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DEFINITION, STRUCTURE AND CONDITIONS OF "BALL FEEL" IN THE OPINIONS OF ADVANCED FOOTBALL PLAYERS

DEFINICIJA, STRUKTURA IN POGOJI "OBČUTKA ZA ŽOGO" PO MNENJU VRHUNSKIH NOGOMETAŠEV

Abstract

Ball games are complex disciplines demanding a high level of coordination abilities from the players. This high level promotes proficient mastery of the technique. One of the particularly essential elements is the "ball feel". Despite its indisputable importance, considerably little attention has been devoted to it in researches so far. Thus, the aims of this research were to define the level of "ball feel" depending on the training period, to establish the relation between "ball feel" and the results in the sport, to seek dependencies between "ball feel" and the dominant foot, and to define the correlation between "ball feel" and selected conditions. The research was conducted among 111 football players from seven clubs with the help of a special questionnaire composed of two parts. The first part referred to information concerning personal data, training period, age and a self-evaluation of the sided differentiation between the physical fitness of the upper and lower extremities. The second part included 22 questions connected with "ball feel" and its various conditions. The highest level of "ball feel" was observed by those questioned during the starting training period, and the lowest in the preparatory period. Those questioned observed a close relation between "ball feel" and the obtained sport result. Players involved in the research observed a connection between "ball feel" and the sided differentiation of the body; that is, right-handed players felt the ball better with their right leg, and the left-handed with their left leg.

On the basis of the obtained opinions, a conclusion stating that "ball feel" was the effect of many years of systematic training was made. This feeling depends on many factors, such as intervals in the training period, situations of stress, unfavourable external conditions, and the changing quality of the ball itself.

Key words: coordination abilities, "ball feel", football, "ball feel" conditions, right-handed

Povzetek

Igre z žogo so kompleksne discipline, saj od igralcev zahtevajo visoko raven koordinacijskih sposobnosti, ki odločajo o spretnosti pri izvajanju tehnike. S tega vidika je eden izmed ključnih elementov "občutek za žogo". Kljub nedvomni pomembnosti pa raziskovanje tega elementa do sedaj ni dobilo veliko pozornosti. Cilj pričujoče raziskave je bilo definiranje ravni "občutka za žogo" v odvisnosti od obdobja treniranja, da bi s tem ugotovili povezanost med "občutkom za žogo" in športnimi rezultati, proučili povezanost "občutka za žogo" z dominantno nogo in definirali korelacijo med "občutkom za žogo" in določenimi pogoji. Raziskava je bila izvedena med 111 igralci nogometa iz sedmih klubov s pomočjo dvodelnega vprašalnika. Prvi del vprašalnika je zajemal osebne podatke, obdobje treniranja, starost in lastno vrednotenje razlik v fizičnem stanju med levimi in desnimi zgornjimi in spodnjimi ekstremitetami. Drugi del je vključeval 22 vprašanj o "občutku za žogo" in različnih pogojih. Najvišjo raven "občutka za žogo" so izrazili igralci v začetnem obdobju treniranja, najnižjo raven pa tisti v pripravljalnem obdobju. Vprašani so izrazili tesno povezanost med "občutkom za žogo" in športnim rezultatom. Vključeni igralci so izrazili tudi povezavo med "občutkom za žogo" in diferenciacijo med levimi in desnimi ekstremitetami, kar pomeni, da so desničarji žogo bolje občutili z desno nogo, levičarji pa z levo. Na podlagi zbranih mnenj igralcev lahko sklepamo, da je "občutek za žogo" posledica večletnega sistematičnega treninga. Odvisen je od mnogih dejavnikov kot so intervali obdobja treniranja, stresne situacije, neugodni zunanji pogoji in spreminjajoča se kvaliteta same žoge.

Ključne besede: koordinacijske sposobnosti, "občutek za žogo", nogomet, pogoji "občutka za žogo", desničarji

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INTRODUCTION

In all sports disciplines, attaining the desired result depends on the high level of movement abilities of the competitor. Those abilities may be divided into fitness abilities – determined by energy processes and co-ordination abilities -determined by movement control and regulation processes (Figure 1) (Gundlach, 1970). The maintenance of appropriate proportions in their development enables successful athletic achievement.

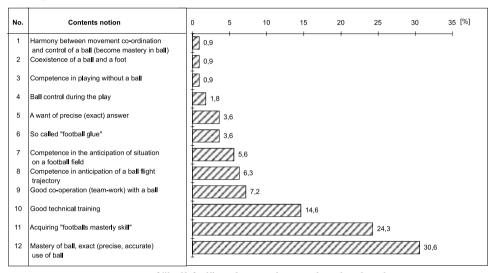


Figure 1: Contents notion of "ball feel" and its understanding by the players

Football is one of the disciplines that are complex with regards to co-ordination. It requires a high level of all co-ordination abilities from the contestants; it is classified on the third level of coordination complexity (Figure 2). Their higher level is favourable to a champion level mastery of the technique.

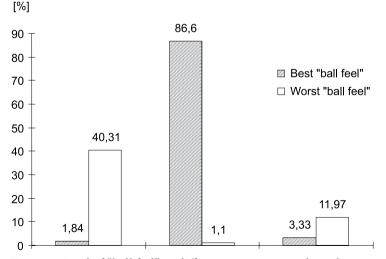


Figure 2: Level of "ball feel" in different training periods in the opinion of football players

One of the especially important elements is the so-called "ball feel". This concept has been present for several decades in theory (Farfel, 1960; Hotz & Weineck, 1983; Ulatowski, 1981) and in practice. Representatives of psychology (Dzamgarov & Puni, 1979; Gagajewa, 1973; Puni, 1956; Rudik, 1958) have also paid a lot of attention to it. For T.T. Dzamgarov and A.C. Puni (1979), "ball feel" is constituted by a complex multifaceted regulator of movement activity and a form of sensorial culture (Fig.3). An interesting opinion was suggested by C.M.Gagajewa, who defined the "feeling of a ball" as: "... ability of perfect regulation of movements and muscular effort on the basis of observations in relation to given tasks, and evaluation of the distance between players, ball and goal" (1973, 23).

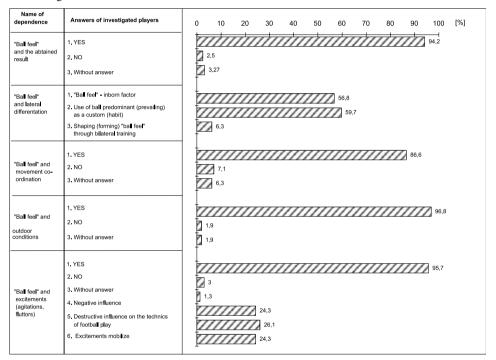


Figure 3: Relationship between "ball feel" and selected conditions in the opinion of football players

Despite its unquestioned importance, relatively little attention has been paid to it in previous studies (Gagajewa, 1973; Starosta, 1995, 2003). Hence, the main aims of this paper were:

- a) to define "ball feel" and its understanding by investigated football players;
- b) to define the level of "ball feel" depending on the length of training period;
- c) to determine the relation between "ball feel" and sports results;
- d) to seek relations between "ball feel" and the prevailing lower limb;
- e) to determine interrelations between "ball feel" and selected requirements.

METHOD

Studies have been conducted on 111 advanced football players from seven clubs with the use of a questionnaire, divided into two parts. The first part included information concerning personal data, professional experience, age, sports advancement, achievements and self-evaluation of lateral differentiation of lower and upper limbs. The second part of the questionnaire included 22 questions connected with the concept of "ball feel", its structure and various requirements. Answers to 15 questions were then processed. The average age of the contestants was 26.4 years, and that of experience in the sports branch was 8.4 years. The subjects can be considered football players with significant experience.

RESULTS

a) Definition of "ball feel" and its understanding by football players

The largest number of football players (30.6%) understood "ball feel" as: "Controlling the ball and steering it precisely" (Figure 1). Many people (24.3%) associated this with: "Mastering the so-called ball player's art". In the case of the remaining players, the concept of "ball feel" was connected with a high level of technical training (14.6%), adequate co-operation with the ball (7.2%), ability to foresee the trajectory of the ball (6.3%), ability to anticipate situations on the field (5.4%), the so-called football glue (3.6%), directing the ball during the game (1.8%). Only in the case of few football players was "ball feel" connected with an ability to play without a ball, the co-existence of ball and leg, harmony occurring between movement co-ordination and mastering the ball.

The original sound of expressions, often very close to slang phrases accepted in the football world, was maintained, as many of them express the essence of the discussed concept. In such a form, they constitute components, however small, on the basis of which it might be possible to establish a full and correct definition of the "ball feel" concept in the future. The expressed opinions were discussed in a synthetic way, as well as individual opinions, indicate that this concept is functioning not only in theory, but also in the actual sports training.

b) Level of "ball feel" in various training periods

The highest level of this feeling occurred in the majority of players (86.6%) in the starting period (Fig.2). Only in a small group of the questioned players did it occurr in the preparatory period (1.8%) or in the transient period (3.3%). There was a significant differentiation of opinions concerning the earliest level of this feeling. In the majority of cases, it occurred in the preparatory period (40.3%), in some questioned players in the transient period (12%), and in some cases even in the starting period (1.2%)

c) "Ball feel" and sports achievements

A definite majority of questioned players (94.2%) observed a connection between the level of the said feeling and the obtained sports achievement (Figure 3). Only for a few football players (2.5%) such a connection did not occur at all. Those opinions indicate an evident relation between a high level of "ball feel" and achievements obtained by the competitor. This means that the level of the feeling constitutes a condition of attaining a good result in sports competitions.

d) "Ball feel" and lateral differentiation in limbs

Football belongs to those sports disciplines in which a deciding role is played by lower limbs. Studies have shown their considerably lower level of kinaesthetic sensations than in the case of upper limbs. Nevertheless, long term sports training lowers the sensibility level, i.e. improves their perceptions of equipment such as the ball. A high level of technical mastery is required with

almost identical participation of both limbs in the game. The decided majority of responses in the questionnaire (77.1%) indicated the domination of the right leg, i.e. its higher level of "ball feel" (Figure 3). In a significant minority cases a better feeling occurred in the left leg (18%). Only very few players indicated identical levels of feeling in both limbs (3%).

Also of particular interest were opinions concerning reasons for a lateral differentiation in limbs. For the majority of football players, "ball feel" was of an inborn character (56.8%). The formation of a functional division of limbs, including the leading (dominant) leg, is due to its more frequent use during the contest, which with time becomes a habit (29.7%). The possibility of improving "ball feel" through a symmetrical execution of technical elements was observed by only few people (6.3%).

e) Correlation of "ball feel" and selected requirements

The connection between the level of movement co-ordination and "ball feel" was perceived by a decided majority of questioned football players (86.6%) (Figure 3). Only a very small group of football players has not observed such a relation (7.1%). Almost a half of the questioned players (49.5%) were of the opinion that the high level of movement co-ordination is favourable to the establishment of "ball feel" as a component of technical mastery.

"Ball feel" and external conditions

Almost all football players (96.8%) observed the influence of those conditions on changes in the scope of feeling (Figure 3). Low ambient temperature is unfavourable to the level of the applied technique (37.8%), and the optimal one may be favourable to the occurrence of a higher level of "ball feel" (16.2%) and a better technique (10.8%). Only a few of the questioned players (3.6%) were of the opinion that external conditions have no major influence on the efficiency of the players.

"Ball feel" and emotions

Responses to questions concerning the influence of emotions were rather diversified (Figure 3). A similar number of responses were received in the scope of a negative influence of emotions both on the applied game (play) technique (26.2%), as well as feeling (24.3%). An almost identically number of football players thinks that emotions as a rule have a stimulating influence on them (24.3). Most probably this also concerned the level of feeling.

DISCUSSION

As a result of the conducted studies, the occurrence of a higher level of "ball feel" was observed in the starting period, and the lowest one in the preparatory and transient periods. Similar results were obtained (Figure 4) in tests of contestants in other sports (Starosta, 1995). This trend is in compliance with the assumptions of sports training.

The concept of "ball feel" is wide and comprehensive and up to now it has not been correctly defined, although such a definition would most probably be of great help in practice. Thanks to a high level of the "ball feel" it is possible to: pass the ball to the partner in a precise way, shoot a successful goal, take away a ball from an opponent, foresee a trajectory of the ball and be in the appropriate place on the field. Those elements are the prerequisites for an efficient and successful game, i.e. for winning (Starosta, 1995). An analysis of the results of the discussed study enabled the determination of occurrence of a special relation between "ball feel" and the obtained sports achievement (94.2%).

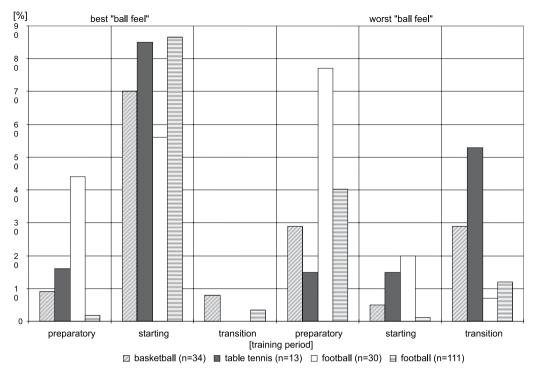


Figure 5: Shot at the goal performed trough symmetrical and asymmetrical preparation of football players during various championships.

The symmetrisation of movements is based on equalising the efficiency of both sides of the body. It requires from the contestants some additional training for the weaker limb, which is favourable to the development of co-ordination, and indirectly to a better "ball feel" of the leading limb. In the presented materials, the ratio of right-legged to left-legged football players was 4 to 1. An insignificant share (3.1%) was represented by players who could play equally with both legs, who are dangerous opponents due to the possibility of applying a greater variety of techniques. The process of symmetrisation seems to be neglected in the training of Polish football players. This is despite the fact that observations have indicated (Starosta & Bergier, 1996; Starosta & Dębczyńska-Wróbel, 1998; Starosta, Rynkiewicz & Siódmiak, 1998) that teams with a larger number of such versatile players occupy very high, or even the highest places in the world elite (Figure 5).

"Ball feel", its essence and structure are not easy to define. This type of feeling is of considerable importance in shaping technical mastery; this has been observed by a majority of contestants (96.8%); similarly to the relation occurring between this feeling and external conditions. Optimum conditions are favourable to a higher level of "ball feel" (16.2%) and technique (10.9%). This feeling also depends on the mental condition of the competitors (95.7%). Excessive emotions may exert a negative influence (24.35), or a stimulating influence (24.3%).

The presented results include only a small fragment of the field of study. The paper included a synthesis of the results of opinions expressed by football players only in relation to some of the problems. Many of them were not discussed at all, although they would constitute an equally

interesting material. It will be the subject of successive papers. Of particular interest were opinions expressed by experienced football players.

CONCLUSIONS

The opinions of the majority of the questioned players indicated the starting period in which the highest level of "ball feel" appeared. The lowest level occurred most frequently in the preparatory period (40.3%) or in the transient one.

A decided majority of the tested contestants (94.2%) observed a relation between the level of "ball feel" and sports achievements. Its high level is favourable to attaining a good result in a sports competition, frequently in winning.

The questioned players were conscious of the lateral differentiation of their lower limbs. In the case of a significant majority of football players (77.1%), the domination of the right foot occurred, i.e. its high level of "ball feel". Quite a large number of players had a better feeling in their left foot (18%). Only a few players have indicated an identical level of such feeling in both limbs.

The relation between the level of movement co-ordination and "ball feel" was perceived by a decided majority of questioned players (86.6%). Almost a half of the studied players (49.5%) were of the opinion that a high level of co-ordination is favourable to the development of "ball feel".

Almost all football players (96.8%) observed the influence of external conditions on changes in the scope of feeling. According to them, a low ambient temperature may lead to lowering the quality of the applied technique, while the optimal temperature may be favourable to the appearance of a higher level of "ball feel" and a better technique. A differentiated influence on this feeling may be exerted by emotions.

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