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**CURRICULAR DESIGN ELEMENTS FOR THE TRAINING OF MASTER
STUDENTS IN THE FIELD OF PHYSICAL EDUCATION AND SPORT
FOR MANAGEMENT RESEARCH ACTIVITIES**

VOLCU Gheorghe¹, VOLCU Irina²

^{1,2}The State University of Physical Education and Sport, Chisinau, Republic of
Moldova

volcugheorghe@mail.ru¹
volcuirina@mail.ru²

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Abstract: It contains references to the approached topic, the purpose of the paper, the used methods, the main results and the conclusions.

This article addresses the issue of professional training of master students of physical education and sport for managerial research. In this context, curriculum design is proposed for the above-mentioned issue. With a relative periodicity, in all educational systems the curriculum goes through a process of updating or reform, depending on the nature and extent of the changes pursued. The designed curriculum substantiates and guides the work of the teacher, facilitates the creative approach of the projective approaches and of the actual realization of the educational process.

Introduction; Scientific research today is the most important lever for improving the standard of living, health, culture and wealth of a society in general. It is equally true that healthy economic, social and cultural development is not possible without a well-structured, high-level education system based on vigorous scientific research.

Scientific research is treated on an equal footing with other branches of the social system, being considered a "necessary component" of this system [6].

Not focusing on research activity would inevitably lead to stagnation and the long run survival of society would be in danger.

In management, the research and development activity have a decisive role, underlined by the fact that its level, rhythm and directions influence all aspects of the economic and social life of the unit and especially the labor productivity, the level and structure of production, the efficiency of the whole economic and social activity. The success of the research-development activity is materialized by technological innovations, by increasing the pace of development and productivity, maintaining the level of competitiveness by a high degree of profit and, especially, by a rigorous and efficient development of the entire production process [2]. The education activities (training, instruction) for managerial research of future

specialists, represent an important task of the research units. This activity must be carried out in close connection with higher education in the field and even with sports organizations. Research at the student and master students' level is recognized as an integral part of university education.

A research program at this level involves students, master students, university researchers and support from the institution. The institution and the teachers / researchers must recognize the importance of research as an integral part of the educational act and provide the plan, infrastructure and academic environment in which valuable research can take place. The research done by students, master students, becomes recognized as an effective way of pedagogy [7, 8], an experience through which they can develop professionally and personally [12, 13].

Managerial research at the university level is essential for all students, not just those who aspire to a scientific career. By taking an active part in research, students can develop critical thinking and thinking independently, discover and develop their talents, understand the nature of scientific research, and appreciate the importance of managerial scientific research for the prosperity of the field of physical education and sport [1].

Management research poses many problems and requirements to the researcher. He can not only be a general connoisseur of ordinary life, but a profound specialist, able to penetrate the essence of managerial phenomena and processes, to know their nature, structure and dimensions [14].

The researcher has to go through certain methodological sequences, thus managing to solve the problem. In order to carry out specific research in the management of physical education and sport, a theoretical-practical training is required, and for this we proceeded to the curricular design of the course "Managerial research in physical education and sport" oriented towards this direction.

The adoption of the new curriculum design model is determined, on the one hand, by the need to update the format and unity of the design of university curricula at the level of education cycles (I and II) on explicit and evaluable learning outcomes. In this regard, the Recommendation of the European Parliament and of the Council of the European Union on key competences from the perspective of lifelong learning [10] outlines a "European training profile" for higher education graduates, structured around eight areas of key competence: literacy skills; multilingual skills; skills in science, technology, engineering and mathematics; digital skills; personal, social and learning skills; citizenship skills; entrepreneurial skills; awareness-raising and cultural expression skills.

Competences are defined as sets of knowledge, skills and attitudes to be formed by the end of their studies, which each individual need for personal

fulfillment and development, for active citizenship, for social inclusion and for employment in the labor market. The structuring of these key competencies is done at the intersection of several educational paradigms and targets both some “academic” fields, as well as inter and trans disciplinary, metacognitive aspects, achievable through the effort of several curricular areas. Education, culture, science and all other areas of social life are undergoing profound reconstructions. The reform program consists in reorienting the development of education [5], that's why we need a high-performance management.

If we talk about scientific research in the field of sports training, showed that the process of obtaining excellent sports performance is closely related/in close connection with the most favorable/adaptable type of perennial management training is based on new principled concepts which results from systems theory, cybernetics, information theory and, at the same time, from physiological and biological concept [11].

Material-method

The purpose of the research is the elaboration of a curricular project aiming the training of master's students in the field of physical education and sport for managerial research activities.

The study of the specialized literature, the study of the working documentation regarding the training of the master students in the field of physical education and sport, the pedagogical observation, the experimental method, the mathematical processing of the statistical data and their graphic presentation.

Starting from the idea that a curriculum design approach must give the concept of competence the meaning of an “organizer” in relation to which the learning aims are established, the specific contents are selected and the teaching-learning-assessment strategies are organized.

The university curriculum aims to enhance the European framework of key competencies at the following levels: formulating general competencies and selecting sets of values and attitudes; organizing the content elements and correlating them with the specific competencies; elaboration of methodological suggestions, didactic and evaluation strategies.

The current form of the university curriculum in the discipline "Managerial research in physical education and sport" is a transitional step towards a future approach to unitary and coherent design throughout higher education, which will be based on defining the affirmation profile of the graduate and developing a new unitary curriculum reference framework.

The National Curriculum Framework [3] stipulates that curriculum development is an ongoing process and aims to relate curriculum to ongoing changes and curriculum development trends at the national and international levels. Curriculum development focuses on:

- ❖ the results of scientific research in the field;
- ❖ experiences of curriculum implementation;
- ❖ technology transfer etc.

Figure 1 shows the structure of the university curriculum of the course, aiming primarily at valuing research skills, which address directly the specific field of academic knowledge, as well as ensuring the transferability of all other key skills. The adoption of the new model of curriculum design is determined by the trends of modernization of higher education in the Republic of Moldova, according to the Education Code [4] and other normative acts.

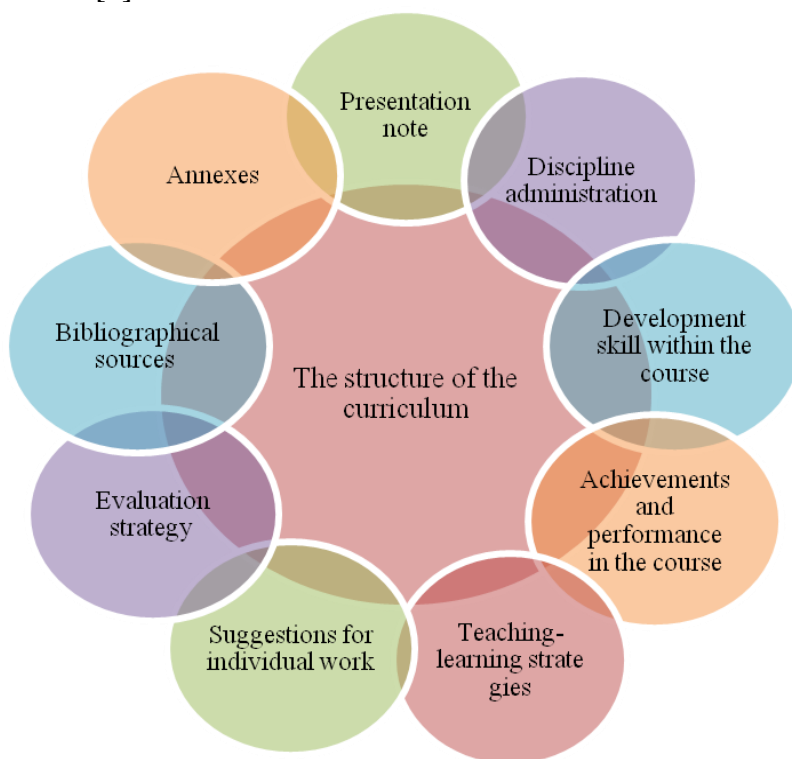


Fig.1. The structure of the Curriculum

In the spirit of the above mentioned aspects and in order to ensure a modern didactic process, based on an optimal educational offer, as well as on the differentiated training of students, based on particular learning paths, individual or group, it is necessary, corresponding to the practical reality, in the second academic cycle to ensure the acquisition by master students of the knowledge necessary to act on the development of managerial skills, research and innovation, as well as initiation / consolidation in the practice of practical disciplines.

The contents and evaluation criteria related to each topic within the study discipline are elaborated by the teacher who ensures the teaching and is approved by the specialized department.

Results and Discussions: The experiment focused on evaluating the efficiency of the new university curriculum, the theoretical course and its functionality in order to obtain the skills necessary for master students for managerial research.

It is essential to note that the theoretical knowledge taught to the two groups were different in terms of content and intensity, respectively the experimental group benefited from a more complex and intensive structure in terms of the content of the theory taught. Thus, at the initial stage of the experiment, the averages of the marks obtained by the students of the control and experimental groups were calculated at the theoretical exams, registering the following values: 7.15 in the control group and 7.17 in the experimental group (Figure 2).

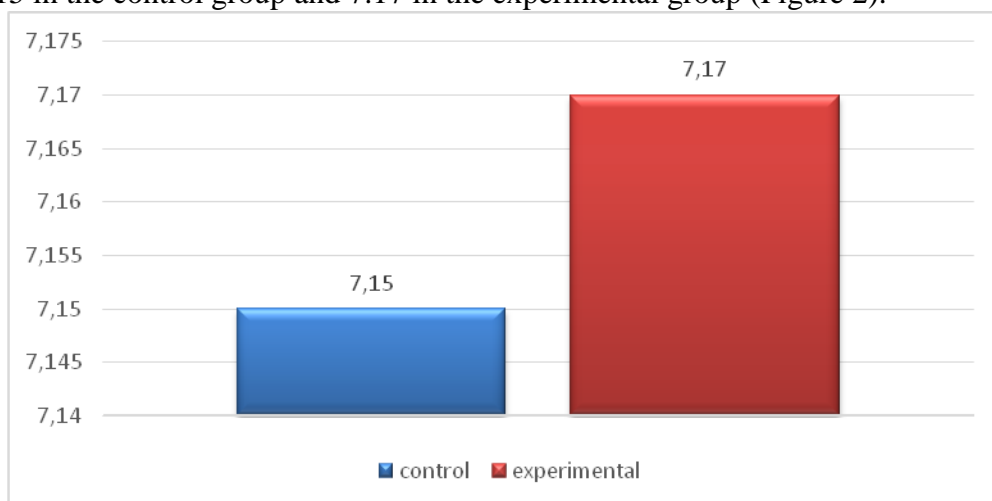


Fig. 2. Graphical representation of the average marks obtained at the theoretical exams for master students of the control and experimental groups at the initial stage

During the experiment carried out for the master students from both groups (control and experimental), 7 tests were performed, one for each chapter of the course. The control group was tested in the classical form of evaluation of the seminars, and the topic corresponded to the initial course schedule. The experimental group was also tested in the scoring grid from 1 to 10, and the topic was in accordance with the newly developed course content "Managerial research in physical education and sport".

As demonstrated in Figure 3, in topics 1, 2, 3, 5 and 6 we recorded significant variations ($p < 0.01$) due to the intensified content of theoretical and practical information in the experimental group. In topic 7, we recorded

insignificant variations ($p < 0.05$), as they are based on recent information, newly developed through its contents, requiring a deeper algorithm and logging. In topic 4 we obtained a very significant variation ($p < 0.001$) due to the importance of methodology in managerial research in the field of physical education and in the training of specialists in this field for managerial research activity. Figure 3 shows the graphical representation of the average obtained after the evaluation of the control and experimental group related to the course topic, and Figure 4 shows the graphical representation of the averages obtained by the two groups following the evaluation.

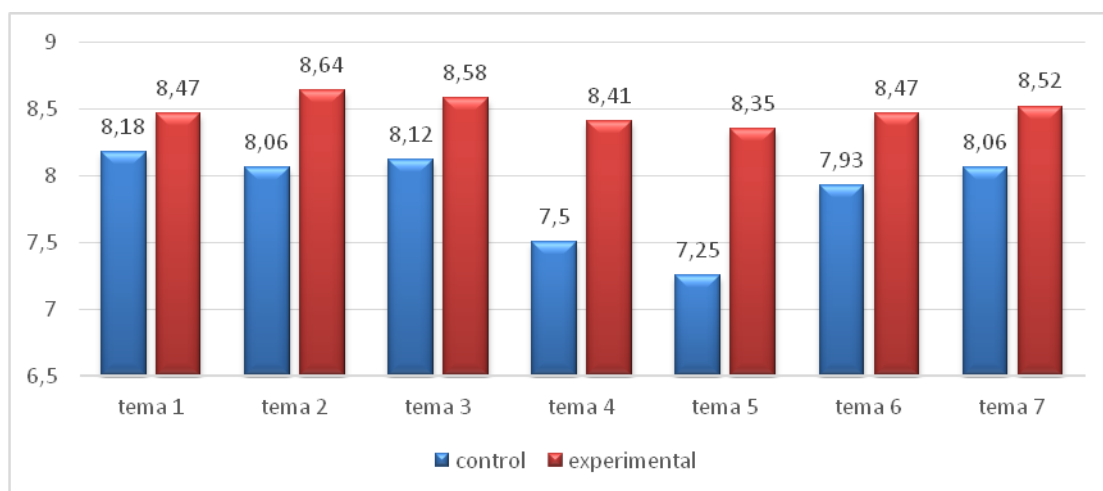


Fig. 3. Graphical representation of the fluctuation of the values of the averages obtained following the evaluation at the level of the control and experimental groups related to the thematic of the course

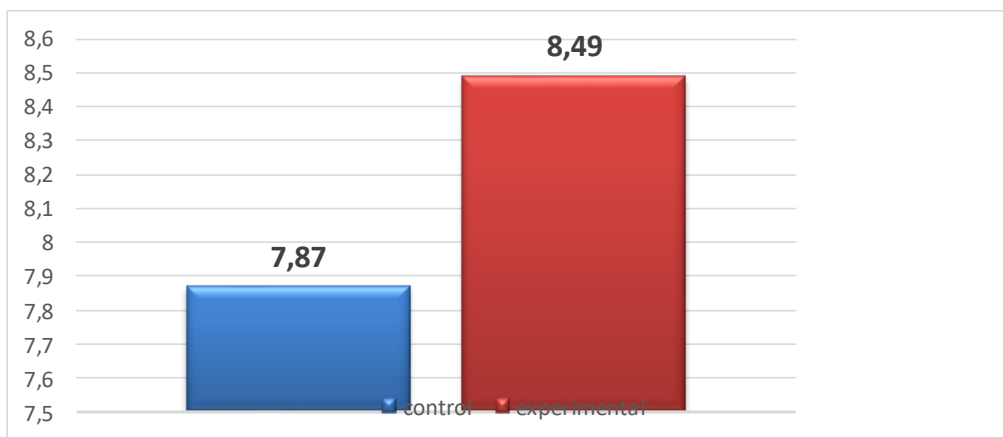


Fig. 4. Graphical representation of the mean obtained from the evaluation of the control and experimental groups

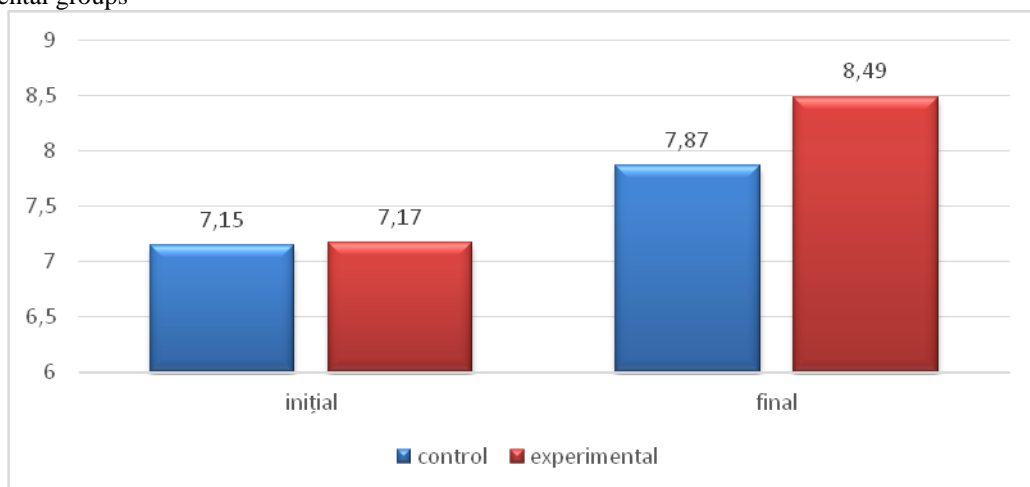


Fig. 5. Graphical representation of the averages obtained by the control and experimental groups at the initial and final stages of the experiment

The variations of the averages obtained, at the final stage, by the subjects of the control and experiment groups (figure 5) are significant, which confirms the validity, the utility, the necessity within the university curricular contents and the newly developed course.

Conclusions. For the development of sports organizations, for example, and higher education institutions of physical education and sport, which ultimately represent, also a knowledge-based entity, a significant role is played by the approach of managerial research. Over time, research methodology was addressed as the path of science, a guide of methods, techniques and tools that allow scientific knowledge of the phenomena studied. According to the experimental data, the newly developed university curriculum has demonstrated its efficiency in the training of

master students in the field of physical education and sport with a significant increase ($p < 0.01$). In this sense, the various researches mostly show the importance in the formation of students of a system of knowledge and motivations, which will contribute to the formation of skills for systematic practice of physical exercises throughout life through scientific management [9].

References

- [1]. Агеевц, В. У. (1997). Анализ динамики процесса повышении квалификаций специалистов по физической культуре и спорту. În: Теория и практика, № 9, с. 13-15
- [2]. A., Budevici, V., Chepteni (2007) Management research methodology, Chișinău, Valinex, p. 67
- [3]. V., Guțu, N., Bucun, A., Ghicov (2017). The reference framework of the national curriculum / aut.: [et al.] Chișinău: Lyceum, 104 p.
- [4]. Education Code of Republicii Moldova nr. 152 din 17.07.2014 Published: 24.10.2014 in the Monitorul Oficial Nr. 319-324.
- [5]. Grosu, B. M. (2013). Preliminary study on improving the relationship between teacher and student in physical education and sports at high school, Conflict Management. prevention strategies 4 for students, v. 22, p. 55
- [6]. Капиța, P. L. (1981). Experiment, theory, practice. Bucharest, Political Publishing House, p. 278
- [7]. Karukstis, K. K., (2008). Starting a successful research program at a predominantly undergraduate institution. În: Journal of Chemical Education, p. 85
- [8]. Klein, S. (1998) Munkapszichologia, Budapest: SHL, Hungary Kft., 867 p
- [9]. L., E., Avram, E., Vizitiu (2020). Study on the importance of physical education and sport classes in current societyinvestigative approach, The annals of the "Ștefan cel Mare" University, ISSN – 1844 – 9131, eISSN 2601 – 341X Volum XIII issue 2, p. 28
- [10]. Recommendation of the Council of the European Union of 22 May 2018 on key competences for lifelong learning. Official Journal of the European Union. 2018/C 189/01
- [11] Ș., G., Pentiuc, E., Rață (2006). Pattern recognition methods in physical training evaluation and planning, 8th International Conference on Development and Application Systems, Suceava, România, May 25-27, p.449
- [12]. Volcu, G. (2019). Managerial research activity in the training of coaches-managers. Monograph. Print Caro, Chisinau, p. 136
- [13]. Volcu, G. (2016). Developing research competences of future manager-trainers within managerial practice. Physical Education and Sport Section The Science and Art of Movement Volume IX issue 2, Suceava, p. 5-12
- [14]. Volcu, G. (2012). Training coaches for managerial research activity. Scientific article in the Evolution of physical culture management science in the

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Republic of Moldova, coordinators: Ambrosi N., Budevici A., Chișinău, Valinex,
p. 342-351