

ORGANIZATIONAL STRUCTURE OF TECHNICAL AND TACTICAL TRAINING OF SKILLED GOALKEEPERS IN FOOTBALL

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Annotation. *Purpose:* to study the structure of technical and tactical training of skilled goalkeepers in football. *Material:* the study involved 40 goalkeepers in age from 21 to 39 years (team Premier League Championship of Ukraine). According to teacher's observations were under direct competition activity of skilled goalkeepers. *Results:* It is shown that the technical and tactical activities goalkeeper characterized by two phases of the game: action to protect and attack. In turn, they include eight typical situations. It was found that in accordance with these typical situations goalkeeper applying a technical and tactical actions. *Conclusions:* It is recommended to increase the efficiency of the game keeper in protective and offensive actions to use specific and non-specific exercises in a variety of standard situations arising during the match.

Key words: soccer, goalkeeper, technical, tactical, training, defense, attack.

Introduction

At present stage of football's development intensity of game is increasing and it requires from football players, including goalkeeper, first of all skill to quickly and effectively use tactic techniques in suddenly changing conditions in limit of time and space. Team, which strives for success, shall act promptly, i.e. it shall consist of players, who are technically skillful and combine technique with quickness of movements.

One of important components of football competition functioning is technical tactic functioning, which is understood as fulfillment of ball techniques, directed to solution of individual, group and team tactic tasks [3; 14; 15].

Construction of training process for goalkeepers was always rather specific in football. Indeed goalkeepers have to use wide specific arsenal of technical-tactic actions, usage of which requires special fitness [2; 4; 12;13].

Though in practice goalkeepers' technical tactic and physical training is realized without creation special conditions for complex development of functions of motor and sensor systems [1; 8; 19].

Goalkeeper shall have special vision of field and this vision shall be trained with the help of special methodic of technical-tactic training, which is based on means, oriented on perfection of periphery eyesight and balance. Widening of vision sector permits for goalkeeper to better orient in game situation, especially when goal is attacked [1; 2; 5; 4; 8;11].

In the process of studying of goalkeeper's technical-tactic functioning great role is played by anticipation. Anticipation is an important factor in controlling of responses and sportsmen's actions. Skills, formed in process of training, are used by sportsman for solution of sport situations. For example, having seen the beginning of ball's flight, sportsman shall as quickly as possible determine trajectory of its movement and moment of its appearing in certain point of space. On the base of this information and experience (memory) sportsman forms plan (program) of future action. Presence of ready programs of movements in memory substantially increases quickness of sportsman's response. Completeness and accuracy of foreseeing increases, if sportsman knows objective regularities, which characterize moving objects, including supporting motor system of own body [7; 8; 11;18; 20].

Skillful perception and responsive action are rather important aspect of match functioning's effectiveness in international football. Concerning goalkeeper's functioning at moment of penalty it is purposeful to use information about movements of legs of player, who fulfills penalty. Confrontation goalkeeper- attacker during penalty is to large extent built on weighting for previous actions of opponent and as a result on using own actions in response. That is why for goalkeeper the process of studying of attacking player's peculiarities is very important factor of his own actions' effectiveness [18; 20].

Competition functioning, as complex manifestation of different sides of football players' fitness, to large extent reflect its problems [10; 15; 17]. In course of pedagogic observations over technical tactic actions of goalkeeper, there were registered the following actions: kicks in goal, interception of ball, taking ball away, taking ball by hands, taking ball by legs, kick from goal, penalty or free kick, ball's pass by leg from hands, ball's pass by kick from ground, ball's pass by hand. Analysis of goalkeepers' technical tactic actions shows that quantity and quality of technical-tactic actions, realized by goalkeeper in different match situations, is different [6; 16; 9].

It was determined that most often goalkeepers make kick from goal, ball passes by kick from hand, interception of ball, taking of ball by hand. With it the greatest quantity of inaccurate actions is made when kicking from hands, kicking from ground, kicking from goal [9; 13; 14].

Thus, analysis of researches and publications witnesses that this problem has been sufficiently studied, though there is insufficiency of works, devoted to structure of technical tactic fitness of qualified goalkeepers.

The work has been fulfilled in compliance with topic of scientific research work of football department of Lviv state university of physical culture for 2011-2015 "Scientific-methodic principles of improvement of sportsman's training system in football, considering peculiarities of competition functioning".

Purpose, tasks of the work, material and methods

The purpose of the work is to study structure of technical tactic fitness of qualified goalkeepers in football.

The tasks of the research:

- On the base of analysis of scientific-methodic literature to study modern ideas about structure of technical tactic fitness of qualified goalkeepers in football;
- To determine structure and content of technical tactic fitness of qualified goalkeepers in football.

The methods of the research:

We fulfilled theoretical analysis of scientific methodic literature, in the course of which we processed 20 literature sources, devoted to problems of different kinds of goalkeepers' training and general approaches in theory of sportsmen's training.

Pedagogic observations over technical-tactic fitness of qualified goalkeepers were fulfilled with the help of analysis of video records of 20 matches of Ukrainian prime league, in which 40 goalkeepers participated. Processing of video-information was fulfilled with the help of program Pinnacle Studio™Plus version 15.1. The received indicators of competition functioning were inserted in special records.

The data, inserted in records, were generalized, processed with methods of mathematical statistic and were formed as summarizing table.

Organization of the research: pedagogic observations over qualified goalkeepers' functioning were realized at matches of Ukrainian football championship in Prime-league. In total we analyzed 20 matches, in which 40 goalkeepers participated.

Results of the research and their discussion

The structure of goalkeepers' technical-tactic fitness in football substantially differs from the same of other players. That is why training of goalkeepers acquires special importance in team's training. Significant role in this process is played by analysis of data of goalkeepers' functioning.

The structure of main sides of qualified goalkeepers' technical-tactic functioning is given in table 1.

In spite of main goalkeeper's functions' being connected with defense of own goal, results of pedagogic observations witness that much more active goalkeepers have to be, participating in organization of attacks of own team. So, participation of goalkeeper in defensive actions is in average 13.20 of technical-tactic actions (TTA) that is approximately 30.6% from all TTA` and participation of goalkeeper in attacks is, in average, 29.95 of TTA or 69.4%. The received indicators of qualified goalkeepers' competition functioning in general are in accordance with data of other researchers [9], but in practice we can state that training of goalkeepers for participation in attacks is not sufficient.

Let us regard technical-tactic functioning of qualified goalkeepers more specifically from the point of view, how they fulfill certain tasks in different typical situations. For this purpose, basing on common actions, made by goalkeepers, we classified their actions by different tasks:

- Direct defense of goal;
- Indirect defense of goal;
- Control over operative space on his half of field;
- Participation in attacks;

The first three tasks are connected with defensive actions and the forth belongs to attacks of own team. Such distribution by tasks conditions also determination of different zones of goalkeeper's responsibility in some typical situation.

These zones are different not only by dimensions and configuration but they require certain skills and skillfulness from goalkeeper in order for him to adequately and effectively solve the tasks, which appear in certain match episode.

Direct defense of goal. According to our researches specific weight of such situations is, in average, 3.25 of TTA during a match or 7.5% from total quantity. Here we relate directly actions at goal, in situation 1x1, actions at penalty. In spite of the fact that zone of responsibility itself is relatively not large by dimension in these situations, in this zone the most dangerous actions take place and the least mistake or inaccuracy in goalkeeper's actions can result in failure for all team.

Realizing direct defense, goalkeeper shall be able to instantly respond to threatening kicks, manifest anticipation in short periods of time. Appearing situations require from goalkeeper significant explosive power, high quickness and speed-power qualities, dexterity and flexibility. In such situations goalkeeper has to act from different initial positions, often far from being optimal.

Table 1

*Structure of technical-tactic functioning of qualified goalkeepers
($X \pm m$)*

Phases of match	Typical situations	Technical-tactic actions	Quantity
Goalkeeper's participation in defense	Actions directly at goal	Catching in supported position	1.4 ± 4.6
		Pushing off in supported position	0.25 ± 1.75
		Catching of ball in falling	0.65 ± 2.35
		Pushing off in falling	0.5 ± 1.5
	Actions at outcomes from above	Interception of high passes – catching	2.1 ± 2.9
		Interception of high passes – pushing off	0.65 ± 2.35
	Actions at outcomes from below	Interception of low passes – catching	0.55 ± 4.45
		Interception of low passes – pushing off	0.1 ± 0.9
	Situation 1x1	Liquidation of threat	0.4 ± 2.6
	At penalty	Liquidation of threat	0.05 ± 0.95
	Support of partner during defense	Catching	4.55 ± 7.45
		Pushing off with hands	0.05 ± 0.95
		Handling of ball	0.85 ± 2.15
Pass without handling		0.65 ± 2.35	
Ruining action		0.45 ± 1.55	
Goalkeeper's participation in attacks	Interaction with partners during attacks	Catching	1.35 ± 1.65
		Catching	0.1 ± 0.9
		Pushing off with hands	1.3 ± 4.7
		Handling of ball	2.4 ± 3.6
		Pass without handling	2.3 ± 5.7
	Inserting of ball in game	Throw	4.5 ± 11.5
		Kicking from ground	13.85 ± 11.15
		Kicking from hands	4.15 ± 12.85
		Total	43.15 ± 2,85

Indirect defense of goal. Specific weight of such situation is, in average, 3.4 of TTA, or 7.9% from total quantity of actions. Responsibility zone is a little bit large than in previous case and expands to space of nearly all penalty Playground. Main purpose of goalkeeper in these situations is prevention from sharp high or low passes for finalizing kick.

Indirect defense requires from goalkeeper good understanding of game situations' peculiarities. In such situation goalkeeper in short time have to analyze different variants of attack's development in finalizing phase and, not forgetting about direct defense, if it is possible, instantly intercept ball. In such situations it is important to foresee development of game situation, to be able to adequately evaluate own potentials when choosing "intercept ball or not". In such situations goalkeeper often has to act in conditions of opponent's pressure, that is why goalkeeper's explosive power, speed-power abilities, quickness are very important. In conditions of struggle it is also important to choose reliable method of interaction with ball and fulfill it technically correctly. Movements during outcomes often are accompanied by jumps or fallings down that is why it is important for goalkeeper to be able to re-switch himself from one direction of movement to other, i.e. to have good coordination.

Control over operative space at own half of field. In such situations goalkeeper realizes function of partners' support during defensive actions. As results of our research witness goalkeeper gets in such situations the oftenest, in average 6.55 of TTA 15.8% from total quantity.

In such situations goalkeeper controls rather wide space at his half of field and, is necessary, he shall quickly respond to situation. In such situations goalkeeper often has to quickly cover segments up to 15-20 meters and sometimes more. Goalkeeper has to act behind penalty Playground, so it is important for him to act with legs, head; it is important for him to take correct decision "to keep ball" or "to ruin opponent's pass". Goalkeepers self confidence and mental balance, his technical arsenal are very important factors for all team.

Participation in organization of attacks. In modern football this aspect of goalkeeper's fitness is very significant. The data of our research witness that specific weight of such actions is, in average, 29.95 of TTA or 69.4% from total quantity. Observation over competition functioning of advanced Ukrainian goalkeepers proves the fact that goalkeepers actively participate in attacks of their teams. Mainly, goalkeeper's actions in such situations are connected with start of attack, with kicking ball from ground, kicking from hands, throwing of ball – such actions are 22.5 of TTA or 52.1% from total quantity. But ability of goalkeeper to "open" for partner for "keeping ball", to quickly pass the ball to partners without breaking the rhythm of attack is of great importance. Important aspect of goalkeeper's functioning is

introduction of ball in game. If situation on field dictates need in quick attack – goalkeeper, after taking ball, shall timely and reliably introduce ball in game with the most effective technique.

Conclusions:

1. Research of structure of qualified goalkeepers' technical-tactic fitness in football showed presence of rather clear structural features of game both in defensive and attacking actions, depending on typical situation.
2. Results of our research witness that goalkeeper to large extent participates in attacks much oftener than in defensive actions, but in practice of trainings this aspect is paid insufficient attention.
3. Correction of training process for goalkeepers shall be realized so that means of technical-tactic fitness would accord by structure and scope with indicators of goalkeepers' competition functioning.

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Cite this article as: Shamardin V.N., Khorkavyy B.V. Organizational structure of technical and tactical training of skilled goalkeepers in football. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2015, vol.2, pp. 75-79. <http://dx.doi.org/10.15561/18189172.2015.0213>

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Received: 08.12.2014

Published: 30.01.2015