World's leading countries experience in the management of elite sports: a review article

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Abstract

Purpose: To present a comparative description of elite sports management in the world sports leaders and to substantiate the possible use of the experience of these countries for elite sports development in Ukraine.

Material and methods: The analysis of literature sources was carried out by working with scientific works, which are presented in the databases "Web of science", "Scopus", "Pub Med" and others. The literary sources were searched for according to the keywords: "elite sports functioning and development", "main indices of elite sports development", "innovations in elite sports". Next, the results were specified according to the keyword "USA", "China", "Great Britain", "Germany", "Ukraine" and separately by the keyword "comparative analysis". A total of 537 works were found according to the keywords, of which 37 were selected for the literature review. The selection was carried out as follows: first, the topic of the articles was analyzed, then, if the topic corresponded to the direction of our study, the annotation was analyzed. If the annotation corresponded to the direction of our research, the text of the article was analyzed. If the text was analyzed, then, if the topic corresponded to the direction of our study, the annotation was analyzed. If the annotation corresponded to the direction of our research, the text of the article was analyzed.

Results. The essence and peculiarities of elite sport functioning and development in USA, China, Great Britain, and Germany, the leaders of world sports are considered. It is shown that in many countries of the world, state authorities tend to pay significant attention to the field of elite sports development. It is established that in order to take the lead in world sports, in particular at the Olympic Games, the USA, China, Great Britain, and Germany are carrying out innovative development of the system of elite sport. However, the innovative development of elite sport in each country occurs according to its own scenario with due account for national specifics. At the same time, elite sport in Ukraine continues to develop according to an extensive model. The presented analysis of elite sports management in the advanced countries of the world can contribute to the improvement of the system of elite sports in Ukraine with account for foreign experience. The data obtained indicate that the system of elite sport management used in Great Britain may be the most appropriate for the functioning and development of elite sport in Ukraine.

Conclusions. One of the possible approaches to the formation and implementation of state policy in the field of elite sport is to use the successful experience of the elite sport management system, which is functioning in Great Britain.

Keywords: experience, innovations, realization, development, functioning
Анотація

Олександр Дрюков, Володимир Дрюков. Досвід провідних країн світу в керуванні спортом вищих досягнень: оглядова стаття

Мета: представити порівняльну характеристику управління спортом вищих досягнень у лідерів світового спорту та обговорити можливі використання досвіду цих країн у розвитку спорту вищих досягнень в Україні.

Матеріал і методи: Аналіз літературних джерел проводився шляхом роботи з науковими роботами, які представлені в базах «Web of Science», «Scopus», «Pub Med» та інших. Пошук літературних джерел проводився за ключовими словами: "функціонування та розвиток спорту вищих досягнень", "основні показники розвитку спорту вищих досягнень", "інновації в спорту вищих досягнень". Далі результати уточнювалися за ключовим словом "США", "Китай", "Велика Британія", "Німеччина", "Україна" та окремо за ключовим словом "порівняльний аналіз". Всього було знайдено за ключовими словами 537 робіт, з яких було відібрано для літературного огляду 37 робіт. Відбір проводився таким чином: спочатку аналізувалася тема статті, потім, якщо тема відповідала спрямованості нашого дослідження, аналізувалася анотація. Якщо анотація відповідала спрямованості нашого дослідження, то аналізувався текст статті.

Результати. Розглянуто суцільність та особливості функціонування та розвитку спорту вищих досягнень у США, Китай, Великої Британії та Німеччині – лідерів світового спорту. Показано, що у багатьох країнах світу органі державної влади прагнуть приділяти значну увагу розвитку сфери спорту вищих досягнень. Встановлено, що для досягнення провідних місць у світовому спорти, зокрема на Олімпійських іграх США, Китай, Велика Британія, Німеччина здійснюють інноваційний розвиток системи спорту вищих досягнень. Проте, інноваційний розвиток спорту вищих досягнень у кожній країні проходить за своїм сценарієм з огляду на національну специфіку. У той же час в Україні спорт вищих досягнень продовжує розвиватися по екстенсивної моделі. Представлений аналіз управління спортом вищих досягнень у провідних країнах світу може сприяти вдосконаленню системи спорту вищих досягнень в Україні з урахуванням зарубежного досвіду. Отримані дані свідчать, що найбільш перспективним прикладом функціонування та розвитку спорту вищих досягнень в Україні може буде управління спортом вищих досягнень у Великій Британії.

Висновки. Одним із можливих підходів до формування та реалізації державної політики у галузі спорту вищих досягнень – це використання успішного досвіду управління спортом вищих досягнень у Великій Британії.

Ключові слова: досвід, інновації, реалізація, розвиток, функціонування
**Introduction**

Elite sport functioning and development depends on various factors, which include national, economic, social, and cultural aspects. These factors have a significant impact on state policy and the system of training athletes [1]. At the same time, it should be noted that in many countries, the policy in the field of elite sports is implemented by various units of both state and public administration bodies and is financed from different budgets [2].

In general, the state management realization in the field of elite sports envisages the implementation of measures aimed directly at ensuring the conditions to increase the competitiveness of athletes in various sports events in the international sports arena, mainly at the Olympic Games and World championships [3, 4].

Therefore, the issue of increasing competitiveness on the world stage, in particular at the Olympic Games, is quite relevant for Ukrainian elite sport at the present stage of the world society development.

This issue became especially relevant after the Games of the XXXII Olympics in 2021 in Tokyo, where Ukraine took 44th place in the unofficial team classification [5]. It is obvious that the current national model of elite sports functioning and development does not correspond to objective realities in many respects. Therefore, there is a need to find new approaches to improving elite sports functioning and development in the country.

In our opinion, the creation of an effectively functioning system of elite sports development in Ukraine envisages determining the main directions of its future development and conducting a comparative analysis of world and national experience in this field.

The primary importance of comparative analysis is the comparison of different systems of elite sport management in Ukraine and the leading countries of the world, which will allow revealing similarities and differences in the investigated objects, regularities of development of the phenomena, the efficiency of activity of these or those countries in the development of the of elite sport.

Currently, the elite sport in the United States, China, Great Britain, and Germany holds key positions in world sports. One of the main indices of elite sport development in the world is the results of athletes' performance at the Olympic Games [6]. The performance results of the national teams of the USA, China, Great Britain, and Germany at the Olympic Games of 2004-2021 are given in Table 1 [7].

As shown in Table 1, the United States, China, Great Britain, and Germany are among the leaders in the team classification at the Olympic Games.

<table>
<thead>
<tr>
<th>Country</th>
<th>Place in unofficial team classification at the XXVII-XXXII Olympic Games (year, place)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
</tr>
<tr>
<td>Great Britain</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>6</td>
</tr>
</tbody>
</table>

In this regard, the comparative analysis of the main aspects of elite sport functioning and development in Ukraine and these countries represents scientific and practical interest, both to determine the common peculiar features of the functioning of elite sport in general and to clarify their specific features and peculiarities.

Thus, the high importance and insufficient improvement of the problem of elite sport functioning and development in Ukraine need further research.

**The objective of the study:** To present a comparative description of elite sports management in the world sports leaders and to substantiate the possible use of the experience of these countries for elite sports development in Ukraine.

**Material and methods**

**Eligibility criteria**

Articles were to be written in English and published in a peer-reviewed journal with the full version of the article available. All entries
were allowed. Studies that were neither randomized studies nor reviews were excluded.

Sources of information and search strategy

The analysis of literature sources was carried out by working with scientific works, which are presented in the databases "Web of Science", "Scopus", "Pub Med" and others. The literary sources were searched for according to the keywords: "elite sports functioning and development", "main indices of elite sports development", "innovations in elite sports". Next, the results were specified according to the keyword “USA”, “China”, “Great Britain”, “Germany”, “Ukraine” and separately by the keyword “comparative analysis”.

Study selection

The selection was carried out as follows: first, the topic of the article was analyzed, then, if the topic corresponded to the direction of our study, the annotation was analyzed. If the annotation corresponded to the direction of our study, the text of the article was analyzed. Also, in the analysis of literature sources, preference was given to sources presented in the quarters level 1 - 3 "Web of Science" and "Scopus". The first author selected articles to be included in the review. If any of the selection criteria were not met, the article was excluded from the systematic review. In case of doubt, the article was discussed with one of the co-authors until a consensus was reached.

Results

A total of 537 works were found according to the keywords, of which 37 were selected for the literature review.

The analysis of literary sources showed that state authorities in many countries of the world tend to pay significant attention to the development of the field of elite sports. An important aspect of elite sports functioning is the development and implementation of a strategy for elite sports development. For instance, in China, the strategy "JuguoTizhi" [8] which is translated as "The whole country supports elite sports" was adopted, whereas in Great Britain, "Policypaper 2010 to 2015 government policy: elite sports performance" [9], and in 2015 "Sporting Future: A New Strategy for an Active Nation" [10], which contributed to a large-scale state policy for elite sports development. In the USA, the concept of the "American development model" [11] was developed, which is the basis for the development of sports training programs in various sports events. In Germany, in 2016, a new strategy for the development of elite sports was developed and implemented, which provides for the concentration of state resources on the development of priority sports events and promising athletes capable of winning medals at the Olympic Games [12].

However, the problem of the scientific search for the mechanisms of elite sports development and elite athletes’ preparation still remains relevant. Researchers [13, 14] highlight the following main directions in the field of elite sports, which are important for achieving international sports success:

- financial support provision for elite sports;
- elaboration and realization of state policy in the field of elite sports;
- creation and support of an efficient system for the identification and development of sports talents;
- providing support to athletes during and after their sports career;
- provision of the infrastructure required for the training of high-level athletes;
- conducting the necessary scientific studies.

Analysis of the activities of the United States, China, Great Britain, and Germany in the field of sport demonstrated that despite the fact that in these countries, as well as in Ukraine, the realization of state policy in elite sport is different, there is a common keynote – the principle of sports autonomy, subsidiarity of funding, and cooperation and partnership of state and public organizations [15].

Centralized management of elite sports with budget funding exists currently in Ukraine. The highest governing body for elite sport development is the Ministry of Youth and Sports of Ukraine, which ensures the formation and realization of state policy in elite sport. Public bodies of elite sport management; national sports federations, physical culture and sports societies work under the control of the Ministry of Youth and Sports. The latter within its competence may delegate to public associations of physical culture and sport certain powers regarding the development of sports events (preparation of athletes for competitions, organization of sports events, etc.), monitoring their realization.

In contrast to Ukraine, there is decentralized management of elite sports in the USA [16, 17].

One of the characteristic features of sport functioning in the United States is the absence in the
federal government of the Ministry of Sport, or other administrative body that coordinates the development of sport [18, 19].

The main document that comprehensively regulates the field of sport, including the elite sport is the Law “On Amateur Sport” passed by the US Congress in 1978. It states that the main organizations coordinating the development of amateur sport in the country are the US Olympic Committee (USOC), associations of various sports events, etc. [17, 19, 20].

The main responsibility for the functioning and development of elite sport lies with the national sports federations, which in the United States function on the principles of autonomy, self-organization, and self-regulation. The key to the qualitative development of sports events in national sports federations is management – a control system that is aimed solely at achieving the set tasks. It should be noted that the efficiency of functioning of national sports federations is greatly affected by the work of marketing services, which play a key role in the commercial activities of sports organizations [21, 22, 23].

The use of marketing by national sports federations is carried out on many issues, including the organization of sports events, the competitive activity of athletes, infrastructure development, logistics, training of professional staff, which contributes to the attractiveness of sports event and ensures financial stability and independence of sports organization.

It should be noted that financial and economic mechanisms for the development of sports are widely used in the United States. Stimulation of sports development is realized by way of tax benefits, lending, subsidies, including in the form of exemption from payment of income tax by sports organizations. This provision is legislated in the US Tax Code [24].

Therefore, the elite sport in the United States is developed on the principles of market relations with the use of modern management and marketing mechanisms.

Unfortunately, many mechanisms and tools for regulation and development of elite sport, which are successfully used in the United States, are unlikely to be applied in Ukraine. The main reason consists in the differences in the work of state bodies engaged in the development of sport in general, and elite sport in particular.

However, the US experience of the widespread usage of management and marketing mechanisms in the sports sphere is quite successful and is of interest in terms of its analysis and possible assimilation.

The elite sport functioning and development in China and Ukraine have a number of similar features. In both countries, a centralized administrative and management structure is used. Both in Ukraine and China, state regulation one of the main instruments of which is the state budget plays a significant role in the formation and development of the elite sport.

Public funding is a major factor of elite sports development in both countries. However, China has previously recognized the need to switch from a “catching-up” model of elite sports development to an “own-based” innovation one.

The implementation of a new state innovation strategy for elite sports development in China envisages investments in infrastructure, human resources, and research services in this area [27, 28, 29].

Studying the experience of modern China in the field of sport, one should emphasize that today the country has created and continues to improve a complex system of state planning and management of elite sport development, which includes the formation of public policy, identification of its priorities, development of state programs, plans, coordination and state support of all stages of the innovation cycle of creation and use of advanced technologies in sport [30].

The modern Chinese model of elite sport has shown the ability to modify as circumstances change.

Meanwhile, the elite sport in Ukraine continues to develop according to an extensive model.

In our opinion, using the Chinese experience of elite sport development Ukraine should develop and introduce into practice a strategy for elite sport development based on strategic partnerships between the state, public sports organizations, science, education, and business, i.e. create a well-defined innovation system of elite sport with account for the national specifics of the transforming society.

In Great Britain and Ukraine, the management of elite sports is centralized. The Ministry of Youth and Sports plays a key role in Ukraine, whereas in Great Britain – the special non-governmental body “UKSport” established under the Department of Culture, Media, and Sport. Two-thirds of its funding comes from the state budget and one-third from the National Lottery Fund and the private sector. It should be emphasized that the activity of “UKSport” is focused directly on elite sport [31].

It should be noted that the executive staff of “UKSport” has consistently pursued a policy aimed
at improving coordination and interaction between different organizations. One of the tasks of this body is to unite the efforts of various governmental and non-governmental organizations to increase the efficiency of their work and reduce expenditures, avoid duplication of functions and divergent actions that contradict each other. Another important task is the creation of large-scale strategic programs with an emphasis on the consistent realization of the whole complex of activities related to elite sport. In this regard, strategic programs are not only the basis for stable development of the elite sport through gradual development with the definition of comprehensive intermediate and final results, but the main source of funding with the participation of government authorities, public organizations, and private business as well. For instance, the complex strategic program “Mission – 2012” was launched in 2006 after London received the right to host the XXX Olympic Games. Its most distinctive feature was the joint work of the state and the private sector in solving the problems of the elite sport development and the successful performance of the United Kingdom at the domestic Olympic Games. The set goal was successfully realized and Great Britain was placed 3rd in the unofficial team classification [32, 33]. The positive assessment of the long-term strategic program “Mission – 2012” by the country’s leadership contributed to the government's decision to continue the implementation of the program “Mission – 2012” within the projects of “Mission – 2016” and “Mission – 2020”. However, it was recommended to pay special attention to certain areas that have the potential to positively influence the elite sports development in the country and successful performance at the next Olympic Games [31].

The experience of Great Britain shows that the introduction of more efficient organizational structures and management mechanisms, intensification of innovative activities in the system of athletes’ preparation, increased funding from various sources with a concentration of resources on priority areas that play an important role in creating an effective system of elite sport successful development and functioning have played a significant role.

One of the effective mechanisms of this experience is the use of public-private partnership for the development of innovation activity. In this regard, a variety of methods and forms of organization of innovation processes and a range of activities are observed. The comprehensive strategic long-term program “Mission – 2012” is one of the most illustrative examples of joint activities of state organizations and private industrial, financial, and innovative businesses.

Thus, the experience of Great Britain in implementing a state innovation policy in elite sport is very successful and is of interest in terms of its analysis and possible assimilation.

In our view, the following areas are useful for Ukraine both from a theoretical standpoint (modeling different directions of elite sport development) and in practical terms as a basis for using the advanced experience of Great Britain in domestic practice in this field:

- use of public-private partnership for innovation activity development;
- creation and implementation of long-term strategic programs for elite sports development;
- a mechanism of creating conditions for long-term investment.

However, assimilation of such experience should avoid full copying. A well-thought-out model of implementing appropriate measures should be created with account for the national characteristics of the economy, political and social system, national mentality.

A comparative analysis of the elite sport development and functioning in Ukraine and Germany shows similar forms of elite sport development. In both countries, the main body responsible for the practical realization of state policy in elite sport is the central government bodies. In Ukraine, it is the Ministry of Youth and Sports, whereas in Germany – the Department of Sports, which operates within the structure of the Ministry of Internal Affairs. However, they differ significantly in their forms of interaction with government and non-governmental organizations. In Ukraine, the crucial role in determining the priorities of the policy of elite sport belongs to the state, where lower-level organizations are obliged to coordinate their plans of preparation, development, etc. with the superior authorities. However, this contradicts the existing trends of decentralization of making managerial decisions. The order is the main tool for managing elite sports in Ukraine.

In Germany, the state forms general approaches to the policy of elite sport, its goals, and priorities, whereas the main role in the implementation of specific programs and measures is assigned to the general public. For instance, a significant part in the practical realization of state policy in elite sport is played by the German Olympic Sports Union (DOSB), which represents the interests of sports federations [34].

National sports federations are independent non-governmental organizations that manage one or more sports events, which in Germany carry out all projects and measures related to the development of
elite sport both at international and national levels [35].

It should be noted that despite the rather liberal regime of elite sport development policy, the Department of Sports of the Ministry of Internal Affairs together with DOSB constantly monitors the current situation in this area, which allows timely addressing the problems and challenges that arise from new international requirements and the world trends in the development of the elite sport.

Thus, as the German experience shows, the development of the elite sport is a rather successful example for possible assimilation.

In our opinion, the experience of administrative and legal regulation of elite sport in the national sports federation is interesting, as well as the effective use of the opportunities of the national sports federation in the implementation of state programs, measures, etc.

While referring to the German experience, it should be noted that in this country an important role in the elite sport development was played by the new strategic ways to support the elite sport development initiated by DOSB and presented in December 2016. They were focused on creating appropriate conditions for further steady development of the elite sport in the country. The main objective of this document was to change the principles of management and financing of elite sport. There was a transition from the formerly widespread practice of broad support for almost all Olympic sports events to the concentration of resources for the development of priority sports events, representatives of which are able to win Olympic medals in the next 4 – 8 years according to objective indices [36, 37].

We believe that the reforms launched in 2016 have created favorable conditions for the innovative development of the system of the elite sport while maintaining the competitive foundations of sports development.

The intermediate success of the new standards of elite sport management in Germany should be noted. For instance, at the XXII Winter Olympics in 2014, Germany was placed only 6 in the unofficial team classification, whereas at the XXIII Olympic Winter Games in 2018 it came second.

In conclusion, it should be stressed that Germany is a successful example of creating and developing an effective system of elite sport, as well as an innovation policy in the field of sports.

Therefore, the experience of Germany can be used in our country for the formation of state policy in the field of elite sport, as well as in the development of specific measures for its implementation.

Discussion

The materials of the presented studies confirm the data of scientific works [15, 16, 25, 31, 34] that the elite sport in the leading countries of the world is based on the activities of national sports federations, the common keynote of which is the principle of sports autonomy, subsidiarity of funding, and cooperation and partnership of state and public organizations.

As a result of our research, we found that the crucial role in the achievement of athletes of the United States, China, Britain, Germany leading positions in world sports, including the Olympic Games, was due to the reforms in elite sports, which envisaged elaboration of the development strategy and specific programs for its realization focused on the systematic solution of existing problems.

According to the analysis of international experience in the United States, China, Great Britain, and Germany in developing strategies for the development of the elite sports, all programs are focused on the development of key innovative technologies for managing sports events, and above all the development of priority sports events, especially the Olympic ones [15, 16, 25, 31, 34]. However, the innovative development of elite sports in each country occurs according to its own scenario, with account for national specifics. Meanwhile in Ukraine it continues to develop according to an extensive model, which is largely a continuation of the Soviet state approach using centralized administrative management.

A comparative analysis of the main aspects of the elite sports functioning and development in Ukraine and leading countries of the world (the United States, China, Great Britain, and Germany) contributed to the discussion of which model (American, Chinese or European) is most acceptable for Ukraine.

In our opinion, a clear focus on a single specific model is impractical due to the different national characteristics of the economy, political and social system, national mentality in each country. Concerning which model of elite sports development can be considered the most promising for Ukraine today, an example would be the model of functioning and development of the elite sports in Great Britain. However, it is important to bear in mind that this context refers to the perception of this model not as an absolute template, but only as an approximate guide.

In our opinion, the ideal version for functioning of the national model of the elite sport innovative development envisages a set of political,
administrative, and economic decisions based on strategic partnerships between the state, national sports federations, science, education, and business with possible experience assimilation of the world leading countries in conducting innovation policy in the elite sport.

The scientific novelty of the findings is that:
• a comparative analysis of the elite sport functioning and development in Ukraine and the world leading countries (US, China, Great Britain, and Germany) was made for the first time, which contributed to a deeper understanding of the common features and differences, development trends, and more substantiated critical assessment of our country’s experience allowing to see a wider range of alternatives and ways of development;
• for the first time the possible assimilation of the experience of the USA, China, Great Britain, and Germany in developing the state innovation strategy for elite sports development; the use of private-public partnership for the realization of innovative long-term strategic programs in infrastructure development, preparation of sports reserve, coaches, scientific projects, etc.; application of modern management and marketing mechanisms in the activity of national sports federations were substantiated.

Conclusions

Comparative analysis of existing models of the elite sport functioning and development in Ukraine and the USA, China, Great Britain, Germany is of great importance for possible assimilation of experience of these countries for the development of the elite sport in Ukraine.

It has been established that to achieve leading positions in world sports, in particular at the Olympic Games, China, Great Britain, and Germany are developing key innovative technologies for managing sports events that have had a positive impact on the development of priority sports events, especially the Olympic ones.

To ensure the competitiveness of Ukrainian athletes on the world stage, in particular at the Olympic Games, it is necessary to switch from the extensive model of elite sport development, which is currently used in Ukraine, to innovative one based on strategic partnerships between the state, national sports federations, science, education, and business.

One of the possible approaches to the formation and implementation of the state innovative strategy for the development of the elite sports, which envisages investment in infrastructure, human resources, research services, etc., is the use of successful experience in the elite sport management of Great Britain.

Conflict of interest

The authors declare that there is no conflict of interest.

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