

## Conceptual blocks of professional training for highly qualified personnel in higher physical culture and sports education

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## **Abstract**

**Objective of the study** is to analyse and substantiate the conceptual blocks of scientific activity in the training of highly qualified personnel in higher physical education and sports education.

**Methods and structure of the study.** Many years of theoretical and scientific research into the organisation of scientific activity in higher education institutions of the Russian Federation specialising in physical education and sport, focusing on the training of highly qualified scientific and teaching staff.

**Results and conclusions.** The theoretical and practical rationale for scientific activity in physical education and sports universities indicates the need to develop criteria for improving human resources, laboratory facilities, improving educational programmes for training scientific and teaching staff, and increasing the publication activity of specialists in the identified main areas, are an indicator of the demand for scientific research results in the practical work of experts in the industry under consideration.

**Keywords:** education, physical education and sports industry, criteria for human resources potential, scientific and teaching staff, scientific work.

Introduction. The National Doctrine of Education in the Russian Federation is a fundamental document that establishes the priority of education in state policy and serves as the basis for the development and improvement of various regulatory and legal acts. Currently, the state is in particular need of highly qualified specialists capable of continuous professional growth and professional mobility in the context of the widespread informatisation of society and the development of new technologies [2, 5].

This approach determines the need to set increasingly higher requirements for the quality of training of highly qualified scientific personnel (candidates and doctors of science) in all fields of knowledge [1, 4, 7].

The prerequisites for the steady development of pedagogical research in physical culture and sport are both the relevant ideas of previous years, which affirm the possibility of effective personality formation through motor activity, the dialectical impact of physical exercise and sport on enhancing a person's moral

potential and maintaining their health, as well as modern research aimed at refining and supplementing the materials already obtained, describing and refining the results based on the use of the latest equipment [3, 6].

In this regard, it can be assumed that the most successful training of highly qualified scientific personnel is only possible through the integration of science and education in university educational complexes, which allow for the development and implementation of advanced research technologies based on interdisciplinary studies.

The training of postgraduate and doctoral students in the main scientific specialities in the field of physical culture and sport involves the mastery of modern means and methods of research activity, the implementation of progressive professional and personal self-education, and the design of a basic and comprehensive educational and scientific path in a professional career [8].

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It should be noted that physical culture and sport are officially recognised as an economic sector, and the modern economy is impossible without science, so sport and physical culture are studied as a sphere of the most important production of health, entertainment and competitive services, as an important means of comprehensive education of the younger generation [2, 6, 7].

Postgraduate students must know how to conduct pedagogical research, how to determine the sequence of its stages, how to establish its quality, and much more. Solving this complex theoretical and methodological function requires the application of criteria for assessing the quality of dissertation research, knowledge of the basics of the constantly improving literary and graphic design of scientific works and the apparatus of mathematical and statistical processing of a significant amount of factual data, and most importantly, scientific schools at universities where young researchers obtain high-quality knowledge.

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Methods and structure of the study. Scientific activity in higher educational institutions specialising

CONTENT PARAMETERS FOR THE TRAINING OF HIGHLY QUALIFIED SCIENTIFIC STAFF BLOCKS The existence of scientific schools. Highly qualified personn Demanded scientific fields Independent reproduction of scientific personnel by educational organisations EDUCATIONAL PROGRAMMES Scientific practice in physical education and sports organisations. Implementation of research results in the educational process. Transfer of practical experience to the educational pro-Assessment of the competencies of scientific and teaching staff. LABORATORY SUPPLIES Providing laboratories with modern scientific and diagnostic equipment Having experienced and authoritative researchers, attracting young specialist Demand for laboratory research in practice and orders from sports organisations. Applying scientific knowledge from laboratory research in the educational process PUBLICATION ACTIVITIES Garnet support for scientific research. Work of dissertation councils for staff reproduction. 3. 4. Defence of dissertations on topical research topics Publication of research results in leading publications

Figure 1. Conceptual blocks of scientific activity in the training of highly qualified personnel in physical education and sports education

in physical education and sports, first and foremost, solves the tasks of effectively training highly qualified scientific and pedagogical personnel who are capable of obtaining a product that is in demand for the practical activities of coaches, specialists and the industry as a whole. This goal can only be achieved with highly qualified and competent staff in higher education institutions, as well as laboratories with modern equipment, relevant and in-demand professional training programmes, and, most importantly, the opportunity to publish research results for a wide range of readers and specialists in Web of Science, Scopus, and VAK (Higher Attestation Commission).

Results of the study and discussion. As part of a consistent comparative analysis of both traditional and innovative scientific concepts in the search for an effective system for structuring basic scientific research in higher education, a systematisation of science and scientific research within the framework of a sports university was proposed (Figure 1).

At the same time, summarising the numerous results of many years of theoretical and scientific research, it is worth noting that the key aspects of the development of scientific activity in physical education and sports educational institutions are the following necessary conditions for the training of highly qualified personnel (Figure 2).

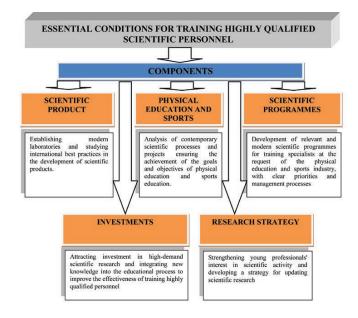


Figure 2. Conceptual components of the main conditions for training highly qualified personnel in physical education and sports education



Longitudinal studies on the effectiveness of scientific research and its integration into the practice of specialists indicate the need to summarise the results of the work in the form of a dissertation or scientific monograph with an extensive list of literature data examining the problem from all sides, thereby significantly increasing the effectiveness of the measurements carried out.

**Conclusions.** An analysis of dissertations in the field of physical culture and sport indicates a growing trend towards the most relevant research being conducted in pedagogical specialities. 5.8.4. Physical culture and professional physical training, 5.8.5. Theory and methodology of sport, and 5.8.7. Methodology and technology of professional education. First of all, there are three main areas: a) training and performance of the sports reserve; b) issues related to higher sportsmanship; c) a trend towards the development of new innovative technologies to attract larger groups to physical education and sports, raising the popularity of classes and knowledge, without forgetting the educational effect of all scientific work during this process.

## References

 Gorelov A.A. O novyh nauchnyh spetsialnostyah, predstavlyayushchih nauku o dvigatelnoy aktivnosti cheloveka, i o tselesoobraznosti vydeleniya ih v otdelnuyu gruppu «kineziologicheskie nauki». Izvestiya Rossiyskoy akademii obrazovaniya. 2021. No. 1-2(54). Pp. 39-49.

- Guba V.P., Voronov Yu.S., Rodin A.V. Aktualnye problemy i perspektivy sovershenstvovaniya protsessa podgotovki nauchnyh kadrov vysshey kvalifikatsii dlya sfery fizicheskoy kultury i sporta: monografiya. M.: Sport, 2025. 196 p.
- 3. Guba V.P., Marinich V.V. Teoriya i metodika sovremennyh sportivnyh issledovaniy. M.: Sport, 2016. 232 p.
- Lubysheva L.I., Pashchenko L.G. Osnovnye napravleniya issledovaniya fizicheskoy aktivnosti naseleniya v publikatsiyah avtorov zhurnala «Teoriya i praktika fizicheskoy kultury». Teoriya i praktika fizicheskoy kultury. 2025. No. 8. Pp. 3-5.
- Masyagina N.V., Leonteva M.S., Martynenko I.V., Lyah V.I. Sovremennye tendentsii v teorii fizicheskoy kultury i sporta kak prediktor sportivnogo obrazovaniya Teoriya i praktika fizicheskoy kultury. 2024. No. 10. Pp. 6-8.
- Rodin A.V. Identifikatsionnyy podhod innovatsionnoe napravlenie otsenki individualnyh takticheskih deystviy sportsmenov v igrovyh vidah sporta. Sportivno-pedagogicheskoe obrazovanie. 2021. No. 3. Pp. 31-35.
- 7. Rumba O.G. Logika i osnovnye etapy organizatsii nauchnogo issledovaniya: lektsiya. SPb.: VIFK, 2017. 17 p.
- 8. Shustin B.N., Safonov L.V., Baranov V.N. Aktualnye nauchnye napravleniya dissertatsionnyh issledovaniya v sfere fizicheskoy kultury i sporta. Vestnik sportivnoy nauki. 2023. No. 2. Pp. 73-77.

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