Start of fast attack sequences, using actions where the players can be immediately pressed by the opponent. In Table I we show the patterns detected by prospective analysis. Criteria conduct - recovery of the ball possession by disarming.

Conduct Criteria	Recovery of the ball possession by disarm					
Prospective analysis	D+1	D+2	D+3	D+4	D+5	
		Pfr (2.79)				
International de Milan (IM)	Z1(2.50)		Z5 (2.00)			
Real Madrid (RM)	Dcd (2.13) Pr (2.34) Rjr (2.06)	Dcd (3.12)				

**Table I** – Start of fast attack, conduct criteria recovery of the ball possession by disarm

When the fast attack starts by disarm, we note different ways to approach the event: IM team removes the ball of the pressure area, using the forward pass, on the other hand RM team leaves the pressure zone using the conduction of ball with fast pace.

Observing Table II we can verify the patterns detected by prospective analysis. Criteria conduct - recovery of the ball possession by interception.

**Table II** – Start of fast attack sequences, conduct criteria recovery of the ball

 possession by interception of the ball

Conduct Criteria	Recovery of the ball possession by interception				
<b>Prospective analysis</b>	D+1	D+2	D+3	D+4	D+5
International de Milan (IM)					
Real Madrid (RM)	Z4 (2.05)		Z5 (2.05)	Z7 (2.21)	

The absence of behavioral procedures by the IM team, seem to be related to the higher acyclicity, producing less standardization. In RM team, the defensive midfield sector is the primary area to recover the ball possession when the team starts the offensive process by intersection. We should also refer the verticality of the game, exposed by activation of areas of the central corridor.

Start of fast attack using actions where the players can't be immediately pressed by the opponent. In Table III, we can verify the patterns detected by prospective analysis. Criteria conduct - recovery of the ball possession by goal-keeper action.

 Table III (continuation) – Start of fast attack, conduct criteria recovery of the ball possession by goal-keeper action

Conduct Criteria	Recovery of the ball possession by goal-keeper action					
<b>Prospective analysis</b>	D+1	D+2	D+3	D+4	D+5	
		Dcd (2.35) Pfr (2.08)				
International de Milan	Z2 (5.74)	Z6 (2.59)		Z12 (2.69)		
(IM)		Pia (5.79)				
	_	_		_		
	Dpl (3.79)	Ddu (4.34)	Dcd (2.58)	Dia (3.00)		
	Dpl (3.79) Ddu (3.04)	Ddu (4.34) Pma (2.96)	Dcd (2.58) Pma (2.07)	Dia (3.00)		
Real Madrid (RM)	Dpl (3.79) Ddu (3.04) Pal (2.98)	Ddu (4.34) Pma (2.96) Pdf (2.45)	Dcd (2.58) Pma (2.07) Pal (2.40)	Dia (3.00)		
Real Madrid (RM)	Dpl (3.79) Ddu (3.04) Pal (2.98) Pdf (2.19)	Ddu (4.34) Pma (2.96) Pdf (2.45)	Dcd (2.58) Pma (2.07) Pal (2.40)	Dia (3.00)		
Real Madrid (RM)	Dpl (3.79) Ddu (3.04) Pal (2.98) Pdf (2.19) Z2 (5.48)	Ddu (4.34) Pma (2.96) Pdf (2.45) Z8 (2.36)	Dcd (2.58) Pma (2.07) Pal (2.40)	Dia (3.00) Z7 (3.38)		

The different conduct activated between the teams particularly the lesser amount of developments activated by the IM team, compared to RM, are related to the pass accuracy of the goalkeeper; or the ability to produce higher intensity game actions, using a faster transition time that allow faster offensive reorganization which consequently creates greater success in developments, thus, more often repeated increasing the systematization of the conducts.

In Table IV, we can verify the patterns detected by prospective analysis. Criteria conduct - recovery of the ball possession due to a regulatory interruption in favor of the observed team.

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Conduct Criteria	Recovery of the ball possession due to regulatory interruption in favor					
Prospective analysis	D+1	D+2	D+3	D+4	D+5	
	Z9 (2.47) Z12 (2.49)	Z12 (3.07)	Z12 (2.49)			
International de Milan (IM)	Spinp (3.10)	Pir (2.27)				
	$Dre\left(3.14\right)$	Dn1(2.46)	$Dre\left(2.82\right)$	Dre(3.04)	Dre(2.71)	
Real Madrid (RM)	Drc (3.14) Pma (2.81) Ppt (2.27)	Dpl (2.46)	Drc (2.82)	Dpc (3.94)	Drc (2.71) Dia (3.04)	
Real Madrid (RM)	Drc (3.14) Pma (2.81) Ppt (2.27) Rjl (3.91)	Dpl (2.46) Rjl (3.78)	Drc (2.82)	Dpc (3.94)	Drc (2.71) Dia (3.04)	
Real Madrid (RM)	Drc (3.14) Pma (2.81) Ppt (2.27) Rjl (3.91) Z7 (2.46) Z9 (4.17)	Dpl (2.46) Rjl (3.78) Z9 (2.87)	Drc (2.82) Z9 (3.03)	Dpc (3.94)	Drc (2.71) Dia (3.04)	

*Table IV* – Start of fast attack, conduct criteria recovery of the ball possession due to a regulatory interruption in favor

The results lead us to suppose that RM adjusts a set of more standardized behaviors, compared to the IM team. The team members identify in this type of start a set of actions which must be developed, and seek to build the process according to predefined tactical-technical principles, showing higher stringency.

#### Discussion

Considering the purpose of this article, it was identified the existence of conducts in which the probability of occurrence ensured the relationship established beyond pure chance.

Taking into account the sequence analysis previously exposed, in the start of fast attack using actions where the players can immediately be pressed by the opponent, we identified dissociative tendencies. In the recovery of the ball possession by interception IM didn't activate any conduct, exposing large irregularities in the actions performed subsequently. On the other hand, the RM team activated spatial characterization conduct which reveals standardization on the field areas where the team plays.

The RM team activates individual actions, resorting to ball conduction, and due to this action, improves the numerical relationship in the offending process; IM activates collective conducts, as exposed in the pass direction. We consider that the team makes use of the short/medium pass and long pass, resorting to a situation that shortens the defensive reorganization time.

Regarding the start of fast attack using actions where the players can't be immediately pressed by the opponent, teams switch roles: RM makes use of the collective actions pass reception / control and long pass; IM activates a development of individual characteristics, conducting the ball. In this type of start teams progress in a more systematic way on the pitch noting a higher repetition of the paths used. We assume that these results may be understood as a success factor, in other words, the teams recover the ball possession and can move closer to the opposing goal, however, using different actions. Regarding the contexts of interaction (game center) it shows a degree of stability, detected by the activation of conducts in both beginnings and both teams.

Compared to the other group of starts, we infer the existence of longer patterns with more activated conducts. We believe that the team uses the starts without direct intervention of the opponent on the ball to start the offensive process in a more regular order applying actions of general knowledge by team players.

None of the starts activates conducts related with the end of the offensive process, this aspect is an example of the difficulty in coding a complete offensive sequence, representative of the entire process: starts, development and the finale.

Compared to the start using actions where the players can immediately be pressed by the opponent, we infer the existence of longer conduct patterns, and more conducts triggered. Teams use the this type of start, in a more regular form, in order to develop actions that are of general knowledge by the team players.

We proceeded with the purpose of studying the game given its complex nature. Our aim was to dissect the start of the offensive process of two teams that shared the same technical staff. Occasionally we can identify identical conducts, but given the results we can conclude that teams have different game models.

The coach plan went through adjustments, according to the characteristics and type of championship, team and players, with the intention of maximizing their resources focusing on the players and their capabilities.

This type of analysis in the natural context (the game), enables us to obtain information on how to organize the training process, so that the team understands ways to enhance the teams potential and oppose adversary actions of success (Barbosa, Sarmento, Martins, Leitão & Campaniço, 2011).

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# COMPARATIVE ANALYSIS OF FAST ATTACK STARTS, BETWEEN THE SOCCER TEAMS REAL MADRID AND INTER MILAN

Introduction: This study intends to identify the significant repeated and regular behavior, emerging from the diversity of game actions, determining the behavioral variables that define and characterize the Offensive Game Methods, in fast attack, in two teams that share the same coach and technical team. The selected teams are International Milan (IM) and Real Madrid (RM). We seek for relation between the beginnings (criteria conducts) and (conducts behaviors), developments, pace of the game, the zones of the field, the interaction contexts. The results allows us to better understand the similarities and differences between them. Methods: The design used in the present study was based on an observational methodology for data collecting. The sample included 12 football games (per team) of domestic competitions, from the

sports season 2009/2010 IM and 2010/2011 RM. The matches were analyzed through systematic observation, using a specific instrument to observe the offensive process (Sarmento, 2012). The collected data were introduced in the SDIS-GSEQ program for Windows (version 5.1). The determination of the motivational value of transitions between the different behaviors considered as criteria categories and object occurred considering the pattern sequence up to the transition limit of 5. The analysis of data reliability was calculated by intra and inter observer conformity, and values above 0.89 for all criteria were achieved. Results: The teams have different patterns, attending to the studied beginnings. Every beginning has a set of behaviors that emerge from the diversity of actions, except in the conduct criteria interception of the ball of IM. Relatively to the beginning of fast attack using actions where the players can be immediately pressed by the opponent, teams were less systematic, compared with the beginning of fast attack using actions where the players can't be immediately pressed by the opponent. Discussion: We verified the specificity of the different beginnings, in two different teams, in fast attack. The beginnings where the players can be immediately pressed by the opponent, makes us think about the opponents affecting the systematization of behaviors, conditioning the existence of results. We think that the teams use the beginnings without direct intervention of the opponent on the ball, to start the offensive process in model order applying actions of general knowledge by team players. References: Sarmento H (2012). Análise do jogo de futebol Padrões de jogo ofensivo em equipas de alto rendimento: uma abordagem qualitativa. Tese de Doutoramento. Universidade de Trás-os-Montes e Alto Douro.

#### "Dan", 18. mart 2014.

НА ТРАДИЦИОНАЛНИМ СКУПОВИМА ЦРНОГОРСКЕ СПОРТСКЕ АКАДЕМИЈЕ УЧЕСТВОВАЋЕ НАУЧНИЦИ ИЗ 25 ДРЖАВА

# Све спремно за почетак

Организациони одбор 11. међународне конференције о трансформационим процесима у спорту "Спортска достигнућа" и 10. Конгреса Црногорске спортске академије вриједно ради на припреми програма академских и социјалних активности које ће се одржати у Подгорици од 3. до 6. априла ове године. Поред најављених пленарних излагања, академски дио конференције ће се одвијати у неколико мултидисциплинарних секција, које ће обухватити природне, друштвено-хуманистичке и медицинске аспекте савременог спорта.

– Велики број учесника конференције који долазе 25 држава свијета ће своје реферате изложити јавно, али значајан број се одлучио и за постер презентације које су по први пут понуђене у организацији Црногорске спортске академије, рекао је проф. др Душко Бјелица, предсједник приређивачког одбора. – Прија-



ва радова за излагање окончана је још 15. јануара, а поред великог броја пристиглих радова, рецензенти су прихватили 118 адекватно припремљена рада чији аутори су се строго држали прецизно формулисаних пропозиција за припрему истих, рекао је Бјелица. Т.Б.