



Formation of project competence of future specialists from the field of physical therapy, physical education and sports in the higher education system

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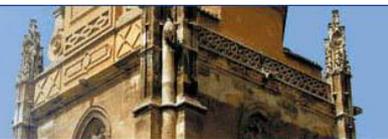
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ABSTRACT

The article aims to investigate the theoretical and methodological aspects of the formation of project competence of future professionals in the field of physical therapy, physical education and sports in the higher education system in a comparative context. The study experimentally tested the effectiveness of the formation of project competence of future specialists in the field of physical therapy, physical education and sports in the system of higher education. The experimental works were carried out during 2019–2021 in three stages: ascertaining, forming and control. Each of the identified stages involved solving the relevant tasks and identifying the necessary research methods. Research methods: analysis of scientific and methodical literature; pedagogical observation; pedagogical experiment; pedagogical testing; methods of mathematical statistics. The ascertaining experiment was attended by 342 future physical education teachers, sports coaches and physical therapists who provide professional training in specialties 014.11 Secondary education (Physical education), 017 Physical culture and sports and 227 Physical therapies, ergo therapy. Comparison of the results of the control and experimental groups showed a positive trend in all indicators of the formation of project competence: the highest increase is provided by reflexive-evaluation and cognitive indicators, the lowest (but stable) increases by motivational and value indicators.

Keywords: methods, project competence, physical culture and sports, physical education.

1. INTRODUCTION

Modern reforms and rapid integration changes in the higher education system of Ukraine focus on training of professional and competent specialists who must meet the requirements of modern Ukrainian society and leading world standards. Effectiveness of professional training in the field of formation, preservation and restoration of health, which include the areas of physical therapy, physical education and sports, largely determined by the level of formation and development of project competence. We established, that the educational process in modern institutions of higher education in these specialties, where the foundations of project competence of future specialists are laid, is determined by the active search for effective ways to optimize and modernize the system of improving the quality of vocational training of students in higher education. At the same time, numerous studies indicate that the available pedagogical technologies do not guarantee the effective formation of project competence and its practical implementation in professional activity. The methodological component reflects the scientific approaches on which the systematic study of the problem of development of project competence of future specialists in the field of physical therapy, physical education and sports is based. We identified such approaches in our study, they are: competency, activity, integrated, practice-oriented and resource-based.

Methodological aspects of the project competence in the field of education had been the subject of research by domestic and foreign experts (Kolesnikova, 2008; Dovmantovich, 2017; Kornosenko et. al., 2020; Fastivets et. al., 2021), prospects of design in the system of formation of competences of experts were investigated in works of (Polat, 1995; Yermakov, 2008; Kolesnikova, 2008; Ivanova, 2014; Ustimenko, 2019; Kornosenko et. al., 2020), the specifics of the formation of project competence of future professionals in the system of higher education were considered in the research of (Brykova et. al., 2006; Sysoeva, 2011; Bredneva, 2017; Khomenko et. al., 2021). At the same time, despite the considerable attention of leading domestic and foreign scientists to the problem of formation of project competence, the methodological and theoretical aspects of the development of this competence in the field of formation, preservation and restoration of health remain unresolved. That is why we consider it necessary to conduct an experimental evaluation of the developed methodology for the

formation of project competence in specialists in the following specialties in comparative aspect: 014.11. Secondary education (Physical education), 017 Physical culture and sports, 227 Physical therapy, ergotherapy.

2. MATERIALS AND METHODS

The aim of the study is to experimentally test the effectiveness of the formation of project competence of future specialists in the field of physical therapy, physical education and sports in the system of higher education.

Experimental work was carried out during 2019–2021 in three stages: ascertaining, forming and control. Each of the identified stages involved solving the relevant tasks and identifying the necessary research methods.

The ascertaining experiment (2019) was attended by 342 future physical education teachers, sports coaches and physical therapists who provide professional training in specialties 014.11 Secondary education (Physical education), 017 Physical culture and sports and 227 Physical therapies, ergotherapy. For the purpose of pedagogical diagnostics of a condition of professional training and revealing of levels of formation of project competence of experts we carried out an ascertaining experiment on such bases: Poltava V. G. Korolenko National Pedagogical University, Kharkiv National Pedagogical University named after G. S. Skovoroda, National University «Poltava Polytechnic named after Yuri Kondratyuk», Poltava Institute of Business of the International Scientific and Technical University named after Academician Yuri Bugay and Hryhorii Skovoroda University in Pereyaslav.

The second stage (2019–2020) was exploratory. Based on the conclusions and generalizations made after the theoretical analysis of the problem of formation of project competence of future specialists in the field of health care, the research hypothesis, which was the basis of pedagogical technology, was formulated. At this stage, such experimental course programs have been developed: «Basics of project activities in the field of health preservation» and «Methods of diagnostics and control in physical education, sports and physical rehabilitation». Following author's teaching aids: «Project activity: theory and practice» and «Integration approach in the field of forming a healthy lifestyle» were built on the principles of interdisciplinary integration. The third stage (2021) was a formative experiment, in the course of which the developed author's system of formation of project competence of future health preservation specialists was implemented in the educational process and the efficiency of the offered technique was estimated and the statistical estimation of probability of the received results was carried out.

At different stages we have used such set of research methods:

- theoretical – study and analysis of the current state of the research problem; analysis of the results of the educational process;
- empirical – observation of the activities of higher education seekers, questionnaires and self-assessment to determine the level of formation of the components of project competence, testing, evaluation of expert opinions, ascertaining and formative experiments;
- methods of mathematical statistics – for mathematical processing of the obtained research results. The statistical significance of the obtained results was estimated by statistical calculations of the Cramer-Welch and Wilcoxon-Mann-Whitney.

3. RESULTS AND DISCUSSION

We see the primary task of the study in the actualization of methodological approaches to the problem of formation of project competence. The variety of methodological approaches reveals the prospects of choice, but it is important to understand that from the standpoint of only one approach it is impossible to reveal the essence and build a clear strategy for project competence formation by future professionals in physical therapy, physical education and sports. We believe that the solution of research problems is possible through a set of scientific approaches, the choice and strategy of which are determined by the logic of research and the structure of project competence. We propose to consider the formation of project competence of future health professionals in the context of the competence approach, that is, the focus of the study of professionally-oriented disciplines on the formation and development of basic, subject and key competencies of the individual, and, as a result, on the formation of general competence of the specialist. The activity approach is closer to the idea of a competence approach within the competencies provided by educational knowledge. Competence approach should ensure the transformation of the subject of learning to the subject of developed social practice. The application of the activity approach in the process of formation of project competence of future specialists in the field of physical therapy, physical education and sports involves, first of all, the inclusion of elements of project activities in training. Implementation of the activity approach promotes the acquisition of project skills by applicants, the formation of their own ways of intellectual action in the development of scientific sources in the learning process. It is the activity approach that is the basis for the formation of project competence of the future specialist, because: competence is defined as the inner need of the individual; the formation of project competence and its development is impossible without the activities of the individual; the formation of project competence should take place in the context of educational activities, the motives of which are personal motives of the specialist as

a subject of this activity; the development of project competence should take into account not only the existing external and internal motives, but also create an environment for the evolution of these motives (Khomenko, 2007; Kornosenko et. al., 2021).

It should also be noted that the development of project competence of the future specialist is not possible within one discipline or even a combination of knowledge from several fields of research, that is, the problem of formation of project competence has a multidisciplinary nature, and therefore the key methodological approach to its solution should be integrative.

According to the positions of the integrative approach, each discipline in the cycle of training a health preservation specialist implements the integration task and provides a real contribution to the formation of individual readiness for project activities and professional activities in general. The projected result of the integration of project knowledge and methods of activity is a holistic awareness and understanding of the meaning of this activity and methodological readiness for its implementation, meaning the ability to see its system, determine its values, implement the project component in professional practice.

Practice-oriented approach in the study of foreign scientists is interpreted as an active form of training, designed for use in theoretical and practical components, which is realized by saturating the educational process with elements of professional activity (Warnek, 2007); as the orientation of the content and methods of the pedagogical process on the formation of practical skills of future professionals (Post, 2010); as a system of educational problem situations, methodological and situational tasks designed for professional training (Pietsch, 2010). From the standpoint of the objectives of our study, the main purpose of professional training of higher education seekers is to develop the ability to act in problematic situations, using the acquired theoretical knowledge, skills, abilities and personal qualities in future professional activities. Signs of practice-oriented approach determine the orientation of educational programs to the requirements of the labor market, the real practical orientation of course work and research projects; active involvement of practitioners in the educational process.

Thus, in the modern system of professional training there is a great variety of scientific approaches that determine the direction of research and the specifics of the activities of a specialist in health preservation. At the same time, none of the proposed approaches alone and in isolation is able to solve the problem of research methodology in the field of vocational training. This is achieved only through the optimal choice and rational combination of a set of methodological approaches. Thus, the formation of diagnostic competence is considered by us through a set of methodological approaches (competence, activity, integration, technological and resource-based). Our proposed approaches are adapted to the problem of formation of project competence of the specialist, since the result of scientific research of the problem is the substantiation of the system of scientific approaches as an adequate means of its conceptualization.

Based on the analysis of a set of literature sources, we have identified the principles of independence, humanization, integration and continuity of education, which determine the pedagogical vector of formation of project competence of future specialists in physical therapy, physical education and sports (Radionova, 2016).

The current stage of development of education is characterized by the project-technological nature of organizational activities, the essence of which is that productive activities are carried out in the logic of projects, namely it is divided into separate completed cycles, called projects. (Novikov, 2007) identifies a group of methodological systems that determine the vector of formation of project competence: problem-based learning, research system of learning, productive learning system, system of projective learning, contextual learning, simulation learning system, information methodological system.

The essence of the concept of «project» is revealed as «pragmatic focus on the result that can be obtained by solving a theoretically or practically significant problem» (Brykova et al., 2006).

It is established that the development and implementation of sports and health projects is phased. Analysis of a set of literature sources allowed us to identify the following stages of work on the project:

- motivational-target stage – substantiation of urgency and expediency of development of sports and health and recreational projects: formulation of the purpose and tasks of the project, substantiation of its social significance, definition of the project theme; organization of working groups, distribution of tasks between project participants;
- search and activity stage – study of the problem, collection of information (determination of the range of sources and search for the necessary information; analysis of possible solutions to the problem); selection of the optimal version of the project task (idea generation); development of a plan of work on the project task; selection of materials and tools; choosing the form of presentation of project results;
- technological stage – carrying out the activities of each project participant in accordance with the plan of work on the project task (project implementation); preparation of the presentation of the project results. Members of the group carry out research, solving intermediate project tasks, the leader indirectly observes, helps (if necessary) or advises;
- finalizing stage – generalization of research results, presentation (project defense); evaluation of project results, collective and personal achievements of project participants.

At the same time, it is important to note that the allocation of design stages, the creation of an algorithm for working on the project is quite conditional, as the development and implementation of sports and recreational projects is a creative process that involves an author's vision and a dynamic approach to the process (Sysoeva, 2011; Dovmantovich, 2017).

The organization of project activities of future specialists in the field of physical therapy, physical education and sports provides theoretical and practical preparation for professional project activities, in particular, the acquisition by future coaches of skills for effective development and implementation of sports and recreational and recreational projects (Yermakov, 2008).

In order to carry out effective project activities, applicants for higher education must have project skills, namely: independently formulate problems as a result of studying problem situations (problematization), determine the goals of project activities (goal setting), step by step plan project activities, formulate tasks and expected results, determine the timing of project work, executors (planning), organize and carry out project activities step by step in order to achieve the set goals (implementation), publicly present and defend the results of educational design (presentation), analyze the results of project activities for their compliance with the objectives (reflection) (Ustimenko, 2019).

It should be noted in the context of the objectives of our study that the project activities of the future specialist has a number of advantages over other methods of training. First of all, because it is interdisciplinary, as the development of sports and recreational projects requires the involvement of knowledge from various disciplines, their own life experience or its acquisition as a result of the project. Also, the use of technology project activities contributes to the actualization of professional interests of higher education students, the inclusion of the task in the context of future professional activities. It should also be noted that the technology of project activities leads to professional self-determination, because in the framework of educational design it is possible to offer students to solve real, close to the future profession tasks and thus develop their ability to perform professional functions and professional activities.

Systematic analysis of the problem of organization of project activities allowed us to identify typical requirements for its application and implementation, such as: the presence of significant in the research, creative plan of the problem (task), which involves the use of integrated knowledge, the implementation of research research to solve it; practical, theoretical significance of expected results; obligatory independent (individual, in pairs, group) activity of project activity subjects; structuring the substantive part of the project (with the definition of stage-oriented results and the distribution of functional responsibilities); application of appropriate research methods, which involves identifying the problem and objectives of the study, formulating a hypothesis, discussion of research methods, registration of final results, analysis of the received data, summarizing, adjustment, drawing conclusions (Polat, 1995; Dovmantovich, 2017).

It is also important to highlight the principles of formation of project activities of future specialists in the field of physical therapy, physical education and sports:

- the principle of predictability, due to the very essence of the design problem, focused on the future state of the object and predict its state and dynamics of its development;
- the principle of continuity – gradual transition from the project idea to the formation of the image of the goal and the image of activity, then – to the program of activities and its implementation, with each subsequent action depends on the results of the previous;
- the principle of normativeness – requires all stages of the project to be completed;
- feedback principle – needs to obtain information about each project action, determine its effectiveness and adjust activities as needed;
- the principle of productivity – at the heart of project activities lies pragmatism, as such activities are focused on obtaining results that have applied value;
- principle of cultural analogy – means that the design results must correspond to certain cultural patterns;
- the principle of self-development – involves the development of the subject of design in active activities to achieve the intended goal (Yermakov, 2006; Kolesnikova, 2008).

Project competence is an integral characteristic of the subject of activity, which is manifested in the ability and willingness of the individual to independent theoretical and practical activities for the development and implementation of projects in various fields of social practice. We agree with statement of (Zimivets, 2015) that project competence is related to project activities and the design process, manifested in the awareness of the importance of project activities, its content, possession of special knowledge, skills and abilities, reasonable choice and optimization of project solutions in case of their variability, the ability to apply this knowledge and skills in a particular professional field.

In a broad sense, the project competence of the future specialist is determined by the formation of project thinking, understanding the integration links between disciplines, the ability to self-education, professional and personal growth. In a narrow sense, project competence is seen as the ability of higher education students to create projects of sports and rehabilitation nature, conduct independent research, testing, collect and process information, analyze it and use it in the project (Bredneva, 2017).

Thus, the generalization of a number of scientific positions allowed us to conclude that the formation of project competence of future specialists in the field of physical therapy, physical education and sports can be considered as a dynamic integrated process, aimed at understanding the motives, needs of rational use of project activities in the professional sphere, which involves mastering the theoretical knowledge and understanding of the essence of design and management of project activities; practical mastering of methods and means of project activity; willingness and ability to apply new professional experience in the implementation of specific practical tasks in the field of sports and rehabilitation and recreation; awareness of the future specialist of compliance with the level of their professional capabilities and skills to the requirements of project activities in the field of physical culture, sports and health preservation.

An important aspect of the analysis of the problem of formation of project competence is to determine its structural components. In this context, we consider it appropriate to cite the structure of project competence proposed by (Ivanova, 2014), according to which the structural and functional-procedural components are allocated. In turn, the structural component contains the following elements: cognitive, culturological, technological, communicative, reflective and innovative. The functional-procedural component of project competence is represented by personal, motivational, interactive, normative and evaluative elements.

Based on the generalization of the complex of literary sources, we found that the project competence of future specialists in the field of physical culture. Sport and physical rehabilitation can be represented in the dynamic unity of the following components: motivational-value, cognitive, activity and reflexive-evaluative.

The separation of the functions of project competence of future specialists in the field of physical therapy, physical education and sports necessitates the development of a set of conditions conducive to the development of this competence. Based on the analysis of a set of literature sources and experience of project activities in the field of health care, we have identified the following conditions:

- self-actualization of personal experience of higher education seekers in the process of realization of project competence;
- selection of the content of professional training that provides systematic integration of knowledge, skills and abilities;
- planning to increase the level of development of project competence as a dynamic, long-term and long-term orientation of the professional activity of the future specialist (Ivanova, 2014).

The leading vector of development of modern pedagogical science is formation of competent, focused on achievement of professional success of experts. To identify the effectiveness and efficiency of the dynamic structure, it is necessary to differentiate the level of higher education seekers involved in the pedagogical experiment, it is necessary to develop an appropriate system of evaluation and accounting of results, which includes criteria and indicators of the formation of project competence of future professionals.

When developing a system of criteria for project competence of future specialists in the field of physical therapy, physical education and sports, we took into account the following aspects:

- 1) the process of formation of project competence is carried out in the relationship and interdependence of personal qualities of the future specialist, specifics of professional training in the institution of higher education, the current pedagogical conditions of the professionally-oriented environment of the educational institution;
- 2) when distinguishing the criteria and indicators that reveal them, it is necessary to take into account the structure and characteristics of the model of formation of project competence in the development and implementation of sports and rehabilitation and recreational projects;
- 3) it is necessary to take into account the place of project competence in the structure of professional activity of the future specialist and assess the prospects of project activity in future self-development.

Based on the generalization of a set of literature sources, we found that the formation of project competence of future specialists in the field of physical therapy, physical education and sports can be assessed through the prism of such criteria as following: motivational and value, cognitive, activity and reflexive-evaluative. Defined criteria and indicators will allow us to assess the level of formation of project competence of students in the process of ascertaining the stage of the experiment and identify the main problems and shortcomings in the professional training of future professionals.

Motivational and value criterion – interest in project activities, focus on obtaining project results, identifying research initiatives. Value orientation is based on a certain system of attitudes, which is the link between the needs of the person and his motives. It becomes a transitional property of the whole subject, because the need can be embodied in different motives.

Cognitive criterion – formation of the system of project knowledge (project definition, specifics of sports and recreational and recreational projects, design requirements, criteria for assessing the quality of the project); availability of knowledge about the evaluation of project effectiveness and its social significance.

Activity criterion – possession of various methods of search, processing and analytical evaluation of information; readiness to objectively assess the intermediate and final results of the design; operating the basics of design in the professional sphere.

Reflexive-evaluative criterion – the ability of the future specialist to assess the effectiveness of their own project activities; willingness to evaluate the results of project activities in the context of personal and social significance; ability to draw conclusions and adjust project effectiveness.

Based on the analysis of diagnostic results for all indicators of the selected criteria, the appropriate levels of formation of project competence of future health professionals were determined: creative (systemic), productive (functional), basic (elementary).

Basic (elementary) level of formation of project competence in the field of development of sports and recreational projects due to the possibility of performing tasks «by analogy», «by algorithm», in the complete absence of creativity and independence.

Productive (functional) level of formation of project competence of future applicants stands for knowledge of ways to capture information and different options for their combination; making certain changes at the stage of project creation, intermediate control of results.

Creative (systemic) level of formation of project competence of future specialists in the field of physical therapy, physical education and sports involves knowledge of ways to independently obtain and record information, modeling of various components of project activities.

Thus, the motivational and value criterion of the formation of project competence of future specialists in the field of physical therapy, physical education and sports reflects the system of values, needs and motives of project activities; cognitive criterion reflects the system of professional, interdisciplinary scientific knowledge of project activities. Activity criterion involves the ability to select adequate goals and objectives of design methods, analyze facts, discuss and interpret the results of research, implement them in practice. Reflective-evaluative represents the ability to understand and evaluate the process and result of project activities, ability to self-regulation, self-development and self-improvement. Defined and substantiated criteria, indicators, levels and selected diagnostic tools will provide an opportunity to assess the formation of project competence of future specialists in the field of physical therapy, physical education and sports, which is the perspective of our further research in order to determine ways to optimize project activities and training system in general.

The qualitative analysis of the effectiveness of the implementation of experimental methods and the developed set of disciplines necessitated a comprehensive quantitative analysis of research data on the basis of experimental institutions: Poltava V. G. Korolenko National Pedagogical University (specialty 014.11. Secondary education (Physical education) and 017 Physical culture and sports), Kharkiv National Pedagogical University named after G. S. Skovoroda (014.11. Secondary education (Physical education)), National University «Poltava Polytechnic named after Yuri Kondratyuk» (017 Physical culture and sports and 227 Physical therapy, ergotherapy), Poltava Institute of Business of the International Scientific and Technical University named after Academician Yuri Bugay (227 Physical therapy, ergotherapy) and Hryhorii Skovoroda University in Pereyaslav (014.11. Secondary education (Physical education) and 017 Physical culture and sports).

It was found that the indicators of the control and experimental groups in the control section actually coincide. We also note the absence of significant changes in the indicators of the control group before and after the experiment, which was a consequence of the introduction of traditional methods. Significant changes were observed in the dynamics of the experimental group before and after the implementation of the developed methodology aimed at forming the project competence of future specialists in the field of physical therapy, physical education and sports.

Thus, in the experimental group in general there was a decrease in the number of respondents who identified the basic (elementary) level of project competence by 61 people, which is 36 %. The number of applicants who showed a productive (functional) level of competence increased by 25 people (14 %) in the experimental group; at the same time, there is an increase in the percentage of people who showed a creative (systemic) (38 people – 22 %) level of project competence (Tab. 1).

Table 1: The results of the implementation of experimental methods for the formation of project competence (absolute units / number of persons)

Level of competence formation	Control group before the experiment		Experimental group before the experiment		Control group after the experiment		Experimental group after the experiment	
	Persons	%	Persons	%	Persons	%	Persons	%
Basic (elementary)	89	52	87	51	83	49	28	16
Productive (functional)	66	39	64	37	70	41	91	53
Creative (systemic)	15	9	21	12	17	10	53	31
Total	170	100	172	100	170	100	172	100

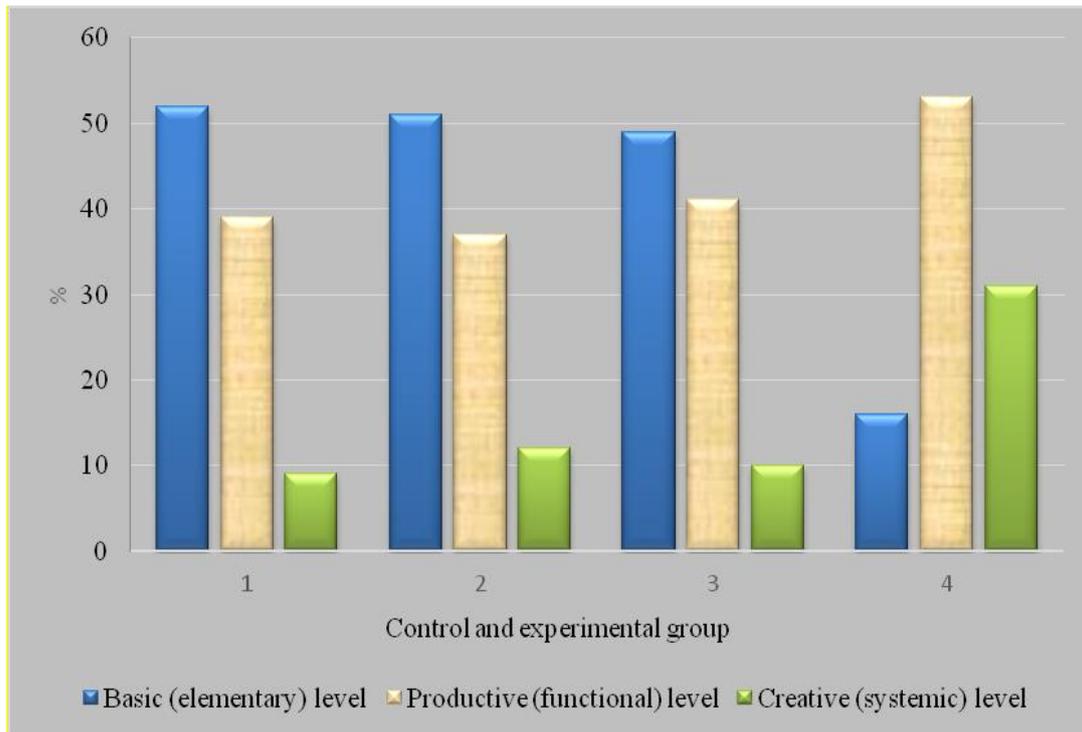


Fig.1: Dynamics of levels of formation of project competence of future specialists in the field of physical therapy, physical education and sports in control and experimental groups

To quantify the dynamics of the results of individual indicators in the control and experimental groups, we used the statistical coefficient of average growth (DPK), which takes into account the results of each of the levels of competence development (3.1).

$$DPK = \frac{A_1 + 2A_2 + 3A_3}{4} \quad (1)$$

where DPK – statistical coefficient of average growth (n) of project competence;

A_1 – increase of group indicators by basic (elementary) level of project competence formation (experimental group after the experiment (EG_2) – experimental group before the experiment (EG_1); control group after the experiment (CG_2) – control group before the experiment (CG_1);

A_2 – increase in group indicators by productive (functional) level of project competence formation ($EG_2 - EG_1$; $CG_2 - CG_1$);

A_3 – increase of group indicators by creative (systemic) level of project competence formation ($EG_2 - EG_1$; $CG_2 - CG_1$).

The highest rates of average growth are observed in the experimental group of respondents in specialty 014.11 Secondary education (Physical education) – 15.1 %, slightly lower rates – 14.8 % in specialty 227 Physical therapy, ergotherapy, and the lowest – 11.1 % in specialty 017 Physical culture and sports (Tab. 2).

Table 2. Indicators of average growth by specialties in the experimental group at the stage of the formative experiment (%)

Specialty	Mean growth, %
014.11. Secondary education (Physical education)	15.1
017 Physical culture and sports	11.1
227 Physical therapy, ergotherapy	14.8

In general, in the experimental group there is a stable growth of all groups of indicators of the formation of project competence: the highest increase is provided by cognitive (40.9 %) and reflexive-evaluation indicators (+41.2 %), slightly lower gains were in activity indicators (+38.8 %), the lowest (but stable) gains were due to motivational and value indicators (+32.9 %) (Tab. 3, Fig. 2).

Table 3: Dynamics of formation of indicators of project competence of future specialists in the field of physical therapy, physical education and sports according to the results of the formative experiment (%)

Criteria of project competence	Basic (elementary)		Productive (functional)		Creative (systemic)		Average increase, %
	EG ₁	EG ₂	EG ₁	EG ₂	EG ₁	EG ₂	
Motivational and value	38	9	40	53	22	38	32.9
Cognitive	43	7	43	63	14	30	40.9
Activity	54	18	31	51	15	31	38.8
Reflexive-evaluation	59	24	29	45	12	31	41.2

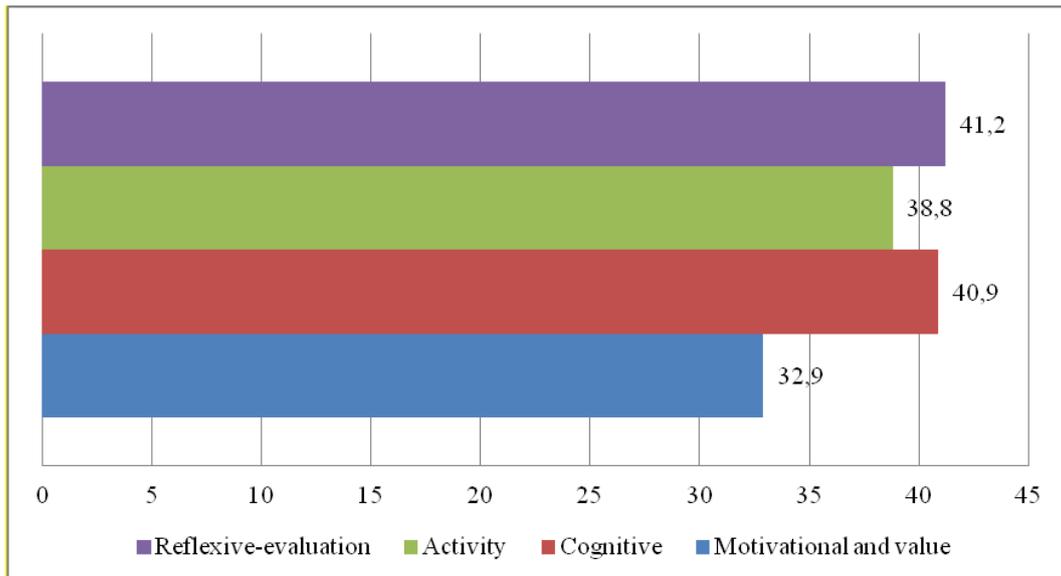


Fig.2: Formation of project competence of the respondents of the experimental group in terms of criteria

The reliability of the obtained results and the correctness of the formulated hypothesis were proved by statistical calculations of the Kramer-Welch and Wilcoxon-Mann-Whitney criteria. The results of the completed research and experimental work allow us to say that the objectives of the study have been achieved, the tasks have been implemented.

4. CONCLUSIONS

Thus, the process of forming project competence of future specialists in the field of physical therapy, physical education and sports is a complex, multi-stage process. The formation of the future specialist as a subject of professional activity occurs in the process of internalization of external regulators (professional norms and principles) in the intrapersonal sphere, resulting in the formation of a system of professional values. The process of formation of project competence of future specialists in the field of physical therapy, physical education and sports is a purposeful, scientifically sound holistic process of managing the development and diagnosis of sports and rehabilitation and recreational projects using standards and algorithms, ensuring the functioning of the system in accordance with the specified, clearly fixed, criterion-defined end results.

Comparison of the results of the control and experimental groups showed a positive trend in all indicators of the formation of project competence: the highest increase is provided by reflexive-evaluation and cognitive indicators, the lowest (but stable) increases by motivational and value indicators. The highest dynamics of average growth is observed in the experimental group of respondents in the specialty 014.11 Secondary education (Physical education), lower rates in applicants in the specialty 227 Physical therapy, ergotherapy, and the lowest in the specialty 017 Physical culture and sports. The calculation of the Kramer-Welch and Wilcoxon-Mann-Whitney criteria confirmed the reliability of the obtained data. This allowed us to conclude on the pedagogical feasibility of the scientific and methodological system of formation of project competence of future specialists in the field of physical therapy, physical education and sports.

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