

**VERIFICATION OF TRAINING OF FUTURE MASTERS OF  
PHYSICAL CULTURE AND SPORTS FOR ACTIVITIES IN THE  
CONDITIONS OF THE FITNESS CENTER**

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**Purpose:** verification of the effectiveness of training future masters in physical culture and sports for professional activity in a fitness center.

**Material and methods:** questioning, testing; pedagogical experiment; statistical methods, factor analysis. The study involved 34 applicants for the second (master's) level of higher education 1-2 years of study, educational and professional program (EPP) «Physical culture and sports», specialty 017 «Physical culture and sports». In order to determine the effectiveness of training future masters in physical culture and sports for professional activity in a fitness center, a survey was carried out of applicants for the second (master's) level of higher education; the levels of readiness formation of future masters in physical culture and sports for professional activity in a fitness center.

**Results:** after the completion of the formative stage of the pedagogical experiment, the indicators characterizing a high level of readiness for professional activity in a fitness center increased among applicants in the control group from

7,34% to 11,20%, among applicants in the experimental group from 8,44% to 24,12%. Accordingly, the data characterizing a sufficient level of readiness for professional activity has changed - in the control group from 44,47% to 52,55%, in the experimental group from 49,31% to 68,22%. The data characterizing the elemental level of formation of readiness for professional activity decreased in the control group from 48,19% to 36.25%, in the experimental groups from 42,25% to 7,66%. At the end of the pedagogical experiment, the most significant structural components of readiness were the motivational component; cognitive-reflexive component; personality and activity component.

**Conclusions:** the effectiveness of training future masters in physical culture and sports for professional activity in a fitness center has been determined and tested; the structure of training future masters in physical culture and sports for professional activity in a fitness center has been improved; the provisions for the development and design of the content of the physical culture and sports for the preparation of future masters of physical culture and sports have been improved; the criteria and levels of the readiness formation of future masters in physical culture and sports for professional activity in the conditions of a fitness center.

**Keywords:** training, applicants, criteria, levels, physical culture and sports, future masters.

## **Introduction**

The processes of globalization, the rapid growth of supply and demand in the labour market lead to the modernization of higher education as a component of society. Physical culture and sports are areas of successful, promising business in many countries around the world, physical education and sports contribute to the preservation, promotion and development of health. In our country, there is an urgent need for well-trained specialists in the field of physical culture and sports, able to compete in the labour market, ready in the future for qualified professional activity at European standards in the field of fitness, capable of constant creative search, self-education and self-improvement.

The effectiveness of professional training of future specialists in physical culture and sports is reflected in legislation and regulations, in particular in the laws of Ukraine “On Higher Education” (2014); “On Education” (2016); “On physical culture and sports” (2016); in the Concept of development of education of Ukraine for the period 2015 - 2025; in the Strategy of Innovative Development of Ukraine for 2010 - 2020 in the context of globalization challenges (2010); in the National Strategy for the Development of Education in Ukraine until 2021 (2013); in the State target social program for the development of physical culture and sports” (2017).

Of great scientific interest for the study were scientific works on the training of future specialists in physical culture and sports (P. B. Dzhurinsky, 2012; M. V. Danilevich, 2016; E. A. Zakharina, 2015 et al.); theories and methods of physical culture (V. G. Arefiev, 2014; T. Yu. Krutsevich, 2017 et al.) [1; 2; 3; 4; 5; 6]. The formation of future specialists’ readiness for professional activity in health fitness was studied by A. O. Tvelina, 2014; L. A. Chekhovskaya, 2019 et al.; fitness technology was researched by ACSM’s, 2008; P. O. Astrand, 1960; P. W. Darst, 2009; Iris Pahmeier, Corinna Niederbeumer (1999) [7; 8; 9; 10; 11].

The increase in the number of fitness centres in the market of our country has contributed to increased competition and, accordingly, intensified the struggle for the consumer of fitness services. Analysis of scientific sources and training of future masters of physical culture and sports revealed that there is a need for quality training of future masters in physical culture and sports, namely in terms of professional activity in fitness centres.

*Connection of the work with scientific programs, plans, themes.* The study was conducted in accordance with the Thematic plan of scientific research of the Department of Theory and Methods of Physical Culture and Sports Disciplines of the State Institution “South Ukrainian National Pedagogical University named after K. D. Ushinsky” for 2019-2023 on the topic: “Theoretical and methodological principles of training future teachers and instructors of physical culture, specialists in physical culture and sports, coaches-teachers of the chosen sport for professional

activity with different groups of the population”, registration number: 0119U002020.

The research hypothesis is based on the assumption of the dependence of future physical culture and sports masters' readiness for professional activity in fitness centres on the structure of the educational process, which is logical structural and component composition and personal and professional qualities of the future master of physical culture and sports.

**The aim** of the study is to test the effectiveness of training future masters in physical culture and sports for professional activities in a fitness centre.

### **Material and Methods of research**

A set of methods was employed: questionnaires for applicants for the second (master's) level of higher education, testing; factor analysis. During the study period, psychological and pedagogical literature, Internet resources were analyzed in order to determine the criteria, indicators and levels of readiness of future masters in physical culture and sports for professional activity in a fitness centre; a survey of applicants for the second (master's) degree of higher education was conducted; the levels of readiness of future masters in physical culture and sports for professional activity in the conditions of fitness centres were determined; the efficiency of professional training for forming future physical culture and sports masters' readiness for professional activity in the conditions of fitness centres was checked.

In order to determine the readiness of future masters in physical culture and sports for professional activity in fitness centres in 2018-2020, a study was conducted, which involved 34 students for the second (master's) level of higher education, 1-2 years of study, EPP Physical culture and sports, specialties 017 Physical culture and sports, State Institution “South Ukrainian National Pedagogical University named after K. D. Ushynsky”. Checking the effectiveness of acquired general, special competencies and program learning outcomes, criteria, levels of future physical culture and sports masters' readiness for professional activity in fitness centres was conducted at the formative stage of the pedagogical

experiment, which involved control (17 people) and experimental (17 people) group of applicants for the second (master's) degree of higher education, 1-2 years of study by EPP “Physical Culture and Sports”, specialty 017 “Physical Culture and Sports” of the State Institution South Ukrainian National Pedagogical University named after K. D. Ushynsky”.

Participants of the control group studied in accordance with the traditional system of training, the experimental group was taught with introduction of a technological concept of training, which was to ensure the formation of general, special competencies, program learning outcomes, methods, tools, criteria and readiness of future masters in physical culture and sports for professional activity in the conditions of fitness centres.

### **Results of the research**

The training of future masters in physical culture and sports took place by the educational and professional program “Physical Culture and Sports” for students of the second (master's) level of higher education, which determined that the main professional competencies of the future master in physical culture and sports in the conditions of fitness centres are: ability to solve tasks of innovative character; ability to act socially responsibly and consciously; ability to adapt and act in a new situation; ability to search, process and analyze information from various sources; ability to identify, pose and solve problems; ability to generate new ideas; ability to develop and manage projects; ability to motivate people and move towards a common goal; ability to work in an international context; ability to continuous self-education; ability to critically comprehend problems in the field of physical culture and sports, original thinking and research; ability to carry out scientific and pedagogical activities; ability to manage work or study processes in the field of physical culture and sports, which are complex, unpredictable and require new strategic approaches; ability to self-education, self-improvement and self-reflection; ability to understand the principles of professional ethics; ability to develop effective practice-oriented programs in the field of physical culture and

sports, taking into account the real and projected results of sports activities and others.

Program learning outcomes must include: the ability to use innovative techniques in professional activity; to develop new programs of sports and physical culture and health orientation; to use educational, sports, health-improving, health-preserving technologies taking into account the modern level of science development; to integrate the acquired knowledge into innovative pedagogical technologies; to know best practices, develop and be able to apply the latest technologies in fitness, recreation and healthy living; to apply the acquired knowledge, skills and abilities in professional activity, to form cultural and axiological aspects of the personality of subordinates (clients of fitness centers); to apply modern methods and technologies, including information, to ensure the quality of the educational and training process; to demonstrate creativity in professional activity, flexible thinking, openness to new knowledge, to be critical and self-critical.

We have determined the criteria and characterized the levels of future physical culture and sports masters' readiness for professional activity in a fitness centre. The motivational criterion determines the degree of motivation to succeed in professional activity and career growth. Epistemological and information criterion determines the degree of mastery of knowledge about the nature and content of future professional activity. The activity-oriented criterion determines the degree of mastering the skills and abilities of students necessary for successful professional activity. Creative criterion determines the degree of students' creativity, which affects the success of professional activity and the ability to function productively. Reflexive criterion determines the degree of formation of reflexive skills in relation to adequate self-esteem, ability to effective professional activity.

At the end of the formative stage of the experiment, the indicators characterizing the high level of readiness for professional activity in fitness centres, increased in the control group from 7,34% to 11,20%, in the experimental

group from 8.44% to 24, 12%. Accordingly, the data characterizing the sufficient level of readiness for professional activity have changed – in the control group from 44,47% to 52,55%, in the experimental group – from 49,31% to 68,22%. The data characterizing the elementary level of readiness for professional activity decreased in the control group from 48,19% to 36,25%, in the experimental group – from 42,25% to 7,66%.

Factor analysis of the structure of future physical culture and sports masters' readiness in the experimental group revealed the main factors that provided 77,57% variance of traits. The most significant structural components of readiness were: motivational component – 31,3%; cognitive and reflexive component – 25.8%; personal and activity-oriented – 20,47% of the total variance of signs.

Thus, the results of the pedagogical experiment showed that changes in the levels of readiness of future masters in physical culture and sports who studied in the experimental group are statistically significant, which confirms the effectiveness of our scientific and methodological implementations in the training process. The analysis of the results confirmed the effectiveness of the program learning outcomes, criteria and levels of readiness.

Ushynsky University has special regulations, normative documents that ensure the quality of higher education for students for the second (master's) level of higher education by EPP “Physical Culture and Sports”. Periodic monitoring of the quality of teaching and evaluation and professional development of teachers is carried out.

Principles and procedures for ensuring the quality of higher education are defined in the Regulation “On internal quality assurance of educational activity and quality of higher education in the State Institution “South Ukrainian National Pedagogical University named after K. D. Ushynsky”, in the Regulation “On the organization of the educational process of the State Institution South Ukrainian National Pedagogical University named after K. D. Ushynsky”, in the Regulation “On the organization of control and evaluation of the quality of education of students in the State Institution “South Ukrainian National Pedagogical University

named after K. D. Ushynsky”, in the regulations on structural units of Ushynsky University.

Monitoring of the quality of training those studying by EPP “Physical Culture and Sports” in the specialty 017 “Physical Culture and Sports”, analysis of the results, if necessary, correction of working curricula, work programs of disciplines is carried out by the department annually. Periodic review of the EPP “Physical Culture and Sports” in the specialty 017 “Physical Culture and Sports” is conducted once for a full course of study in the educational program. The results of the evaluation of the quality of education are regularly published at the meeting of the Academic Council of the Institute, Ushynsky University and on the official website of Ushynsky University.

Assessment of students' academic achievements is carried out on a 100-point ECTS scale and a national scale (excellent, good, satisfactory, unsatisfactory; passed, not passed). The system of assessing learning outcomes includes current, intermediate, final semester, deferred control and certification. Annually, the results of assessing the quality of students' education are discussed at meetings of the department, academic councils of the institute, Ushynsky University and published on the official website of Ushynsky University.

Annual evaluation of scientific and pedagogical workers who provide the educational process for EPP “Physical Culture and Sports” in the specialty 017 “Physical Culture and Sports” is carried out by: Department of Theory and Methods of Physical Culture and Sports, Research Department, Centre for Education Quality, student Council of Ushynsky University through surveys, questionnaires of students, reporting of teachers on the results of educational, scientific, organizational activities. Regular publication of evaluation results takes place at meetings of the Academic Councils of the Institute, Ushynsky University and on the official website of Ushynsky University.

Ushynsky University has a system of professional development of research and teaching staff that provide the educational process for EPP “Physical Culture and Sports” in the specialty 017 “Physical Culture and Sports” in various forms:



courses, internships, trainings, etc. (full-time, distance). They provide control over the implementation of the results of advanced training in the educational process at the level of the Department of Theory and Methods of Physical Culture and Sports of Ushynsky University.

### **Conclusions / Discussion**

The effectiveness of program learning outcomes as components of the educational and professional program (EPP) “Physical Culture and Sports” for training students for the second (master's) level of higher education was determined, theoretically substantiated and experimentally tested, criteria and levels of readiness for professional activity in fitness centres were revealed.

Criteria and levels of future physical culture and sports masters’ readiness for professional activity in the conditions of fitness centres are determined, namely: *motivational criterion* which determines degree of motivation for achieving success in professional activity and career growth; *epistemological and information criterion* that determines the degree of mastery of knowledge about the nature and content of future professional activity; *activity-oriented criterion* that determines the degree of mastery of skills and abilities by students necessary for successful professional activity; *creative criterion* that determines the degree of students’ creativity, which affect the success of professional activity and the ability to function productively; *reflexive criterion* that determines the degree of reflexive skills’ formation in relation to adequate self-esteem, ability to effective professional activity.

The levels of readiness of future masters in physical culture and sports for professional activity in the conditions of fitness centres which have changed during a formative stage of experiment, namely: high, sufficient and elementary are established. Upon completion of checking the effectiveness of program learning outcomes, as components of the educational and professional program (EPP) “Physical Culture and Sports” for training students for the second (master's) degree of higher education, the most significant structural components of readiness that form the factor structure of dispersion were the following: motivational component

– 31,3% of the variance of signs; cognitive and reflexive component – 25,8% of the total variance and personality and activity-oriented component – 20,47% of the total variance.

It was found out that at Ushynsky University there are special provisions, normative documents that ensure the quality of higher education of the second (master's) level of higher education by EPP “Physical Culture and Sports”. Periodic monitoring of the quality of teaching and evaluation and professional development of teachers is carried out. The structure of readiness of future masters in physical culture and sports for professional activity in the conditions of fitness centres has been improved. Provisions for the development and design of the content of the EPP for training future masters in physical culture and sports for professional activity have been further developed.

**Prospects for further research** are seen in the development of fitness technologies in the training of athletes in complex coordination sports.

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