

Педагогічні технології навчання фізичної культури

УДК 371.133:796:615.825

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Formation of the Operational-actionable Component of the Future Physical Rehabilitation Specialists' Readiness to Health Protection Activity

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Statement of the Research Problem and its Importance. At the present stage of the professional high school development the main idea of the concept of higher education is to train qualified specialists in the appropriate level and profile, a competitive one at a labour market, competent, who is fluent in his profession and is well-oriented in adjacent areas of activity, is able to work effectively on a speciality at the level of the world standards, is ready to constant professional growth, social and vocational mobility. This requires from higher education institutions to improve the educational process, the formation of the students activity and self-reliance, readiness for self-education and self-improvement, enhance professional skills, the learning the new forms, methods and techniques of the professional activity [1].

One of the main features of the students' training in higher educational establishment is its connection with life, with the definite specific features of the future practical activity. The whole way of the development of higher education is the desire to bring the theoretical training closer to practical one. At the same time, the analysis of the results of the monitoring of educational services quality in the field of higher education, the requirements of the labour market to the skills of the graduates from higher educational institutions, employers' requests and proposals as to the ensuring the quality of vocational training graduates shows, that, in the conditions of the market economy, the situation with the organization of the practical training in higher educational institutions is considerably worsened [2].

At the same time, quality upgrade of the higher educational system increases the demands from the society side to the professional training of the future specialists in physical rehabilitation, who should be able to develop and promote an effective system of education of the population regarding the active social orientation on healthy lifestyles, raising the prestige of human health; use traditional and non-traditional methods of health recovery; involve the citizens to active physical culture training, to increase the level of physical activity for optimal performance with the aim of restoring and preserving the health and continuation of the active longevity.

All this gives the ground to conclude that the question of the practical professional training of the future specialists in the Ukrainian universities is quite relevant, many-sided and requires new scientific developments and research.

Analysis of the Recent Studies of this Problem. Certain aspects of the vocational and practical training of the specialists in physical rehabilitation have been studied by such domestic scholars, as T. V. Boichuk, T. V. Diachenko, V. O. Kuksa, O. I. Miheienko, L. P. Sushchenko and others.

At the same time, the general concept of the practical training of future specialists in physical rehabilitation has not produced, the question of their practical training to the professional activity is not reflected enough.

Task of the study:

1. To show the essence of the operational-actionable component of the future physical rehabilitation specialists' readiness to health protection activity, the indicators and the level of its formation.

2. To investigate the features of the formation of operational-actionable component of the future physical rehabilitation specialists' readiness to health protection activity.

Methods of Research – inquiry-diagnostic (testing: in the traditional form, as well as in modes of on-line and of of-line, rating evaluation, expert estimation); observing (direct and indirect observation, self-esteem); the pedagogical experiment; prokicmetrical (study and generalisation of pedagogical experience); statistical methods of research.

Summary of the Basic Material and Provement the Results of the Study. The leading idea of the research based on understanding the process of training of future specialists in physical rehabilitation to the health protection activity as a complex dynamic system, which provides the formation of competent specialist of the new generation, prepared for health protection activity and competitive on the market of the health and rehabilitation services.

Operational-actionable component of the readiness of future specialists in physical rehabilitation to health protection activity describes the the student's availability of projective-constructive, performing analytical and reflexive skills of health protection activity.

The performing ability and skills include motivational-stimulating (ability to generate positive motivation to restore health; available to explain the tasks of the lesson and the features of the physical actions which are recommended to a man), educational (the ability to perform pedagogical and educational activity in the process of physical rehabilitation; train people to assess their physical state, identify harmful factors that negatively affect the health, use physical exercises, natural factors and other available tools for restore, enhance and preserve the health), organizational (the ability to guide the processes of renewal, strengthening and preservation of the health according to the individual characteristics of the spiritual, physical and mental development of the person; organize methodological health protection and rehabilitation physical-training lessons for people who are engaged into physical culture independently) and communicative abilities and skills (ability to establish correct relations specialist in physical rehabilitation with a rehabilitated person, with colleagues; use different mechanisms for the formation of interpersonal relationships between the participants of the rehabilitation process, prevent and overcome the conflicts in communication).

Projective-constructive ability and skills include the gnostic (ability to acquire, update and expand their knowledge of principles, methods, means and forms of health protection activity), projective-prognostic (ability to plan and rehabilitation measures in accordance with the common strategic goal of health protection, physiological-hygienic, psychological-pedagogical factors, and also the optimal species, methods and techniques of the health protection activity) and design ability and skills (the ability to comprehensively use various physical exercises, natural and preformed physical factors to restore human health; to identify mental and physical performance, the readiness to systematic physical activity in different age periods).

Analytical reflexive ability and skills cover control-regulated (the ability to determine the degree of human fatigue after physical and mental exertion; identify the contraindications to physical and mental stress due to age, health) and scoring-resulting abilities and skills (the ability to objectively evaluate the results of its own activities; to evaluate and monitor the effectiveness of rehabilitation programs at all stages of physical rehabilitation and to determine their compliance with the age and physical preparedness of the man).

According to operational-actionable criterion of the readiness of future specialists in physical rehabilitation to health protection activity: *low level* is characterized by the absence of projective-constructive, performing, and analytical- reflexive ability and skills of the student as to performing health protection activity; *average* – sufficiently determined projective-constructive, performing, and analytical-reflexive *ability and skills* of the student as to performing health protection activity; *high* – clearly marked projective-constructive, performing, and analytical-reflexive *ability and skills* of the student as to performing the health protection activity.

In order to study the peculiarities of the formation of the **operational-actionable** component of future specialists' readiness in physical rehabilitation to health protection activity, the pedagogical experiment was conducted. For the research and experimental work, the Lusk Institute of human development at the University "Ukraine" and Drohobych State Pedagogical University named after Ivan Franko were elected. According to the tasks of the pedagogical experiment the control group (n = 112 persons) and experimental (n = 122 persons) group were formed from the students of these universities.

Students in the control group were trained due to the traditional scheme of the educational process; in the experimental group the learning process included the implementation of the active-activity phase of the future specialists' training in physical rehabilitation to health protection activity.

Active-actionable phase, which inherently is system-creative, provides the involving of the students into the process of their own professional development, which gives him the opportunity to actively advance along the individual trajectory of the formation of the readiness to health protection activity. At this stage, students

master the system of special knowledge, abilities and skills: planning professional activity with regards to profессиogram and qualifying characteristics of the future specialist in physical rehabilitation; planning for health protection activity and forecasting its results; implementation of health protection activity, taking into account their level of intellectual, emotional and personal development; the determination of the close and distant prospects of their own professional development.

Of special importance it is the development of the regulatory mechanisms of the activity, behavior and communication, the expansion of the individual ways of creative self-expression in the educational process at the expense of integration and combination of different methods and means of learning, organizational forms of classroom and extracurricular classes. The main forms and methods of work at this point is: the problem-based and multimedia lectures, panel discussions, business games, trainings, the method of brainstorming, the method of case-study, method of projects, various forms of independent and individual students work, distance education, using information and communicative technologies, Internet-counseling, volunteer health protection activity, student research work.

One of the components of active-actionable phase of the practical training of future specialists in physical rehabilitation, which presupposes that the students are mastering the modern methods of scientific research, forms of organization of health protection activity, forming in them, on the basis of the obtained knowledge, the professional skills for making independent decisions, is pedagogical and production practice. Only use the knowledge in practice, you can master them tightly enough, acquire the ability to use them in a variety of professional situations, on this basis, it is developed the creative thinking of future specialists in physical rehabilitation, formed a creative approach to health protection activity.

When organizing and conducting the practices it is need to come from the fact that the practice should: have an active character; be cross-cutting and based on absorbing the theoretical concepts of the disciplines of professional training for speciality «physical rehabilitation»; predict the formation and development of the operational-actionable structural component of the readiness of the future specialists in physical rehabilitation to health protection activity.

For the purpose of determining the operational-actionable criterion the diagnostic card was developed for evaluation the levels of projective-constructive, performing, analytical-reflexive ability and skills of the student to health protection activity. The students carried out a self-assessment according to the diagnostic skills, proposed in the card, taking into consideration the following scale: high level – 1 point, the average level is 0,5 points, low level – 0,3 points.

The expert evaluation was carried out by two experts, the role of which was given to the leading specialists of the Department of physical rehabilitation. The total score was calculated according to the results of student's self-evaluation and two experts' assessments.

A high level of mastering of projective-constructive, performing, analytical-reflexive ability and skills by the future specialists in physical rehabilitation are determined by the presence of 2,5–3 points, the average – is 1,3–2,4 points, low- is 0,9–1,2 points.

Dynamics of the levels formation of projective-constructive, performing, analytical-reflexive ability and skills of future specialists in physical rehabilitation of health protection activity is presented in table 1.

The following data shows that at the beginning of the pedagogical experiment, a high level of projective-constructive, performing, analytical-reflexive ability and skills had 10,71 % of students of the control group and 11,48 % students of experimental groups; the average level of projective-constructive, performing, analytical-reflexive ability and skills had 32,14 % students of the control group and 31,97 % students of experimental group; low level – 57,14 % of students of the control group and 56,56 % of the students of the experimental group.

Table 1

Dynamics of the Levels Formation of Projective-constructive, Performing, Analytical-Reflexive Ability and Skills of Future Specialists in Physical Rehabilitation

Group	Stage	Level								
		low			average			high		
		ABS.	%	diff. in%	ABS.	%	diff. in%	ABS.	%	diff. in%
The control group (n=112)	beginning	64	57,14	-11,60	36	32,14	+5,36	12	10,71	+6,25
	end	51	45,54		42	37,50		19	16,96	
Experiment Group (n= 122)	beginning	69	56,56	-27,05	39	31,97	+13,9	14	11,48	+13,11
	end	36	29,51		56	45,90		30	24,59	

At the end of the pedagogical experiment, a *high level of* the formation of projective-constructive, performing, analytical-reflexive ability and skills of future specialists in physical rehabilitation had 15,18 % students of the control group and 22,95 % students of the experimental group; *the average level* is 37,50 % of students of the control group and 50 % of the students of experimental groups; *low level* – 47,32 % students of the control group and 27,05 % students of experimental groups.

After the completion of the pedagogical experiment it was observed the following trends for formation projective-constructive, performing, analytical-reflexive ability and skills of future specialists in physical rehabilitation (fig. 1): the increased number of students with *high level* of formation projective-constructive, performing, analytical-reflexive ability and skills in the control group at 6,25 %, in experimental at 13,11 %; the number of students with a *medium level* of projective-constructive, performing, analytical-reflexive ability and skills is also increased in the control group at 5,36 % in experiment at 13,93 %; the number of students with *low level* of projective-constructive, performing, analytical-reflexive ability and skills is reduced in the experimental group at 11,60 %, in the control group – at 27,05 %.

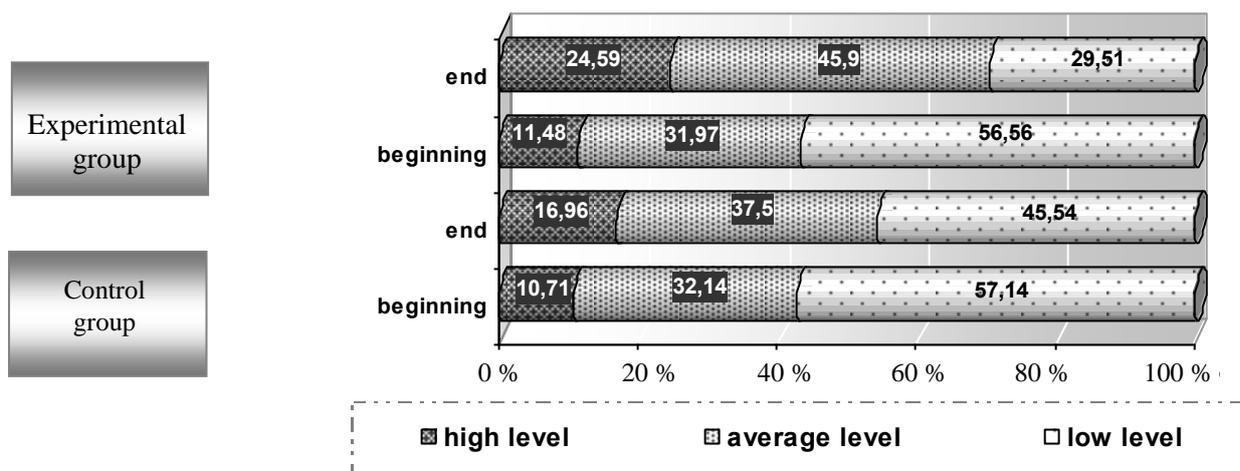


Fig. 1. Dynamics of Levels of Projective-constructive, Performing, Analytical-Reflexive Ability and Skills of Future Specialists in Physical Rehabilitation in the Control and Experimental Groups

Consequently, the comparative analysis of the levels of projective-constructive, performing, analytical-reflexive ability and skills of future specialists in physical rehabilitation at the beginning and at the end of the pedagogical experiment shows a positive increment of the given index in both the experimental and control groups after the completion of the pedagogical experiment.

Scores of projective-constructive, performing, analytical-reflexive ability and skills of future specialists in physical rehabilitation are presented in table 2. It is shown from the following data that between the indicators of formation projective-constructive, performing, analytical-reflexive ability and skills of the students in experimental and control groups at the beginning of pedagogical experiment the statistically reliable differences were not found, that indicates the homogeneity of these groups.

Table 2

Scores of the Formation Projective-constructive, Performing, Analytical-reflexive Ability and Skills of Future Specialists in Physical Rehabilitation

Stage	The control group (n=112)		Experimental group(n=122)		t	p
	M ±m	σ	M ±m	σ		
Beginning	11,71± 0,52	5,46	13,03± 0,55	6,10	1,75	>0,05
End	13,03± 0,58	6,15	15,70± 0,63*	6,96	3,36	<0,05

Note:* - The results at the end of the experiment, a statistically significantly different from similar early in the experimental group (p < 0,05).

After the pedagogical experiment the determined data increased in both experimental and control groups. In particular, in the experimental group the score of projective-constructive, performing, analytical-reflexive ability and skills was increased from (13,03± 0,55) to (15,70± 0,63) points, and these values statistically significantly are differed between each onther (p < 0,05). In the control group the indicator of formation projective-constructive, performing, analytical-reflexive ability and skills increased from (11,71±

0,52) to (13,03± 0,58) points. At the same time, the difference was proved to be statistically unreliable in relation to the original level in the control group.

Thus, among the indicators of formation projective-constructive, performing analytical-reflexive ability and skills of future specialists in physical rehabilitation in the experimental and control groups at the end of pedagogical experiment is observed a statistically reliable difference ($p < 0,05$).

Conclusions and Prospects for Further Research. Analysis of operational-actionable component of readiness of future specialists in physical rehabilitation to health protection activity showed that the training of students to a specified activity should have actionable-oriented character, which is in a wide application of interactive teaching technologies in the process of studying professionally oriented disciplines; health protection direction of the practical training of the students. It is experimentally proved that the realization of active-actionable phase of the training of future specialists in physical rehabilitation significantly increases their readiness to health protection activity.

In the long term it is planned to explore the features of the forming of the reflexive analytical component of the future specialists' readiness in physical rehabilitation to health protection activity.

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Abstract

In the article it investigates the operational-actionable component of the future physical rehabilitation specialists' readiness to health protection activity. It is analyzed the practitioner-oriented approach to the formation of the projective-constructive, performing and analytical-reflexive students' skills. It is shown the peculiarities of the active-actionable phase of the training of future specialists in physical rehabilitation to health protection activity. It is stressed the necessity of the application of pedagogical forms and methods of the interactive direction in the process of teaching professionally oriented disciplines, health protection kind of practical training of future specialists in physical rehabilitation. It is experimentally proved the effectiveness of the implementation of the active-actionable phase in the training of the future specialists in physical rehabilitation, that greatly increases their readiness to health protection activity.

Key words: operational-actionable component, readiness, future specialist in physical rehabilitation, health protection activity.

Наталія Бєлікова, Світлана Індика. Формування операційно-діяльнісного компонента готовності майбутніх фахівців із фізичної реабілітації до здоров'язберігальної діяльності. У статті досліджено операційно-діяльнісний компонент готовності майбутніх фахівців із фізичної реабілітації до здоров'язберігальної діяльності. Розглянуто практико-орієнтований підхід до формування проєктувально-конструктивних, виконавських й аналітико-рефлексивних умінь і навичок студентів. Розкрито особливості активно-діялісного етапу підготовки майбутніх фахівців із фізичної реабілітації до здоров'язберігальної діяльності. Наголошено на необхідності застосування педагогічних форм і методів інтерактивного спрямування в процесі викладання професійно орієнтованих дисциплін, здоров'язберігальної направленості практичної підготовки майбутніх фахівців із фізичної реабілітації. Експериментально доведено ефективність реалізації активно-діялісного етапу підготовки майбутніх фахівців із фізичної реабілітації, що суттєво підвищує їхню готовність до здоров'язберігальної діяльності.

Ключові слова: операційно-діялісний компонент, готовність, майбутній фахівець із фізичної реабілітації, здоров'язберігальна діяльність.

Наталья Беликова, Светлана Индыка. Формирование операционно-деятельностного компонента готовности будущих специалистов по физической реабилитации к здоровьесберегающей деятельности. В статье исследуется операционно-деятельностный компонент готовности будущих специалистов по физической реабилитации к здоровьесберегающей деятельности. Рассматривается практико-ориентированный подход к формированию проектно-конструктивных, исполнительских и аналитико-рефлексивных умений и навыков студентов. Раскрыты особенности активно-деятельностного этапа подготовки будущих специалистов по физической реабилитации к здоровьесберегающей деятельности. Отмечена необходимость применения педагогических форм и методов интерактивного направления в процессе преподавания профессионально ориентированных дисциплин, здоровьесберегающей направленности практической подготовки будущих специалистов по физической реабилитации. Экспериментально доказана эффективность реализации активно-деятельностного этапа подготовки будущих специалистов по физической реабилитации, что существенно повышает их готовность к здоровьесберегающей деятельности.

Ключевые слова: операционно-деятельностный компонент, готовность, будущий специалист по физической реабилитации, здоровьесберегающая деятельность.