

Cycles of Training Sessions and Competitions of Youth Football Players

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Abstract: At the present level of football development, the requirements for athletic skills are increasing. Given a fierce competition in the international and national sports arena as never before, it is important to mobilize functional reserves and maximize individual inclinations of players to demonstrate the highest capability for sport in the period optimal for it. It is precisely a long-term training programme focused on the demonstration of natural inclinations that is a strategic area in the training of qualified athletes under the current conditions. Adhering to qualitative characteristics of the training process should become the basis for evaluating the rational structure of a long-term training process. The paper aims to theoretically and methodically justify the periods of training sessions and competitions of youth football players. Research methods are the following: general theoretical methods (analysis, synthesis, abstraction, comparison, generalization and descriptive mathematical statistics), systemic theoretical methods (structural analysis, functional analysis, structural-and-functional analysis, historical method, system modelling), a study of the printed and electronic sources of information, description, interviewing, expert survey. An analysis of scientific and methodological literature, legal documents and training programmes adopted in the countries with a high level of football development has made it possible to construct models of annual programmes based on the years of study with further regulation of cycles of training sessions and competitions. Rational construction of the system of footballers' long-term training is based on the introduction of changes in the organization and holding of children's and youth competitions, pedagogical principles of managing sports activities and technologies for training youth football players, as well as methods of evaluating children's coaches' professional performance.

Keywords: *sportsmanship, training programme, models of year-long programmes, children's and youth competitions, the Football Federation of Ukraine.*

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Introduction

Such aspects as an overwhelming popularity of sports in the modern world, its intense commercialization and professionalization, as well as the ever-increasing socio-political significance of success at the Olympics, World and European Championships, have led to the establishment of highly effective systems for training athletes in many countries (Kormelink, & Seeverens, 1999; Lingen, 1998; Balyi, 2001; Ruiz, 2002; Wein, 2007; Peter, & Bode, 2005; Shinkaruk, 2011; Platonov, Pavlenko, & Tomashevskiy, 2012; Schomann, Bode, & Vieth, 2014). As a result, competition in the international sports arena has drastically increased. Modern sports and numerous scientific studies prove that only incredibly gifted athletes can conquer the top of the world sport. Indeed, they have natural inclinations to achieve magnificent results in a particular sport. Besides, they have been able to realize them in the process of improvement over the years.

Therefore, modern research focuses on many years of athletes' improvement in various sports, including team sports. Many scholars study such issues as an appropriate age for taking up sports, duration of training, an age range as for involving in top-class sports (Bisanz, & Vieth, 1997; Balyi, & Hamilton, 2003), targeted development of motor skills and sportsmanship (Bogen, 1985; Volkov, 2002; Guba, 1997; Stafford, 2005; Chirva, 2008), a structure and content of athletes' long-term improvement (Platonov, 2004; Vargas, 1998; Weineck, 2004; Olbrecht, 2007; Bompá, & Haff, 2009), training individualization (Kvashuk, 2003; Martín, 2005; Koriahin, 2014).

At the present level of football development, the requirements for athletic skills are increasing. Given a fierce competition in the international and national sports arena as never before, it is important to mobilize functional reserves and maximize individual inclinations of players to demonstrate the highest capability for sport in the period optimal for it. Such a position has determined the areas of studies, which analyzed various aspects of long-term football training. They are the following: clarifying the dependence of knowledge on the development level of motor skills (Boychenko, 1986; Smirnov, 1988; Rivera, 1995; Stark, 2010); selecting exercises and methods for controlling how trainees learn relevant techniques and develop their motor skills (Calvin, & Waty, 2007; Antipov, Guba, & Tyulenkov, 2008; Uhlig, 2012); age-appropriate training loads (Lalakov, 1998; Rowland, 2005); specific ways of implementing individualization into education and training (Dzhanuzakov, 1982; Klesov, 1991; Chernetsov, 2010; Weber, 2010; Hegen, & Schöllhorn, 2012); justifying the content of

physical and technical-and-tactical training (Uhing, 2006; Chirva, 2008; Kudyashev, 2011); specific ways of solving tactical problems depending on developmental characteristics of mental skills (Zuykov, 2002; Osipenko, 2006; Glazkova, 2011); patterns of planning the training process (Marseillou, 2008; Maksymenko, 2010; Guba, & Leksakov, 2012); specific systems for managing, selecting and orienting football players at the stages of long-term training (Helsen, Hodges, & Winckel, 2000; Kostyukevich, 2014).

It is precisely a long-term training programme focused on the demonstration of natural inclinations that is a strategic area in the training of qualified athletes under the current conditions. Adhering to qualitative characteristics of the training process should become the basis for evaluating the rational structure of a long-term training process.

Practice shows that the knowledge accumulated over many decades does not bring the expected results. The main reasons behind such a situation in children and youth sport include the lack of adequate methodology for their understanding; incorrect criteria for evaluating the training process, such as fulfilling sporting requirements from a young school-age, a focus on results in children's competitions, early narrow specialization, intense cycles of training and competition which precipitate the training process and, thus, destroy the system of regular training, leading to overtraining, traumatism and quitting sports (Smith, 2003; Shinkaruk, 2011; Platonov, & Bolshakova, 2013; Stenson, 2005, April 7).

In this regard, it is relevant to study the existing system of football. It must be acknowledged that Ukrainian football, which is characterized by a well-established system of long-term training, a system of competitions, long-standing sporting traditions, confirmed eighth place at the World Cup in 2006, the title of European champion among boys under the age of 19 in 2009 and the title of World Champion among players under the age of 20 in 2019 and continues participating in the Champions League and Europa League competitions, can be considered a good model to study how well this system fits objective patterns aimed at maximizing opportunities for each athlete to demonstrate his or her maximal athletic performance.

The paper aims to theoretically and methodically justify the periods of training sessions and competitions of youth football players.

The structure and content of long-term training of youth football players

A long-term system of training youth football players incorporating an age range optimal for the stages of sports improvements should rely on an age optimal for the demonstration of first significant success in sports,

objective patterns of developmental age, cultivation of sportsmanship, adaptation of different functional systems to training and competitive influences, as well as specific characteristics of football as a sport.

It is well-known that youth football players start playing football on a high professional level at the age of 19-21 years after 10-12 years of regular training. In some cases, there is a certain decrease or increase in the training period due to individual characteristics of cultivating sportsmanship in football.

Both the structure and stages of youth football players' long-term training should be based on the patterns and principles of developing the highest standards in sportsmanship, which allows one to fully realize natural inclinations of athletes and ensure that they achieve the top level in sport within an optimal age range for their demonstration (Bakhmat et al., 2019; Behas et al., 2019; Bezliudnyi et al., 2019; Halaidiuk et al., 2018; Maksymchuk et al., 2018; Sitovskiy et al., 2019; Melnyk et al., 2019; Sheremet, Leniv, Loboda, & Maksymchuk, 2019; Gerasymova et al., 2019; Byvalkevych, Yefremova, & Hryshchenko, 2020; Sebalo, & Teslenko, 2020; Makoviichuk et al., 2020; Koziuk, Hayda, Dluhopolskyi, & Kozlovskiy, 2020).

At the initial stage of training (age of 6-9), it is necessary to introduce the elements of street football into the training process, neutralize the importance of sports results, create conditions for full completion of training programmes. This stage should be aimed at promoting health and versatile physical training, eliminating deficiencies in the level of physical development, teaching relevant techniques with the widespread use of the material of various sports, movement games and gaming to create a diverse base of general and special motor skills.

The stage of preliminary basic training corresponds to the prepubertal period of adolescent development (age of 10-13). It is a period of high sensitivity for developing coordination skills and mastering technical-and-tactical skills. Therefore, it is essential to find an optimal balance between technical-and-tactical and physical training. Technical-and-tactical improvements should extremely diverse, prevent the development of severe motor skills and correspond to the development level of different motor skills. It is vital not to precipitate physical training, especially strength training, towards mastering techniques with extremely intense strength components. Results are also rather important to competitions, however, without any dominant styles, since trainees should, first of all, enjoy games and recognize the quality of individual and group actions. The goals of the second stage can be achieved through complex tasks. Complex tasks are one

of the steps in endless improvements from the simple to the complex. Footballers should learn ball possession techniques in various activities related to the game.

The stage of specialized basic training (age of 14-16) coincides with the period of significant changes in the body of the child (puberty), which will inevitably precede the stabilization of sports results, the deterioration of adaptative processes, the decline in performance, the slowdown of recovery reactions after training sessions and competitions, breaks with the existing skills and abilities, as well as the antagonism between the rate of growth and the development of the cardiovascular system. Hence, training influences start to be individualized and controlled. Thus, it is important to use various specialized movement tasks, which ensure effective improvements in techniques. Competitive practice should not be accompanied by narrow specialization and intense specialized training for a particular match. Once trainees have reached the age of 13-14, and not earlier, they can be taught team-oriented tactical actions and ways of dividing game roles (positions) since a preliminary basis of game action is “mature enough” only after the age of 14. Providing a proper basis of individual technical-and-tactical skills has been formed, group interactions can be rather productive. The third stage aims to teach the player to effectively and qualitatively apply techniques under extreme conditions, and most importantly, solve tactical problems before receiving the ball. Such a form of training organization (performing techniques under extreme conditions) should be incorporated into each lesson, only modifying the content.

The stage of training for significant success in sports is a stage of the athlete’s life when all functional systems have been formed and ensure high working capacity and immunity of the body against unfavourable factors manifested during intense training. The duration of this stage is due not only to general patterns of sports training but also to individual features of children’s development since the human body continues to develop up to the age of 20-23. The end of the stage should, where possible, coincide with the athlete’s achievement of the lower boundary of the age range, optimal for the highest results. It is crucial to provide such conditions under which the period when footballers are most likely to achieve the highest results (prepared in the course of the natural development of the body and functional transformations as a result of long-term training) coincides with the period of the most intense and difficult physical, tactical and technical training. Such a coincidence allows the most promising athletes to achieve the greatest possible results, otherwise, they will be much lower.

The cycles of training sessions and competitions of youth football players

An analysis of scientific and methodological literature, legal documents and training programmes adopted in the countries with a high level of football development has made it possible to construct models of annual programmes based on the years of study with further regulation of cycles of training sessions and competitions (see Table 1).

Table 1. *Cycles of training sessions and competitions for youth football players*

Stage	Age	The number of study hours	Game duration	Competition format
Initial training	6-7	twice for one and half hours per week (156 hours per year)	- tournament (no more than three) with a running time of two weeks; - 2x15/20 min; - up to 30 games per season.	- 4x4 (with or without a goalkeeper); - pitch: min 12x20 m; max 15x25 m (4x4); - goalposts: min 2x1 m, max 3x2 m; - ball: № 3.
	8-9	thrice for one and half hours per week (234 hours per year)	- tournament (no more than three): up to two weeks at the age of 8, up to four weeks at the age of 9; - 2x20/25 min; - up to 30 games per season.	- 4x4, 5x5, 6x6, 7x7; - pitch: min 12x20 m, max 15x25 m (4x4); min 20x30 m, max 25x35 m (5x5, 6x6); min 35 x 40 m, max 35 x 55 m (7 x 7); - ворота: 3x2 m (4x4); 4x2 m (5x5, 6x6); 5x2 m (7x7); - ball: № 3.
Preliminary basic training	10	thrice for one and half hours per week (234 hours per year)	- tournament (no more than three): up to four weeks at the age of 10,	- 4x4, 5x5, 6x6, 7x7; - pitch: min 12x20 m, max 15x25 m (4x4); min 20x30 m, max 25x35 m
	11	four times for one and half hours per week (312 hours per year)	up to six weeks at the age of 11; - 2x20/25 min;	(5x5, 6x6); min 35 x 40 m, max 35 x 55 m (7 x 7); - goalposts: 3x2 m (4x4);

			- up to 30 games per season.	4x2 m (5x5, 6x6); 5x2 m (7x7); - ball: № 3-4.
	12	four times for one and half hours per week (312 hours per year)	- 2x25/30 min; - up to 30 games per season,	- 7x7, 8x8, 9x9; - pitch: min 35x40 m, max 35x55 m (7x7); min 45x60, max 50x70 m
	13	four times for two hours per week (416 hours per year)	one game per week.	(8x8, 9x9); - goalposts: 5 x 2 m; - ball: № 4.
Specialized basic training	14-15	four times for two hours per week (416 hours per year)	- 2x30/35 min; - up to 30 games per season, one game per week.	- 11x11; - pitch: min 64x100 m, max 75x110 m; - goalposts: 7.32x2.44 m; - ball: № 4-5.
	16	five times for two hours per week (520 hours per year)	- 2x35/40 min; - up to 30 games per season, one game per week.	- ball: № 5.
Training for significant successes in sports	17-18	seven times for two hours per week – two times daily (728 hours per year)	- 2x45 min; - up to 42 games per season, one game per week.	
	19	eight times for two hours per week – three times daily (832 hours per year)	- 2x45 min; - up to 42 games per season, one game per week.	

There is no periodization in the year-long training of footballers, which is focused on achieving sports results, up to the age of 12. Aspects and ratios of various training aids change depending on the patterns of cultivating sportsmanship during the long-term training rather than the need to train for particular competitions during the whole year. At the initial stage

of training, children participate in short-term entertaining tournaments or festivals.

The first part of preliminary basic training covers performances in several representative tournaments, which can include 10-15 day special-purpose training structures (usually two micro-cycles) ensuring the periodization of elements in the year-long training. Given the start of regular competitions (age of 12), the second part of such training encourages youth football players to be scrupulous about both training sessions and various competitions.

The lack of a year-long periodization aimed at achieving high results in age-group competitions is a crucial point in organizing the training at this stage. All competitions should naturally fit into the training process.

Specialized basic training should be organized when footballers have recognized their inclinations towards sports achievements. Such training is already associated with targeted training for competitions. It also leads to a corresponding periodization of the year-long training with the features of two-cycle planning in connection with participation in competitions under spring-autumn or autumn-spring systems, when two macrocycles (especially the winter-spring one) with a long training period are clearly expressed (at the expense of the initial stage) of both basic and specialized training. The overall structure of the year-long training at this stage of long-term improvements already corresponds to that which will be used in the course of training for the highest level of sporting achievements. The only difference is that the duration of the general stage of the training period in each regular macro-cycle will tend to decrease.

Discussion and conclusions

The scientific value of the research lies in the fact that, for the first time, a theoretical model of rational construction of a system of footballers' long-term training for sportsmanship has been justified. It is shown that the creation of a long-term training programme for young footballers should be closely coordinated with qualitative transformations of three interdependent elements, which are crucial for developing youth and reserve football: 1) the training system (training modes, training technologies); 2) competition systems (modes and formats of competitions); 3) systems for training coaches (the content of training).

Many studies prove that the effectiveness of training children at initial stages does not lie in precipitating the training process, early narrow specialization, achieving the highest level of sporting achievements in

children and youth competitions, which lead to burnout of a young athlete (Deyou, 2005; Platonov, & Bolshakova, 2013). Instead, it depends on the realization of children's potential and natural inclinations and higher achievements in the lower boundary of the age range optimal for a particular sport (Balsevich, 2009; Platonov, 2013). As a result, the above-mentioned aspects have necessitated the current study.

It is impossible to organize the rational long-term training for footballers given the abundance of disparate data on youth and reserve sport, the lack of adequate methodology for their understanding and the existing false criteria for evaluating the training process. The training process can be properly monitored in an organic interaction between training systems and organization of competitions, taking into account the attainment age of young athletes. Therefore, it is essential to ensure the interaction between children, youth, reserve and professional sports to form the promising youth through involving the most gifted young men from sports schools and academies in the top sport with the subsequent realization of their capabilities (Platonov, 2004).

The data discovered during the research have supplemented and proved that the system of competitions in the long-term training of footballers should organically combine the goals, objectives and content of the training process at different stages of such training (Platonov, 2013).

The research findings have become the basis for formulating the main provisions of the interconnection between children, youth, reserve and professional football in a unified system of the long-term training; developing the national systems of the long-term training for footballers abroad; highlighting factors which may impede the effective functioning of the multi-year process of training footballers for higher achievements within the current system; generating scientific knowledge about creating a rational system of the long-term training for footballers based on proper transformations in the training system (training cycles and technologies), the system of competitions (cycles and formats) and the system of training coaches (training content). The technology of the long-term training programme for youth football players is characterized by functionality and accessibility. It is based on the expansion of initial training along with the establishment of optimal age ranges of the stages in the long-term training; the establishment of optimal training cycles and formation of training groups by years of study at sports schools; the implementation of a stage-based system of technical-and-tactical training; the introduction of health-promoting methods of physical training; the transition from a unified methodical approach to an individually differentiated system of organizing a

training process; the implementation of the methodology for integral evaluation of youth football players' motor skills; the establishment of objective criteria for evaluating the performance of children's coaches; the introduction of a rational system of children's and youth competitions; the implementation of a unified program of training and advanced training for coaches, which ensures the use of modern training technologies, reorganization of children's competitions and, in particular, reconsideration of training strategies and, accordingly, positions in the system of coach-trainee relations, as well as criteria for evaluating the effectiveness of children's coaches' performance.

The practical implementation of the formulated provisions can help coaches and athletes to rationally and effectively organize a multi-year process aimed at training a qualified sporting reserve for professional football.

Thus, three sets of data have been obtained in the course of the research: confirmatory, complementary and completely new ones, which form a coherent system of scientific knowledge about the rational organization of the long-term training for footballers so that they can achieve excellence in sport.

As evidenced by international experience, the conditions for gradual development of young players' versatile skills can be created in light of the following considerations: first, children under the age of 12 should not be involved in formal competitions to ensure the quality and effectiveness of the training process aimed at individual development and training of creative players; second, it is essential to conduct educational training sessions through gaming with obligatory consideration of children's age and individual characteristics. It is gaming that is the key to effective learning, which contributes to developing individual capabilities of children, their gaming spirit and technical-and-tactical skills, which will further determine players' potential at the professional level.

In Ukraine, the current practice, regulations and content of football education create contradictions between the declared purpose of training qualified sports reserve and the requirements to achieve it. It is manifested in the fact that the activities of children, youth and reserve sport are directed not at accomplishing the tasks of various stages of training but meeting the requirements for sports training, starting from the stage of initial training. Besides, the existing system of the long-term training is focused on age-group competitions, starting from childhood, which leads to the early growth of sporting results, does not help to solve educational problems and violates the principles and patterns, which are the basis for the rational

development of the long-term training system. Finally, the implementation of intense training cycles is related to the exploitation and exhaustion of the growing child's body long before reaching the lower boundary of the optimal age range for demonstrating the first significant success.

Practical implementation of the formulated holistic knowledge about a rational development of a system of training qualified youth for professional football and technology for its implementation will reorient the long-term process of improvement from a priority of achieving sporting results towards ensuring a high level of sportsmanship and adjust it to the national interests of football development and the standards of child and youth football development in the world.

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