

# The Characteristics of Building Long-Term Training Systems for Footballers in Foreign Countries

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**Abstract:** A scientific understanding of building a rational system of long-term training for footballers in Ukraine, as well as ways of its practical implementation, should rely on foreign experience in this field to be effective. The article aims to theoretically and methodologically justify foreign experience in building a rational system of long-term training for footballers. Each country demonstrates its options for solving this particular problem. The countries occupying leading positions in European football have well-established organizational and management systems for training and selection of athletes in the process of long-term improvement. In general, all of the above-mentioned countries use similar systems with their own specifics stemming from national traditions, economic and logistical conditions. Differences in the training of footballers from different countries are due to the different role and degree of participation of governmental, non-governmental and private structures.

**Keywords:** *Football federation, national programmes, the UK, Germany, Spain, France, the Netherlands, Brazil.*

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## Introduction

The success of any country in building and enabling a system of long-term training for footballers is undoubtedly the merit of theorists and practitioners. However, it is generally believed that modern science and practice, for objective reasons, cannot develop solely within a narrow national framework, based on the achievements of only one country. Therefore, it is indisputable that a scientific understanding of building a rational system of long-term training for young footballers in Ukraine, as well as ways of its practical implementation, should rely on foreign experience in this field to be effective. This assertion can be confirmed by a particularly apt remark by the Russian scientist Lalakov (1995) on the peculiarities of training of Soviet football teams: “As a rule, our teams tried something new only when it was asserted on the world and European stage”. Different aspects of the problem under study are covered in the works of many scholars Nikolaienko (2021), Prots (2021), Halaidiuk (2018), Berbets (2021), Komogorova (2021), Sitovskiy (2019), Karasievych (2021).

Maksymenko (2010) emphasizes an urgent need to study and use foreign experience in the training of young athletes in Ukraine. He indicates that the attempts to study and use foreign experience in building training systems for players in national practice are fragmentary and not always successful. In most cases, these attempts are associated either with blind imitation of individual training schemes or with the implementation of approaches to building training systems for adult athletes, borrowed from coaches of Ukrainian professional teams, in the training of young players. The researcher highlights the paramount importance of studying how they elaborate long-term training for young players in France, Spain, Italy, the UK, Germany, the Netherlands, Portugal, Bulgaria, Brazil, Chile, Peru, Argentina, Mexico, Canada and the USA. At the same time, he rightly notes that their systems of long-term training for footballers are based on the main theoretical principles developed in the Soviet Union.

Still, one cannot but agree with the author's statement that one of the main differences, in comparison with the Ukrainian system of training sports reserve, is the lack of a single national training programme for young footballers in these countries. The conducted analysis shows that national programmes are serving as a basic guidebook for long-term training for footballers in many countries. They are published by relevant football federations of Austria (Frizi, 2007), the UK (SYFA, 2011), Brazil (Sans, & Frattarola, 2007), Belgium (Browaeyns, 2010), Germany (Schomann, Bode, & Vieth, 2014), Spain (Casais, & Conde, 2008), Italy (FIGC, 2008), Canada

(CSA, 2007), Netherlands (Kormelink, & Seeverens, 1997), Peru (Federación de Fútbol de Perú, 2005), the USA (NSCAA, 1996), France (Leroux, 2006). These programmes differ from Ukrainian ones in that they do not record quantitative indicators of workload by years and types of training.

**The article aims** to theoretically and methodologically justify foreign experience in building a rational system of long-term training for footballers.

## **The UK**

The Football Association (FA) develops and implements national programmes for the development of grassroots football, designed for four years. Their main goals are to raise the standards of coaching, administration and refereeing, protect children playing football and maintain order outside the sports grounds (The Football Association, 2011a). As a result of such programmes, the total number of teams grew to almost 100 000, of which almost two-thirds were children's teams belonging to various formats of football organization in the previous years (The Football Association, 2010a).

These programmes envisage reducing the dropout rate of children aged between 14 and 19 from football, as well as improving football infrastructure in secondary schools. Particular attention is paid to methods of working in football schools (The Football Association, 2010b). Now, social workers must participate in the implementation of these programmes, which placed additional costs on clubs. At the same time, the number of people who believed that the new standards improved the quality of football increased up to 70% (The Football Association, 2010a). By 2015, 80% of children's and youth teams were obliged to have licensed coaches (The Football Association, 2011a). Also, the number of referees increased from 26.700 to 28.200. The necessary funds were provided for their preparation. However, the main part of the funds (150 million pounds) was spent on infrastructure development, including construction, reconstruction and arrangement of stadiums and venues (The Football Association, 2011a).

The activities of football academies are of paramount importance, too. The FA follows a special rule to avoid additional difficulties. Indeed, football academies can be attended only by children under the age of 13 who live within an hour's drive from them and children under the age of 15 who live within an hour and a half drive. At the same time, football clubs pay for accommodation in urban families for those children who are over 15 and who live far away. Clubs select such families who can create favourable living conditions for young athletes (The Football Association, 2011b).

Football academies provide free training since they start earning income from young athletes once they have grown up. When young players reach the age of 16, clubs sign an agreement with their parents on the possibility of their playing and begin paying them wages. There are written agreements with the parents of those players who are under this age. They, however, are primarily related to the transition from school to school. In England, it is possible only with the payment of a small compensation from the previous football establishment established by the Premier League. Parents cannot pay for football education of their children to the academy. Children can be admitted to football academy based on the recommendation of scouts and after a six-week probationary period. If they are not qualified enough, they may be expected to leave it. Such academies are headed by a director, who is in charge of three full-time coaches and ten staff members. Organizational and financial issues lie with the administration of clubs. Academy staff only monitor pitches and manage the training process (Getchell, 2014). The entire structure of academies, their staff and even sample contracts have been developed by the FA Premier League. Therefore, clubs train young players according to uniform rules and in a single legal field (The Football Association, 2011b). The cost of maintaining such academies is approximately two million pounds per year (Getchell, 2014).

It is important to note that coaches play a leading role in academies. Liverpool football club clearly shows how prestigious the profession of children's coach is in England. In recent years, a large number of professionals have applied for coaching positions (about 50 applications, including from former players of Liverpool). Most of the applicants were rejected since the positions are filled by highly qualified and well-paid professionals (their salary being from 25 to 50 thousand pounds per year) (Williams, 2014).

## **Germany**

In Germany, they realized the need to discover a qualitatively new approach to training football youth after the failure of the national team at the 1998 World Cup. The talent support programme (Talentförderprogramm) was introduced during the season 2002-2003 (Tarasenko, 2013). The German Football Association (DFB) annually allocates about 10 million euros for this programme (Tarasenko, 2010). To date, DFB has built 366 training bases scattered across the country and approximately evenly spaced. The point was that children who wanted to

become footballers should be on an equal footing and use the same opportunities.

The presence of such a large number of bases has allowed one to attract 22,000 children aged between 11 and 17 to play football. A total of 1,200 local coaches worked with them. The entire system of training young footballers is coordinated by 29 DFB specialists. They regularly visit training bases, instruct coaches and children and analyze the situation. As a rule, children aged between 11 and 13 train separately and those aged between 14 and 17 together. From the age of 14, children begin to learn the DFB team tactics (Deutscher Fussball-Bund, 2009).

## **Spain**

In contrast to Germany, where the system of long-term training for young footballers was modernized at a fairly rapid pace, there was no such a “revolution” in Spain. Qualitative transformations took place gradually there. Researchers claim the starting point for change was the period of 1995-96 when the Royal Spanish Football Federation (RSFF) held a series of talks with clubs on the prospects of the national team (Hegen, & Schöllhorn, 2012).

Shaping conceptual approaches to creating a new system, the RSFF proceeded from the real situation in club football in the country. In doing so, it was taken into account that most clubs did not have large budgets and, therefore, could not hire the leading footballers. Due to this, Spanish clubs were forced to train young players themselves and develop their own football schools (Krasnoff, 2013).

During the 1990s, they created a system of children’s and youth and reserve football in Spain. Each major club (such as FC Barcelona and FC Real) has 13 teams consisting of players of different ages. The RSFF organized a separate league for each age group to hold regular children’s competitions (Krasnoff, 2013).

Today, the RSFF comprises 19 regional football federations, and each of them has its own team. In regional federations, scouts monitor performances of players in each age league and include them in their national teams. All information about players is transferred to the centre, that is the RSFF. Scouts of national teams watch matches between regional national teams and thus select players for the youth national team of the country (Tarasenko, 2012).

One should pay particular attention to the high efficiency of the considered system of long-term training, which ensures annual selection to national teams of about 100 players each year of birth.

The Institute of National Teams of Spain consists of eight teams, including national, youth and six teams for each age between 15 and 20. When a senior coach of one of the national teams (except the first one) resigns or is promoted, his assistant must be appointed in his place. This ensures the continuity of long-term training (Tarasenko, 2012).

A technical director of the RSFF fulfils the monitoring function in the system of long-term training. One of the most successful technical directors is Ginés Meléndez. Being one of the most successful youth coaches of today, he has won several titles with Spanish footballers.

## **France**

Analyzing the system of long-term training for young footballers in France, one should take into account great potential prospects for its effective development, which are inherent in the system of sports organization in this country. Its distinctive features involve the joint management of state funds by the state itself (the Ministry of Youth and Sports) and the public sports movement represented by the National Olympic and Sports Committee, which in turn represents all sports federations (Krasnoff, 2013).

In such circumstances, the French Football Federation (FFF) can maintain seven regional training centres for young footballers, which are funded by the state. They train the best 12-15-year-old players who live in surrounding areas. In France, every top football club is required to have its own boarding school, the so-called skills centre (Krasnoff, 2013). One of the most famous centres is the Fernand Sastre National Technical Center (Clerfontaine), located 50 kilometres northwest of Paris. It was established on the initiative of Sastre in 1988, who headed the FFF between 1972 and 1984. The centre performs several important missions. First, Clerfontaine is a training centre for the first national team of France. Secondly, other national teams are also deployed here if necessary. Third, young women footballers are trained at the centre, too. Finally, fourthly, one of the best and the most famous football academies in the world is located here (Krasnoff, 2013).

The centre accepts children who meet strict requirements, including French nationality and residence in the Paris region or the surrounding regions. The selection of candidates consists of several stages. First of all, the candidates must qualify for the selection in their city. If a geographical criterion is met, they should appear for inspection in the suburbs of Paris. Providing that young players meet the requirements of local coaches, they

stay for another three days. Finally, no more than 24 people can be recruited from the forty contenders (there can be no more than four goalkeepers in the list).

The following aspects are strictly regulated: the number of training sessions per week; the number of tournaments in which players of one or another age category participate; their stay at home and return to the academy. Only when children reach the age of 13, they can be admitted to the academy. The training process lasts three years. It is important to note that the efficiency of the training process is rather high since every year an average of six or seven graduates of the academy sign contracts with professional clubs. Academy coaches effectively implement an individual approach to each trainee. Much attention is paid to the development and consolidation of skills in playing with the “weak” left foot. Emphasis is also placed on psychological features of such training. The academy accepts girls, too. The age requirement is slightly higher for them, that is 15 years old. In 2006, a medical centre was established in Clairefontaine. Not only students of the centre but also other athletes can receive consultation here.

Also, the centre holds various seminars due to their material and technical support. Their facilities are the following: classrooms equipped with the latest technologies; libraries with specialized literature for coaches and sports managers; archives of videos of football programmes, matches of French club teams and the national team.

Once young players turn 15, the most trained of them are accepted by professional clubs. From the moment the boys reach the age of 16, clubs can enter into five-year contracts with them for the duration of their attendance of the club’s boarding school (i.e. up to 21 years old) and, thus, retain talented players until they join the senior team. Only a club that owns a boarding school with coaches licensed to work with young players is entitled to participate in official tournaments.

In addition to Clerfontaine, there are eight other elite football academies in the country (Castelmaurou, Chateauroux, Leuven, Dijon, Marseille, Ploufragan, Vichy and Reims).

Boarding schools are entitled to several categories of funding. The more qualified athletes boarding schools train, the higher the category of their funding is. However, serious requirements are imposed on educational subjects included in the secondary school curriculum, as well as on the progress of young footballers. All these issues, including the smallest details, are reflected in the French Football Charter.

The same is the case with contracts. The club where the young footballer was trained, as compensation for the costs incurred with it, is

vested with the priority right to conclude the first professional contract with this player in the future. The duration of the specified contract may vary and should not exceed three years.

The transfer of young players to professional clubs should be accorded with the established procedure. There is no play for championship among junior teams (16-18 years old) in the top division. It must be noted that 16-18-year-olds are automatically promoted to strong amateur teams in top-division clubs that dominate the regional league.

Finally, the number of professional footballers allowed to be included in the list of teams of the first and second leagues may not exceed 21 individuals. This limit does not apply to those young players who have become professional players in their home clubs (European Club Association, 2012).

### **The Netherlands**

In this country, the system of long-term training for young footballers is carried out mainly by football academies of clubs (Kormelink, & Seeverens, 1997).

It relies on the use of the so-called unified royal methodology of teaching young footballers. It consists in the fact that the most talented trainees, starting from the age of 10, develop and improve based on their strongest individual abilities. If one is better at speed dribbling, another at power struggle and the other demonstrates high performance, they are led in this way and are already preparing for a certain position, i.e. a specific role. Besides, the most gifted children are transferred to the group of trainees one or two years senior. To this end, training programmes are divided into two blocks. The first block (80% of study time) aims to develop qualities common for all trainees. The second block (20% of study time) seeks to cultivate the strongest individual qualities of young players.

The high efficiency of the Dutch system of training young footballers (on average eight out of ten academy graduates become professional footballers) is also ensured by some other important components (European Club Association, 2012). Due to a well-established selection system, children recruited from the age of seven must meet various requirements. In 2005, only one out of 1100 candidates was admitted to the football academy "AFC Ajax De Toekomst. The academy recruits players through scouting. The main region for finding trainees is an area with a radius of 60 kilometres from the academy. It is the maximum acceptable distance that allows children to combine classes at the academy with



ordinary life. The academy administration believe all children should live with their parents and study in regular schools. They consider boarding schools to be ineffective. Living in such conditions may be too stressful and even unnatural for children. Interestingly, children from abroad are accepted by families living in Amsterdam. In addition to coaches and doctors, AFC Ajax De Toekomst staff includes teachers who help children with their homework after training sessions.

The academy employs about 70 scouts from all 12 provinces in the Netherlands. Most of them are volunteers rather than professionals who receive symbolic compensation for their work. Most often it is a season ticket for the club's home matches. They can observe potential candidates for several weeks, months, or even years, after which one of the club's professional scouts must watch them and decide whether to recommend them to a coach of a certain age group. The parents of such children must be sent a letter with the notification that the academy staff monitor the progress of their child who may soon be invited to AFC Ajax De Toekomst. When parents send their children to the academy, they know that it trains footballers and, at the same time, provides children with proper education. Coaches are generally aware of everything that happens to children. It is obligatory to send a teacher even to children's tournaments since they will not allow children to fall behind the school curriculum and their peers.

Importantly, only highly qualified coaches who have undergone special training are involved in the educational process. Each age group is allocated two main coaches, specialists in athletic technique and motor skills development, and a goalkeeper coach. The entire preparation process is controlled by the headteacher of the school, who is also called a coaching methodologist.

It should be noted that coaching positions are difficult to obtain in the Netherlands. It takes six years to obtain a coaching license. The relaxation of the rules is only applicable to those who have played for the national team over 40 matches or have impressive international achievements at the club level. All others are required to undergo a lengthy preparation process. After the first year of training, the coach can work with children's teams, after the second one with youth teams. After the third stage of training, they can be assistants in adult teams. Once they have completed two-year practical training, they can start the last course to obtain a license of the highest level. Thus, the professional development of prospective coaches is carried out at a very high level. The duration of such training is because they teach not only football-related subjects or physiology but also the rules of conduct in a stressful situation or communication with the press.

The breadth of coaching education is further embodied in the qualifications of trainees.

In the Netherlands, trainees are assigned a new coach every year. Under such conditions, they are educated not by a coach alone but by the system as a whole.

An important factor is the ideal conditions for training sessions, which should be conducted only within modern facilities. On 14 hectares of land, there are seven grassy and one artificial football field, as well as a two-story building with 14 changing rooms, offices and other necessary infrastructure, a gym, and a swimming pool. The academy uses a complex of video systems which allows coaches to watch and analyze training sessions and matches. Such an analysis is conducted for all groups starting from U-17. The academy spends 6.5 million euros per year (European Club Association, 2012).

## **Brazil**

The countries of the Latin American region have also paid much attention to training young footballers since the late 20<sup>th</sup> century (Luther, 2008; Federación de Fútbol de Perú, 2005; Sans, 2012). However, unlike Western European countries, Latin Americans build their long-term training systems based on fundamentally different targets. They prepare young players not so much for their own needs as for foreign clubs. At the same time, at least two goals are pursued: 1) to receive income from transfers; 2) to prepare highly qualified players, who have gained extensive experience in the leading clubs of the world, first of all, in the famous European clubs, for the national team (Krushelnytska, 2009).

In Brazil in the 1970s, football schools began to be established at clubs. They are focused on training many players for foreign clubs. One of the first such schools was founded at the famous São Paulo FC in 1978. The educational process consists of three stages and covers three age groups.

The first stage covers the age of six to ten. Trainees are distributed across ordinary football schools, which are located in different parts of the city, in its suburbs and other localities of the state. The club only supervises these schools. The activities of twenty of them are fully funded by the club since they are included in its organizational structure. All other schools are under the patronage of the club. It means they regularly receive assistance from it, including ammunition, inventory, medical equipment, drugs. They are also provided with doctors, coaches and selectors.

Schools provide training services free of charge. The search for candidates is carried out by the club's selectors among children who are fond of street football. Several times a year, boys selected in this way are invited to a two-week training camp, which is usually located at the premises of hotels owned by the club. Candidates undergo a medical examination and take special tests to determine their level of preparedness. The main attention is paid to the level of using football techniques.

The selected candidates are distributed among the primary schools that are part of the club. Since here they are taught only football, they also must go to regular secondary schools.

The second stage relates to the age of ten to sixteen and involves preparing boys who have been trained in primary schools. The best of them are admitted to the football school of the club. It already combines sports training with general education. At the same time, boys who under the patronage of other teams or from street football teams can also be trained in this school.

When trainees reach the age of 14, the club may offer them to live on the training base in some exceptional cases. At this stage, training sessions are conducted three times per week (from morning to evening). The rest of the time is allocated to regular training, including warm-up activities in the morning remains.

The third stage is designed for those trainees aged between 16 and 18. It is mainly devoted to specialized training. All trainees live in the club area. At the end of each week, matches are held as part of special tournaments, such as the state championships among juniors. At this stage, the club aimed to develop diverse knowledge and skills in trainees. They will help them to successfully adapt to any of the existing manners of the game in the world when concluding contracts with foreign clubs.

At all stages of training, one can observe a rather strict expulsion of trainees who have not completed the programme. If a young footballer is not considered promising, he is expelled. The first stage of training involves an average of 120 trainees, the second one about 60 trainees and the third one 25-30 trainees.

The long-term training of young footballers in São Paulo FC shows good results largely due to the well-developed infrastructure. In a relatively small area, there are several quality pitches, classrooms for theoretical classes, a gym, a swimming pool, a hotel, a canteen, a press centre. Here is the medical building, which is considered one of the most modern centres of sports physiotherapy and injury treatment in the world.

## Conclusions

In recent decades, human resourcing of professional football abroad is influenced by the following two trends (Maguire, & Pearton, 2000). The first trend lies in involving highly qualified players from abroad, which enables clubs to achieve the desired sports and economic results relatively quickly. The second trend implies discovering talented children and helping them achieve the level of sportsmanship due to long-term systematic training.

Today, both individual football clubs and football governing bodies are starting to believe that it is the second trend that should be implemented in the practice of human resources in football since it provides the best prospects for national football as a whole. Therefore, it is essential to analyze approaches which the strongest countries in football use. The results of such an analysis can be useful for Ukrainian professionals to adapt them to the needs of human resourcing of professional football in Ukraine.

The analysis of literature sources and activities of foreign football shows that the issues of training sports reserve are solved at two levels, namely, the national level and the level of football clubs (Tarasenko, 2012; European Club Association, 2012). Each country demonstrates its options for solving the issue of training young footballers (Nikolaienko, & Balan, 2012).

In the strongest countries in European football, there are well-established organizational and management systems for training and selection of athletes in the process of long-term improvement. In general, all of the above-mentioned countries use similar systems with their own specifics stemming from national traditions, economic and logistical conditions. Differences in the training of footballers from different countries are due to the different role and degree of participation of governmental, non-governmental and private structures.

The authors of the article believe that the most important aspects of foreign experience in optimizing the system of long-term training for young footballers, which should be used in Ukraine, are as follows: the structure of the long-term training system; technological principles of the long-term training system focused on the achievement of sportsmanship; the organization and implementation of the training process; the organization of competitions; organizational principles of the long-term training system.

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## References

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- Berbets, T., Berbets, V., Babii, I., Chyrva, O., Malykhin, A., Sushentseva, L., MEDYNSKII, S., Riaboshapka, O., Matviichuk, T., Solovyov, V., Maksymchuk, I., & Maksymchuk, B. (2021). Developing Independent Creativity in Pupils: Neuroscientific Discourse and Ukraine's Experience. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 314-328. <https://doi.org/10.18662/brain/12.4/252>
- Browaey, B. (2010). *The philosophy of youth development at the Belgian FA*. Retrieved from <https://www.soccercoach.eu/info/Belgian%20FA%20Important.pdf>
- Casais, L., & Conde, M. (2008). Fútbol Base: El entrenamiento en categorías de formación. *Moreno Y Conde Sports*, 1.
- CSA. (2007). *Long term player development*.
- Deutscher Fussball-Bund. (2009). *DFB-Elitförderung*. Munster: Philippka-Sportverlag.
- Federación de Fútbol de Perú. (2005). *Principios básicos para el formador*
- FIGC. (2008). *Guida Tecnica Per Le Scuole Di Calcio*. Roma
- Frizi, H. (2007). *Lehrplan Fußball*. Aachen: Meyer & Meyer
- Getchell, Ch. (2014). *US Youth Training Systems vs. England*. Retrieved from [http://www.socceru.com/2014/us\\_youth\\_soccer\\_training\\_vs\\_england\\_academy.htm](http://www.socceru.com/2014/us_youth_soccer_training_vs_england_academy.htm)
- Halaidiuk, M., Maksymchuk, B., Khurtenko, O., Zuma, I., Korytko, Z., Andrieieva, R. ... Maksymchuk, I. (2018). Teaching approaches in extracurricular physical activities for 12-14-year-old pupils under environmentally unfavourable conditions. *Journal of Physical Education and Sport*, 18(4), 2284-2291. <http://efsupit.ro/images/stories/decembrie2018/Art%20344.pdf>
- Hegen, P., & Schöllhorn, W. (2012). Lernen an Unterschieden und nicht durch Wiederholung. *Fussballtraining*, 3, 41-52
- Karasievych, S., Maksymchuk, B., Kuzmenko, V., Slyusarenko, N., Romanyshyna, O., Syvokhop, E., Kolomiitseva, O., Romanishyna, L., Marionda, I., Vykhrushch, V., Oliinyk, M., Kovalchuk, A., Halaidiuk, M., & Maksymchuk, I. (2021). Training Future Physical Education Teachers for Physical and Sports Activities: Neuropedagogical Approach. *BRAIN. Broad*

- Research in Artificial Intelligence and Neuroscience*, 12(4), 543-564.  
<https://doi.org/10.18662/brain/12.4/264>
- Komogorova, M., Maksymchuk, B., Bernatska, O., Lukianchuk, S., Gerasymova, I., Popova, O., Matviichuk, T., Solovyov, V., Kalashnik, N., Davydenko, H., Stoliarenko, O., Stoliarenko, O., & Maksymchuk, I. (2021). Pedagogical Consolidation of Pupil-Athletes Knowledge of Humanities. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13(1).  
<https://doi.org/10.18662/rrem/13.1/367>
- Kormelink, H., & Seeverens, T. (1997). *Developing soccer players: the Dutch way*. Versand: onLi Verlag
- Krasnoff, L. S. (2013). *The making of Les Bleus Sport in France, 1958-2010*. Lanham: Lexington
- Krushelnytska, O. V. (2009). *Metodolohiia y orhanizatsiia naukovykh doslidzhen* [Methodology and organization of scientific research]. Kyiv: Kondor.  
[http://biology.univ.kiev.ua/images/stories/Upload/Kafedry/Biofizyky/2014/kryshelnytska\\_metod\\_org\\_nayk\\_dosl.pdf](http://biology.univ.kiev.ua/images/stories/Upload/Kafedry/Biofizyky/2014/kryshelnytska_metod_org_nayk_dosl.pdf)
- Lalakov, G. S. (1995). Gotovim iunykh futbolistov [Training young footballers]. *Physical Education in Siberia*, 2, 63–66.
- Leroux, Ph. (2006). *Football. Planification et entrainement*. Paris: Editions Amphora
- Maguire, J., & Pearton, R. (2000). The impact of elite labour migration on the identification, selection and development of European soccer players. *Journal of Sports Sciences*, 18 (9), 759–769.
- Maksymenko, I. H. (2010). *Teoretyko-metodychni osnovy bahatorichnoi podbotovky yunykh sportsmeniv u sportyvnykh ibrahkh* [Theoretical and methodical principles of long-term training for young athletes for sports games]. (Abstract of postdoctoral thesis). Taras Shevchenko Luhansk National University, Luhansk
- Nikolaienko, V. V., & Balan, B. A. (2012). Analiz ihrovoi diialnosti futbolistiv 19-21- richnoho viku v providnikh komandakh Yevropy [Analyzing gaming activities of footballers aged between 19 and 21 in the leading teams of Europe]. *Pedagogy, Psychology and Medical-Biological Issues of Physical Education and Sport*, 10, 45–49.  
<https://www.sportpedagogy.org.ua/html/journal/2012-10/12nvvlte.pdf>
- Nikolaienko, V., Maksymchuk, B., Donets, I., Oksom, P., Verbyn, N., Shemchuk, V., & Maksymchuk, I. (2021). Cycles of Training Sessions and Competitions of Youth Football Players. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13(2), 423-441. <https://doi.org/10.18662/rrem/13.2/429>
- NSCAA. (1996). *Coaching soccer*. Philadelphia, PA: Masters Press
- Prots, R., Yakovliv, V., Medynskyi, S., Kharchenko, R., Hryb, T., Klymenchenko, T., Ihnatenko, S., Buzhyna, I., & Maksymchuk, B. (2021). Psychophysical

- Training of Young People for Homeland Defence Using means of Physical Culture and Sports. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 149-171. <https://doi.org/10.18662/brain/12.3/225>
- Sans, A., & Frattarola, C. (2007). *Manual para la organizacion y el entrenamiento en las escuelas de futbol*. Barcelona: Paidotribo.
- Schomann, P., Bode, G., & Vieth, N. (2014). *Kinderfußball: Ausbilden mit Konzept 1*. Munster: Philippka-Sportverlag.
- Sitovskiy A., Maksymchuk B., Kuzmenko V., Nosko Y., Korytko Z., Bahinska O. ... Maksymchuk, I. (2019). Differentiated approach to physical education of adolescents with different speed of biological development (2019). *Journal of Physical Education and Sport*, 19(3), 1532 – 1543. <http://efsupit.ro/images/stories/august2019/Art%20192.pdf>
- SYFA. (2011). *The National Player Pathway: 7v7s Ages 9-12*. Retrieved from <https://www.scottishyouthfa.co.uk/images/Information-Downloads/Football-Games-and-Tournaments/Laws-of-the-Game-Small-Sided-Games-and-Player-Pathway/SYFA-sfa-player-pathway-7v7.pdf>
- Tarasenko, I. (2010). 10 milioniv v rik - za maibutnie Bundestim: Stilky platyt nimetskyi futbolnyi soiuz, shchob rostyty talanty dlia zbirnoi [10 million per year – for the future Bundesteam: the German football union pays so much to grow talent for the national team]. *Soviet Sport*, 90 (18145), 7.
- Tarasenko, I. (2012). Ispanska futbolna evoliutsiia: yak nevdakhy postupovo peretvorylysia v krashchu futbolnu krainu svitu [Spanish football evolution: how the losers have gradually become the best football country in the world]. *Soviet Sport*, 99, 8.
- Tarasenko, I. (2013). Zvychaine nimetske dyvo [An ordinary German miracle]. *Soviet Sport*, 61 (18987), 7.
- The Football Association. (2010a). *The FA Youth Development Review*. Retrieved from <https://www.thefa.com/-/media/cfa/northamptonshirefa/files/youth/u11-and-u12-youth-development-review-booklet.ashx>
- The Football Association. (2010b). *The FA Group Strategic Plan*. Retrieved from <https://www.thefa.com/news/2014/jan/01/fa-strategic-plan-2011-15>
- The Football Association. (2011a). *Developing football for everyone: National Game Strategy 2011-15*. Retrieved from <http://www.thefa.com/~media/Files/PDF/Get into Football/1134 FA NGS 200x260 Booklet 07.ashx>
- The Football Association. (2011b). *Rules and regulations of the Association season 2012-2013*.
- The Scottish FA. (2010). *Developing talent plan*.

- Williams, S. (2014). *Football academies: kicking and screaming*. Retrieved from <http://www.stumbleupon.com/2014/su/2QEeS/www.telegraph.co.uk/sport/football/4938593/Football-academies-kicking-and-screaming.html>
- European Club Association. (2012). *Report on youth academies in Europe: youth development central for the future of club football*. Retrieved from <https://www.ecaeurope.com/media/2730/eca-report-on-youth-academies.pdf>