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Frequency of Combative Activities in the 1st League Men's Football Match

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Abstract

Introduction. Football, a dynamic sport game, belongs to heuristic sport activities. In these activities it can come to an unavoidable contact with the opponent in an effort to fight the ball out. Besides that there are a lot of game situations where it is advantageous to employ the contact with the opponent as a part of game techniques and tactics. **Aim.** The aim of the research is to discover and describe combative activities in a football game and also to find out their frequency in a football match. **Material and methods.** For the research and observation we have chosen five matches of FC Baník Ostrava team that was in the particular year 2008/2009 a participant of the highest Czech football competition – 1st Gambrinus League. Indirect monitoring from the recording was used for the observation. The record was created by a detailed analysis of one match, where we segregated the observed combative activities. The monitored situations were as follows:

- what combative activity was performed
- the post of the player who performed the combative activity
- half time
- the rival of the monitored team

Results. The number of particular combative activities out of five monitored matches was:

- 120 oppositions (24 in one match)
- 259 pushes (51.8 in one match)

The character of a football game is created by sport rules that from the combative activities allow using mainly pushes. Other basic pushes can be in conflict with the rules. The most active post in usage of combative elements is the forward. In one match it was monitored 5.6 oppositions and 5.3 pushes on average. The high proportion of combative elements is caused by the active role of the forward in a football match. From the point of view of football game tactic it is interesting that in the second half-times we monitored lower occurrence of oppositions (13.6:10.4 in one match on average), however, there was higher occurrence of pushes (23.2:28.26 in one match on average). The total sum of combative activities is higher in the second half-times in general.

Conclusions. Finally, we state that combative activities have an irreplaceable position in football nowadays and their mastering is an important part of team performance. The team that is not fully prepared for physically and mentally demanding contact style of football has a worse position in contrast to teams that mastered combative techniques well.

Introduction

Football as a dynamic sport game belongs to heuristic sport activities. Quick translocations, sudden change of movement direction, as well as driving the ball under opponent's pressure are the typical features of this game [Votík 2003; Večeřa, Nováček 1995; Navara, Buzek 1986; Matoušek 1973]. In these movements it can come to an unavoidable contact with the opposing player in an effort to find the ball out. Besides that, there are many game situations where it is advantageous to employ the contact with

the opponent as a part of game techniques and tactics. Since football can be considered a ritual game, various types of contact often belong to these rituals. Taken from the point of view of categorization of sport activities combatives penetrate sport games in terms of movement [Reguli 2005].

In combatives we draw from their taxonomy and actual definition [Reguli 2005]. Combatives are physical exercises aimed at a contact physical defeat of a partner. Combatives are comprised of specific exercises which prepare a participant to overcome their partner by means of a physical contact.

Tab. 1. 1st Gambrinus League in th season 2008/2009

	Team	Z	V	R	P	VB	OB	B
1.	SK Slavia Praha	16	11	4	1	37	11	37
2.	FK Mladá Boleslav	16	9	4	3	23	16	31
3.	FC Baník Ostrava	16	9	3	4	30	16	30
4.	AC Sparta Praha	16	8	3	5	27	17	27
5.	Slovan Liberec	16	7	5	4	21	17	26
6.	SK Sigma Olomouc	16	7	5	4	21	21	26
7.	FC Viktoria Plzeň	16	5	7	4	23	19	22
8.	FK Teplice	16	6	4	6	17	14	22
9.	FK Baumit Jablonec	16	6	4	6	16	20	22
10.	1. FC Brno	16	5	5	6	17	16	20
11.	FK Bohemians Praha	16	6	1	9	23	28	19
12.	1. FK Příbram	16	5	3	8	17	21	18
13.	SK Dynamo Č. Budějovice	16	3	9	4	14	22	18
14.	SK Kladno	16	3	4	9	9	27	13
15.	FK Viktoria Žižkov	16	3	2	11	16	26	11
16.	FC Tescoma Zlín	16	2	3	11	8	27	9

Explanations:

Z – Number of played matches

V- Number of wins from the total number of matches

R – Number of draws

P – Number of losses

VB – Number of scored goals

OB- Number of received goals

B – Number of individual teams

Basic combatives occur in basic combative relations and are carried out by relatively simple fighting exercises performed with one or more opponents. We can divide them on the basis of biomechanical complexity of their course.

We distinguish:

- Pulls
- Pushes
- Oppositions.

In pulls the opponent is translocated or pulled to our side. The fighters provide centrifugal pressure always in the direction from the opponent in the anteroposterior direction. The direction of power vector provided by both fighters is the same.

In pushes the opponent is translocated or just pushed out from their side. As regards the fighters the vector of power is centripetal acting towards the opponent in the anteroposterior direction. The direction of the power vector is identical in both fighters. Considering the power vectors of the fighters pulls are opposite to pushes.

In oppositions the aim is to deny the adversary the opportunity to establish any contact. The direction of power vector changes instantly during the course of combat. Pulls and pushes change quickly in mutual combinations in different directions. Oppositions present the most demanding group of basic combatives requiring high co-ordination abilities, which makes room for greater application of tactics and makes for improvements in individuals who are well versed in psychology, technique, tactics, with greater experience, etc.

We suppose that these combative activities can be observed even in football. However, we are

not aware of any study dealing with frequency of combative activities in a football game.

Aim

The aim of our research is to reveal and describe combative activities in a football game as well as to find out their frequency in a football match. With the help of detailed analysis and creation of clear statistics of five chosen matches we want to contribute to extension of knowledge of combative activities in football.

Objectives:

- Determination of the main combative activities in football
- Creation of a record
- Analysis of the records of particular matches
- Statistical processing of the video records and interpretation of the results.

Methods and materials

For the research and observation we have chosen FC Baník Ostrava Team that was in the particular year 2008/2009 a participant of the highest Czech football competition – the 1st Gambrinus League. This club was founded in 1992 and regularly takes part in our highest football league; in a post-war era A-team of this club has only twice descended from the 1st league. This club has become the league master four times, the last it was in 2004, and even nowadays it moves in first places of the table. This can be proved by its placement in our

highest football competition in the last five years – 1st place in 2003/2004, 7th place 2004/2005, 6th place 2005/2006, 7th place 2006/2007 and 3rd place in the season 2007/2008.

The monitored team is the front club that regularly places in the first half of the 1st football league table. This fact proves that FC Baník Ostrava Team occupies in the historical table of the 1st Czech Football League the fifth position out of all 29 teams that took part in the history of the highest Czech Football League.

The state and the placement of the teams after the autumn season 2008/2009 are clearly shown in Table 1. For our monitoring five matches were chosen randomly. The rivals of the observed team are in Table 1 printed bold.

The age of the male players ranges between 19 and 35; all of them are professional football players. In all five monitored matches there were 18 Baník players in total; however the performance of some was strictly of just episodic character – e.g. the player Pavlík entered the match only for 3 minutes, Lukeš for 4 minutes. To sum up the observed group consisted of just 16 players. The group is characterized as compact; there were no greater fluctuations or changes in team composition. On individual positions participated 2 goalkeepers, 5 backs, 8 halfbacks and 3 forwards.

All observed matches were played on natural grass. Out of five monitored matches Baník played their home games five times and twice played host. With regard to the season the matches were played in, the grounds were wet and soft though always well prepared. None of the match took place on heavily waterlogged ground that would disable the players' natural movement and the climatic factors were sufficient as well. Only one match in Olomouc was played in occasional light snowing.

Methods

Indirect monitoring from the record was used for the observation. It was possible to slow or possibly replay the individual phases of the match, and thus evaluate and analyze the fall technique in a particular situation of the match.

The record paper was created on the basis of a detailed analysis of one match, where we segregated the most frequently observed fall techniques. After that we recorded fall techniques appearing in individual matches onto the pre-prepared record paper. The monitored situations were:

- what basic combative was performed
- the post of the player that performed the basic combative

From the point of view of the post of the player that performed the basic combative, we distinguished a goal-keeper, forward, halfback and back. We observed two main forms of basic combatives in the game in general:

- pushes
- oppositions

As we noticed by creating the record paper, the pulls were in observed matches not present. These were always a part of pushes as a complex combative feature.

Results and discussion

Number of individual basic combatives in all observed matches was

- oppositions 120
- pushes 259

In all five monitored matches 379 basic combatives were recorded in total, with more than doubled occurrence of pushes. It is shown that the football players tend to use natural and simple movement actions (gross motor skills). On one match falls 75.8 basic combatives on average.

Number of basic combatives according to game positions

From the theoretical and practical point of view it is important, what players employ most basic combatives. In this part we focus on analysis of average frequency of monitored basic combatives in individual game positions in one match on one player of a particular game position. Since there is not the same number of players on the individual position we deal with frequency calculated on one player of a particular game position (Fig 1):

- forward
- halfback
- back
- goalkeeper

We can see that the frequency of individual basic combatives is different mainly in pushes. Employment of basic combatives by a goalkeeper was practically not noticed (Tab 2). We further analyze individual player positions in details.

Tab 2. Average frequency of basic combatives on one match and one calculated player

	pushes	oppositions
Forward	5.3	5.6
Halfback	5.25	2.1
Back	5.1	1.1
Goalkeeper	0.4	0

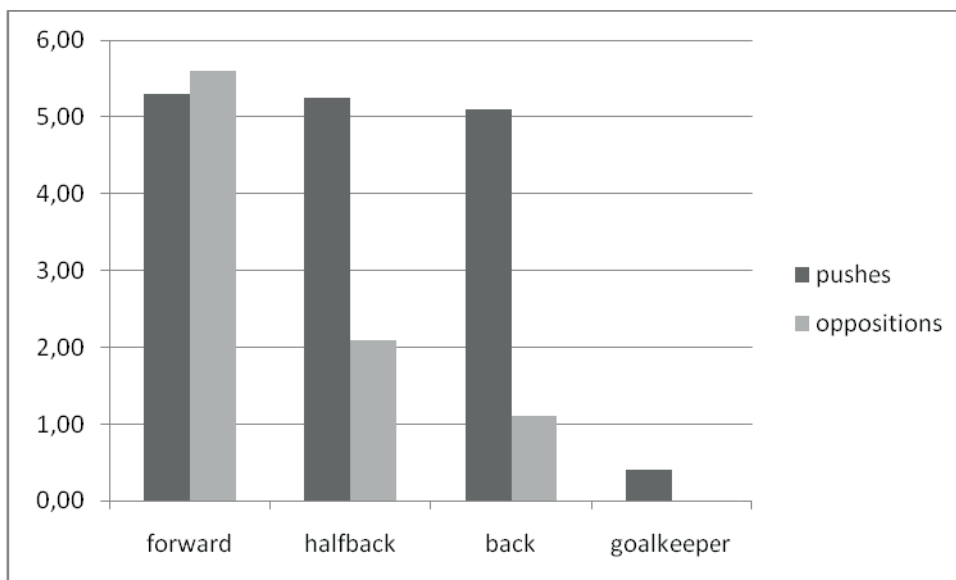


Fig 1. Average frequency of basic combative techniques in one match and one player

Forward

In one forward we noticed in one match:

pushes 5.3 on average
oppositions 6 on average

Even though it was proved that pushes are more employed in football, slight prevalence of oppositions was noticed in forwards. It can be explained so that the forward tries to get to the ball anyway and he often does not use just clear body play. In an effort to gain the ball the player helps himself also with his arms which he tries to deviate the back from his advantageous position. His activity is very often on the edge of football rules. We state that the forwards employ most combative elements.

Halfback

In one halfback we found out in one match:

pushes 5.25 on average
oppositions 2.1 on average

The most frequently employed combative elements were pushes. Oppositions were surprisingly used rarely– every halfback just 2.1 times per one match on average. The Ostrava halfbacks play clear style football without any redundant contact.

Back

In one back we found out in one match:

pushes 5.1 on average
oppositions 1.1 on average

The use of pushes by the Ostrava defending players is prevalent. Every player in the line of defence performs 5.1 pushes in one match on average. It is remarkable that Ostrava back used in the monitored matches only 1.1 pushes per one match. The players try to prevent the contact. One

influential thing is also the fact that Ostrava tries to enforce the opponents their own play style and the Ostrava players do not want to be “pushed back”, thus the backs do not have to solve complicated defence situations.

Goalkeeper

In one goalkeeper we found out in one match:

pushes 0.4 on average
oppositions 0 on average

In goalkeepers we do not suppose any contact with the opponents. Both pushes were performed in specific situations. On the other hand the goalkeeper employs various fall techniques (5 per one match on average).

Effectiveness in use of basic combatives

The frequency of combative elements gives evidence just about their quantity but not their effectiveness. In football the basic combatives are employed as a means for obtaining the dominance in personal fight and in the game in general. We were also interested in efficiency of use of oppositions and pushes by Ostrava players.

From the total number of 120 pushes there were 64 successful and 56 unsuccessful. The Ostrava players had slightly positive balance with applying oppositions. Out of the total number of 259 pushes there were 156 successful pushes and 103 unsuccessful pushes. It is shown that Ostrava players are physically prepared very well and that they manage the contact style of football without any problems. In monitored matches Baník Ostrava won three times, drew once and was defeated only once. The prevalence in effectiveness of used combative elements is a helpful evaluating criterion

Tab. 3. The total number of combative elements according to play positions and effectiveness or ineffectiveness

	Oppositions		Pushes	
	successful	unsuccessful	successful	unsuccessful
Forward	23	33	26	27
Back	15	7	71	31
Halfback	26	16	57	45
Goalkeeper	-	-	2	-

of sport maturity of the team. From the analysis of effectiveness of use of oppositions and pushes in individual play positions (Tab. 3) we conclude that it is necessary to improve mainly the skills of forwards.

The table with the total number of combative elements according to play positions and effectiveness or ineffectiveness (Tab. 3):

Conclusion

The number of particular combative activities out of five monitored matches was:
120 oppositions (24 in one match)
259 pushes (51.8 in one match)

The character of a football game is created by sport rules that from the combative activities allow using mainly pushes. Other basic pushes can be in conflict with the rules.

The most active post in usage of combative elements is the forward. In one match it was monitored 5.6 oppositions and 5.3 pushes on average. The high proportion of combative elements is caused by the active role of the forward in a football match.

From the point of view of football game tactic it is interesting that in the second half-times we monitored lower occurrence of oppositions (13.6:10.4 in one match on average), however there was higher occurrence of pushes (23.2:28.26 in one match on average). The total sum of combative activities is higher in the second half-times in general.

The combative activities play a big role in football and physical and mental readiness for managing these elements. The player has to be prepared for the game with his body. The gathered data are related even to the process of training. It is suitable to insert into the training specific combative exercises that are generally well elaborated by various authors [e.g. Cynarski, Momola 2007; Bartík 2006, 1999; Vít 2005; Warchoł 2003].

We finally state that combative activities have in nowadays football their own irreplaceable position and their managing is an important part of team performance. Team that is not sufficiently ready for

physically and mentally demanding contact style of football have more complicated position compared to teams well prepared in terms of combatives.

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Częstotliwość stosowania elementów walki w meczu I ligi męskiej drużyny piłki nożnej

Słowa kluczowe: pchnięcia, stawianie oporu w czasie walki na boisku, gra kontaktowa

Abstrakt

Piłka nożna, dynamiczna gra sportowa, należy do heurystycznych zajęć sportowych. W ćwiczeniach tych może dość do kontaktu z przeciwnikiem w trakcie walki o przejęcie piłki. Oprócz tego istnieje wiele sytuacji na polu gry gdzie zalecane jest wejście w kontakt z przeciwnikiem jako część techniki lub strategii gry.

Celem niniejszego badania jest odkrycie i opisanie czynności związanych z walką w piłce nożnej, a także odkrycie częstotliwości występowania zachowań związanych z walką w czasie meczów.

Materiały i metody. Na potrzeby badania i obserwacji autorzy wybrali pięć meczów drużyny FC Baník Ostrava w latach 2008/2009, która uczestniczyła w najważniejszych zawodach piłkarskich – 1 Lidze Gambrinus. Do obserwacji użyto metody pośredniego monitoringu, czyli nagrania z meczu. Notatka została stworzona na podstawie szczegółowej analizy jednego meczu gdzie dokonano segregacji obserwowanych technik walki. W czasie monitorowania dokonano obserwacji obejmujących:

- techniki walki
- pozycję gracza, który wykonał czynności związane z walką

- sytuację na boisku do przerwy
- rywala monitorowanej drużyny.

Rezultaty. Liczba zachowań z użyciem technik walki w czasie pięciu monitorowanych meczów wyniosła:

- 120 prób przeciwstawienia się (24 w czasie 1 meczu)
- 259 pchnięć (51.8 w czasie 1 meczu).

Charakter gry jaką jest piłka nożna jest, w której według reguł sportowych, z czynności związanych z walką dozwolone są głównie pchnięcia. Nie wszystkie jednak rodzaje pchnięć są zgodne z regułami gry. Najbardziej aktywną pozycją, na której stosuje elementy walki jest pozycja napastnika. W ciągu jednego meczu zaobserwowano średnio 5,6 prób oporu i 5,3 pchnięć. Wysoka proporcja elementów walki jest spowodowana przez aktywną rolę napastnika w meczu piłkarskim. Z punktu widzenia taktyki gry w piłkę nożną interesujący jest fakt, że w drugiej połowie meczu zaobserwowano mniejszą ilość prób oporu (13,6:10,4 średnio w czasie jednego meczu), aczkolwiek wystąpiło więcej pchnięć (23,2:28,26 średnio w czasie jednego meczu). Całkowita suma czynności związanych z walką jest ogólnie mówiąc wyższa w drugiej połowie meczu.

Podsumowując autorzy pracy stwierdzają, iż techniki walki są obecnie nierozłącznie związane ze sportem, a udoskonalanie ich jest ważną częścią dokonań drużyny. Drużyna, która nie jest w pełni fizycznie ani psychicznie przygotowana do kontaktowego stylu piłki nożnej stoi na gorszej pozycji w odróżnieniu od drużyn, które przyswoiły sobie także elementy walki.