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# Raising Effectiveness of Specialist Professional Training through the Course "Managerial Research in Physical Education and Sport"

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#### Abstract

This article is based on an experimental study that we have conducted on the efficiency of the course "Managerial research in physical education and sport" for the vocational training of the specialist in the field. The scientific research is the key lever in the development of the physical education and sport field and has a decisive influence on the adaptation of sports organizations to the international changes.

"Managerial Research in Physical Education and Sport" is an educational discipline that substantially contributes to the formation of the general and specific competencies necessary for the specialist in his professional activity. It contributes to shaping the future specialist profile by forming the managerial scientific working skills necessary for all organizing forms of sports activities.

Keywords: managerial research, specialist, vocational training, physical education, university curriculum, university course, competencies, didactic strategies

#### Introduction.

The vocational training of students in higher education institutions of physical culture and sports has been and remained the key problem for a large number of specialists [1, 2, 3, 4, 5, 6, 9, 11], being one of the main objectives of higher education.

The instructional and educational process of higher education needs to adapt to a changing world. This is achieved in all the fields of society and knowledge seems to expand with a higher speed than understanding. It is necessary for students to learn how to navigate through the vast amount of information, to analyze, to make decisions and to master new fields of knowledge, in a society in constant progress.

Solving the new issues faced by higher education studies in physical culture and sport involves adapting the curriculum to international standards and rethinking the teaching-learning-evaluation methodology.

The assimilation of the complex functions of universities to ensure the training of highly qualified specialists, the thorough preparation of the researchers, of the culture people and the provision of the knowledge and technology innovation can only be achieved by a new way of organizing the instructional and educational process.

The discipline "Managerial research in physical education and sport" is included in the curriculum [8], in the area the Managementof Physical Culture and is meant to make its specific contribution to achieving the complex development of the autonomous and creative personality of the students - Stipulated in the Education Code of the Republic of Moldova [7]. It primarily focuses on the valorization of key competencies that directly address the specific field of academic knowledge, as well as ensuring the transferability of all other key competencies, by opening up to inter- and transdisciplinary approaches within the curriculum field of physical education and sport and with other disciplines of study.

The university syllabus in the discipline "Managerial research in physical education and sport" was elaborated in terms of passing from the curriculum model focused on objectives - elaborated and implemented in the national academic system - to the model focused on competencies. The introduction of the new model of curriculum is determined, on the one hand, by the need to update the format and the unity of the university curricula design at the level of the educational cycles (I and II) on explicit and evaluable learning outcomes. Accordingly, the Recommendation of the European Parliament and the Council of the European Union on key competencies in terms of lifelong learning [10] outlines for higher education graduates a "European training profile", structured on eight key competencies: Communication in the native language; Communication in foreign languages; Competencies in mathematics and basic skills in science and technology; Digital competence; Social and civic competencies; Spirit of initiative and entrepreneurship; Learning to learn; Awareness and cultural expression. Competencies are defined as assemblies of knowledge, skills and attitudes to be formed by the end of the studies that each individual needs for personal fulfillment and development, for active citizenship, social inclusion, and employment on the labor market. The structuring of these key competences is carried out at the intersection of several educational paradigms and targets both "academic" domains, as well as inter- and transdisciplinary, metacognitive aspects, achievable through the effort of several curricular areas.

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

The syllabus structure in the discipline "Managerial research in physical education and sport" is: presentation note, general competencies, values and attitudes, specific competencies and contents, methodological suggestions, didactic strategies, evaluation strategies and bibliographic sources (Figure 1).



Fig.1. Structure of the syllabus in the discipline "Managerial research in physical education and sport"

The lesson system within the university curriculum is further corroborated by all components. The drafted course foresees 20 course hours, 20 hours of methodical, practical, laboratory, seminar and control lessons and 110 hours of individual work. In total, the syllabus provides 40 hours of its own lesson system and 110 hours outside of it, which is generally 150 hours of instructional activities.

The current form of the university syllabus in the discipline "Managerial research in physical education and sport" represents a transitional stage towards a future approach of unitary and coherent projection throughout the whole higher education, which will be based on the definition of the graduate's assertion profile and the elaboration of a new unitary curricular reference frame.

**Aim of research** - studying the efficiency of the course "Managerial research in physical education and sport" in the professional training of the specialist.

### **Objectives of research:**

1. Studying the current theory and practice of the scientific and professional-pedagogical training in the context of the managerial research of the future manager-coaches.

2. Assessing the level of scientific and professional-pedagogical training of future manager-coaches in the context of managerial and scientific contents.

3. The theoretical-experimental argumentation of the course efficiency "Managerial research in physical education and sport" for master students.

In order to achieve the purpose and the objectives we have applied the following **research methods**: theoretical analysis and generalization of literature data; analysis of planning, evidence and control documents; pedagogical observation; pedagogical experiment, comparative method; statistical and mathematical method; graphical method.

It is essential to specify that the theoretical knowledge taught to the two groups were different from the point of view of content and intensity, respectively the experimental group benefited from a more complex and intensive structure in terms of the content of the taughttheory. Thus, at the initial stage of the experiment the grades average of the students of the control and experimental groups were calculated in the first semester during the theoretical examinations, the following values being recorded: 7.15 in the control group and 7.17 in the experimental group, which shows us the homogeneity of the groups (Table 1, Figure 2).

# Table 1. The grades average of the master students of the control and experimental groups during the first semester of the first year of study

Average of the 1st semester, 1st study year	Average of the control group	Average of the experimental group
Media anul I	7.15	7.17



Fig. 2. Graphical representation of the grades average obtained in the theoretical exams during the first semester of the first year of study of master students in the control and experimental groups

In the experiment conducted for master students from both groups (control and experimental), 7 tests were carried out, one in each chapter of the course. The control group was tested by means of classical evaluation of the seminars, and the theme corresponded to the initial program of the course "Methodology of managerial research". The experimental group was also tested in the grade schedule from 1 to 10, and the theme was in line with the new developed one of the coursecontent "Managerial research in physical education and sport".

As shown in Table 2 and Figure 3, we recorded significant variations (p < 0.01) in the 1st, 2nd, 3rd, 5th and 6th themes due to the intensified content of theoretical-practical information within the experimental group. In the 7<sup>th</sup> theme, we recorded insignificant variations (p < 0.05), as they are based on recent information, newly developed through their contents, requiring a further algorithms and logics. In the 4<sup>th</sup> theme we obtained a very significant variation (p < 0.01) due to the importance of the methodology in managerial research in the field of physical culture and in the training of the specialists in this field for the activity of managerial research. Figure 3 shows the graphical representation of the average obtained from the evaluation of the control and experimental group regarding the theme of the course, but in figure 4 we can see the graphical representation of the averages obtained by the two groups after the evaluation.

No. crt.	Theme of the course	Control group (n=17)	Exp. group (n=17)	t	Р
1	<b>1st theme.</b> Specifics of managerial scientific research in the field of physical culture	8.18±0.06	8.47±0.06	2.98	< 0.01
2	<b>2nd theme</b> . the fundamental and applicative scientific research in the management of physical culture	8.06±0.06	8.64±0.13	3.77	< 0.01
3	<b>3rd theme.</b> Conceptual and documentary marks in the managerial research process in the field of physical culture	8.12±0.14	8.60± <b>0.06</b>	3.02	< 0.01
4	4th theme.the managerial scientific research methodology in the field of physical culture	7.41±0.13	8.35±0.13	4.77	< 0.001
5	5th theme. Managerial research instruments in the field of physical culture	7.6±0.13	8.41±0.20	3.28	< 0.01
6	6th theme. Implementation and suistainability of managerial research	7.94±0.13	8.47±0.06	3.40	< 0.01
7	7th theme. Managerial science and manager profile	8.06±0.13	8.52±0.13	2.38	< 0.05
	The Average of ongoing evaluation	7.87±0.14	8.49±0.04		

Table 2. Averages of the grades obtained after the evaluation at the level of the control and experimental groups related to the				
elaborated course theme (n=17)				

The positive evolution of the results obtained by the experimental group is due to the use of the deepening knowledge and skills which allowed to the students a quicker and more efficient understanding of the theory taught. At the same time, the students in the experimental group were found to train more specific practical skills in the field of research and learning of the basic conceptual parts of the scientific research, the





Fig. 3. Graphical representation of the average values fluctuation obtained after the evaluation at the level of the control and experimental groups, related to the theme of the experimental course



Fig. 4. 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 experimental groups (Figure 4) are significant, confirming the validity, usefulness, necessity of the university curricular contents and the newly developed course.

Based on the study, we can **conclude** that the course "Managerial research in physical education and sport" plays an important role, improving the professional training of the specialist.

The university syllabus "Managerial Research in Physical Education and Sports" demonstrated its effectiveness in preparing the future manager-coach with a significant increase (p < 0.001).

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# Analysis of the Performance Training Program of the Base Macrocycle of the Annual Cycle

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#### Abstract

Athletic swimming is part of the individual sporting industries characterized by the mechanical action of cycling through intense psychic participation and by cumulative stresses and impacts from a morpho-functional and motive point of view. Over the years, from one eventto another, swimming has seen a steady increase in results. This development resulted from the continuous renewal of 40-50% annual performance, both nationally and globally. Also, the increase in the number of participants in international competitions has led to an increase in swimming performance. Any success strategy is based on a very accurate, well-grounded and viable principle. It should also be emphasized that in order to create a climate of great performance, the elite group of seniors will be open only to those who are committed to submitting to a program in order to complete their training. Each member of this group will be asked to work for the purpose of perfection, be it technique, intensity or any other field of training. The purpose of training programs is to produce metabolic, physiological and psychological adaptations to allow swimmers to swim better. Adaptations are actually the changes that are the result of the body's response to training. Planning the training in a macrocycle was approached methodically and scientifically by a multitude of practitioners and theoreticians, who present detailed elaborations on the performance objectives, the methods and means used, the volume and the intensity of the training effort applied in the training of the swimmers performance level.

*Keywords:* swimming; macrocycles and making-up their programs; mezocycles and making-up their programs; microcycles and making-up their programs

### Introduction

**The actuality of the subject.** Planning the training in a macrocycle was approached methodically and scientifically by a multitude of practitioners and theoreticians, who present detailed elaborations on the performance objectives, the methods and means used, the volume and the intensity of the training efforts applied in the training of performance swimmers.

The training of performance swimmers is a complex process of training and refinement of skills, motor skills, physical and moral qualities that are based on the scientific requirements of sports training and development, individual peculiarities and training conditions. Only by using great efforts in terms of intensity and volume can the training tasks and the achievement of results at a high level of sport performance be achieved (Ozolin,1980; Alabin,1981; Maglischo, 1992; Platonov, 2012; Counsilman, 1977).