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## **FORMATION OF THE ACTIVITY-OPERATIONAL COMPONENT OF THE PROFESSIONAL IDENTITY OF FUTURE SPECIALISTS IN PHYSICAL THERAPY, ERGOTHERAPY**

*The aim of the article is to investigate the peculiarities of the formation of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy and to diagnose the developed system. The activity-operational component is manifested in specific actions and is implemented in stages. The first stage – observation of actions, words, gestures, actions of other people, effective use of active listening, active vision and active empathy, the second stage – interpretation and understanding of the behavior of others, the third stage – conclusions and evaluation of correctness, adequacy of their actions in a given situation. Formation of activity-operational component of professional identity of future specialists in physical therapy, ergotherapy in higher education institutions, methodological approaches (acmeological, epistemological, personal, activity, axiological, synergetic and praxeological) and principles, continuity of orientation and differentiation). Indicators and levels of activity-operational component are characterized. It is established that the activity criterion presupposes the understanding of competence as a component of professional identity. This criterion reflects the attitude to specific activities and categories of patients / clients, the result of which is self-expression. According to the results of the analysis of the data of the pedagogical experiment, it is established that the level of formation of the professional identity of future specialists in physical therapy, ergotherapy of the experimental and control groups according to the activity criterion has increased. The conducted pedagogical experiment allowed to establish that the selected methodological approaches and principles allow to ensure the formation of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy in higher education institutions.*

**Key words:** *activity-operational component, professional identity, activity criterion of diagnostics of professional identity, professional education, physical therapy, ergotherapy.*

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## **ФОРМУВАННЯ ДІЯЛЬНІСНО-ОПЕРАЦІЙНОГО КОМПОНЕНТА ПРОФЕСІЙНОЇ ІДЕНТИЧНОСТІ МАЙБУТНІХ ФАХІВЦІВ З ФІЗИЧНОЇ ТЕРАПІЇ, ЕРГОТЕРАПІЇ**

*Мета статті – дослідити особливості формування діяльнісно-операційного компонента професійної ідентичності майбутніх фахівців з фізичної терапії, ерготерапії та провести діагностику розробленої системи. Діяльнісно-операційний компонент виявляється в конкретних діях і реалізовується поетапно. Перший етап – спостереження за вчинками, словами, жестами, діями інших людей, ефективне використання прийомів активного слухання, активного бачення й активного співпереживання, другий етап – інтерпретація і розуміння поведінки іншого, третій етап – висновки й оцінювання правильності, адекватності своїх дій у певній ситуації. Формування діяльнісно-операційного компонента професійної ідентичності майбутніх фахівців з фізичної терапії, ерготерапії в закладах вищої освіти, методологічних підходів (акмеологічний, гносеологічний, особистісний, діяльнісний, аксіологічний, синергетичний та прагматологічний) та принципів (професійної спрямованості, систематичності, неперервності та наступності, єдності індивідуалізації та диференціації). Охарактеризовано показники та рівні діяльнісно-операційного компонента. Встановлено, що діяльнісний критерій передбачає розуміння компетентності як складової частини професійної ідентичності. Даний критерій відображає ставлення до конкретних видів діяльності і категорій пацієнтів/клієнтів, результатом якого є самовираження.*

*За результатами аналізу даних педагогічного експерименту встановлено, що рівень сформованості професійної ідентичності майбутніх фахівців з фізичної терапії, ерготерапії експериментальної та контрольної груп за діяльнісним критерієм підвищився. Проведений педагогічний експеримент дозволив встановити, що виділені методологічні підходи та принципи дозволяють забезпечити формування діяльно-операційного компонента професійної ідентичності майбутніх фахівців з фізичної терапії, ерготерапії в закладах вищої освіти.*

**Ключові слова:** діяльно-операційний компонент, професійна ідентичність, діяльнісний критерій діагностики професійної ідентичності, професійна освіта, фізична терапія, ерготерапія.

**Statement of the problem.** Today, the domestic system of professional education of specialists in physical therapy and ergotherapy, where modernization processes are taking place, is a question of professional competence of graduates of higher education institutions. The ability of a physical therapist / ergotherapist to find his place in the professional space is determined by his readiness for independent professional activity and willingness to quickly navigate in the modern multidisciplinary space, constantly self-improvement, critically considering their professional development and contribution to health care.

In such circumstances, the main result of higher education institutions that train specialists in physical therapy and ergotherapy is the possibility of comprehensive assignment of graduates of basic cultural and professional competencies, in which the willingness and ability to solve standard problems of professional activity in interaction is important among professional education (Dmitriieva and Kopychynska, 2019; Kopychynska and Dmitriieva, 2020).

**Research analysis.** Activity operational approach in modern scientific research in pedagogy is considered as a methodological (Hammond et al., 2016; Paskaleva, 2016). The urgency of the problem is based on the need to select the content of the system of didactic management of the activity-operational component. In the process of implementing the goals and objectives of didactic management activity-operational component is provided by a set of actions, methods aimed at creating a methodological system for managing the training of future specialists in physical therapy, ergotherapy, and actualizes the personality of physical therapist or ergotherapist, and optimizes for their development.

The urgency of the studied problem is due to the lack of a holistic study to reveal the content of the formation of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy.

**Purpose of the article** – to investigate the peculiarities of the formation of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy and to diagnose the developed system.

**Presenting main material.** The activity-operational component of professional identity directly reflects the essence of the rehabilitation process, which is implemented by appropriate methods, techniques and forms of rehabilitation.

In the study, we consider the activity-operational component as one that characterizes the ability to perform actions that form a professional identity, the ability to solve complex specialized tasks and tests.

The activity-operational component is manifested in specific actions and is implemented in stages. The first stage – observation of actions, words, gestures, actions of other people, effective use of active listening, active vision and active empathy, the second stage – interpretation and understanding of the behavior of others, the third stage – conclusions and evaluation of correctness, adequacy of their actions in a given situation.

Scientists differently determine the sequence of these stages in the structure of the studied phenomenon. However, the absence of at least one of them will lead to an inaccurate definition of the features and levels of professional identity (Pavliuk, 2009).

Formation of activity-operational component of professional identity of future specialists in physical therapy, ergotherapy in higher education institutions, methodological approaches (acmeological, epistemological, personal, activity, axiological, synergetic and praxeological) and principles, continuity of orientation and differentiation).

The principle of professional orientation reflects the training of specialists in physical therapy, ergotherapy for professional activities, in which a set of knowledge, skills and abilities allows to perform activities to determine and improve quality of life and motor potential, in promoting healthy lifestyles, prevention, treatment / intervention, habilitation and rehabilitation. Further professional training is improved in the process of labor activity through the system of advanced training and self-education. This principle of professional orientation reflects the construction of a system of professional training of specialists in physical therapy and ergotherapy, taking into account the types of professional activities: comprehensive examination / assessment of an individual patient / client or the needs of a group of clients;

evaluation of the results obtained during the examination / evaluation for making clinical decisions concerning patients / clients; diagnosis, prognosis and development of an intervention plan; providing advice within its competence and determining when exactly patients / clients should turn to other specialists; implementation of the intervention / treatment program; determining the results of any intervention / treatment; providing recommendations for independent work.

The principle of systematicity is a classic principle of didactics and is based on the following scientific principles: all actions on a person are effective only when they are purposeful and carried out in the system. Systematic means the orderliness of the knowledge system as the content of learning. In addition, each subject has its own scientific logic, its own system of concepts that follow from each other; each subject has its own patterns that reflect certain facts and phenomena. The principle of systematicity is associated with the laws of cognitive and practical activities of students. Material is considered mastered if a person has formed a system of associations and connections between old, acquired knowledge and new. At the same time, systematic thinking as a characteristic of a developed mind means that the human brain works more efficiently if it receives a load regularly, systematically and in certain portions.

Systematicity also means the need to establish links between topics and sections of the discipline, to establish interdisciplinary links, as each student is taught not one discipline, but several. This will contribute to a holistic view of the studied subjects, understanding the relationship and interdependence of various objects and phenomena. Also, this principle reflects the procedural side of learning, which must be built in a certain system. Training of a specialist in physical therapy, ergotherapy as a managed systematized process requires planning and is carried out in accordance with the developed program-methodical materials, which determines the system of the teacher's work in the process of professional training and allows to structure educational material. Systematization should also be manifested in the organization of the learning process, in the requirements for students in the system of each lesson. Systematic should be in the work of the student, manifested in the systematic preparation for classes, work in the classroom.

The principle of continuity and continuity reflects the length of the training process over time, its structure and stage nature. This principle also expresses the temporal and spatial connection of the stages of professional training of future specialists in physical therapy and ergotherapy. Continuity means building

a training system from the beginning of vocational training. The course of professional training is realized as a progressive movement aimed at mastering new knowledge in certain disciplines and on the basis of interdisciplinary links, to build a system of practical training that allows to master professional skills, technologies and form professionally significant personality traits of the future specialist. The mechanism of continuity in training is continuity, which involves the preservation at each stage of training of basic knowledge, basic skills and personality traits, formed earlier in the previous stages.

The principle of unity of individualization and differentiation is considered in pedagogical science as connected with the account of age and individual features. Within its framework, «individualization» is seen as taking into account the individual characteristics of each individual, as each person is a unique individual, which is determined by the unity and integrity of each person's development. Each person has their own needs, their own individual inclinations, aptitudes and abilities. Hence, the approach to the student should be implemented taking into account his individual characteristics. On the other hand, individualization may not correlate with the need to take into account the individual characteristics of each, but to assume a certain differentiation, as it is difficult to fully individualize the training process.

Diagnosis of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy in the study, we conducted on the basis of activity criteria.

The activity criterion presupposes an understanding of competence as an integral part of professional identity. We propose to consider the activity criterion as a subjective idea of the future specialist in physical therapy, ergotherapy about their readiness to work in a particular area of professional activity. This criterion reflects the attitude to specific activities and categories of patients / clients, the result of which is self-expression.

Indicators of the activity criterion of formation of professional identity of future specialists in physical therapy, ergotherapy are the ability to apply and adhere to moral norms, professional ethics, obtain the consent of the patient / client, or guardians to conduct physical therapy, ergotherapy; ability to take into account factors that may affect the effectiveness of communication, use open and closed questions, identify and interpret nonverbal communication signals, communicate professionally and clearly with patients / clients, guardians, family members, relatives and all participants in the rehabilitation process; critically analyze the existing rehabilitation practice,

based on modern scientific data; apply knowledge in practice, solve complex problems and problems that arise in professional activities.

The basic level of formation of professional identity of future specialists in physical therapy, ergotherapy by activity criteria is characterized by the ability to apply and adhere to moral norms, professional ethics, obtain the consent of the patient / client or guardians to conduct physical therapy, ergotherapy; ability to communicate professionally and clearly with patients / clients, guardians, family members, relatives and all participants in the rehabilitation process; lack of ability to analyze existing rehabilitation practices based on current scientific data; ability to apply knowledge in practice.

The advanced level of professional identity of future specialists in physical therapy, ergotherapy by activity criteria is characterized by the ability to apply and adhere to moral norms, professional ethics, obtain the consent of the patient / client, or guardians to conduct physical therapy, ergotherapy; the ability to communicate professionally and clearly with patients / clients, guardians, family members, relatives and all participants in the rehabilitation process; ability to analyze existing rehabilitation practice, based on modern scientific data; apply knowledge in practice, solve complex problems and problems that arise in professional activities.

The highest level of professional identity of future specialists in physical therapy, ergotherapy by activity criteria is characterized by the ability to apply and adhere to moral norms, professional ethics, obtain the consent of the patient / client or guardians to conduct physical therapy, ergotherapy; take into account factors that may affect the effectiveness of communication, use open and closed questions, identify and interpret nonverbal communication signals, communicate professionally and clearly with patients / clients, guardians, family members, relatives and all participants in the rehabilitation process; critically analyze the existing rehabilitation practice, based on modern scientific data; apply knowledge in practice, solve complex problems and problems that arise in professional activities.

The pedagogical experiment was attended by 131 students of the Academician Yuriy Bugay International Scientific and Technical University, Poltava Institute of Business Academician Yuriy Bugay International Scientific and Technical University, National Technical University of Ukraine "I. Sikorsky Kyiv Polytechnic Institute", which were classified as experimental and groups.

As a result of the pedagogical experiment it was found that the data characterizing the formation of

professional identity of future specialists in physical therapy, ergotherapy increased in the experimental group from  $24 \pm 6$  to  $45 \pm 12$  and in the control group from  $23 \pm 9$  to  $35 \pm 10$ . According to the diagnostic results After the pedagogical experiment, a difference was revealed between the indicators of future specialists in physical therapy, ergotherapy of experimental ( $45 \pm 12$ ) and control ( $35 \pm 10$ ) groups, which characterize the formation of professional identity.

The dynamics of the levels of formation of professional identity of future specialists in physical therapy by activity criterion, ergotherapy is also revealed.

It was found that before the pedagogical experiment 44 students (61,97%) of the experimental and 35 students (58,33%) of the control groups demonstrated that their professional identity by activity criterion is at a basic level. The advanced level of formation of professional identity was shown by the results of 23 students of the experimental and 22 students of the control groups, which is 32,39% and 36,67%, respectively. The highest level of professional identity formation according to the activity criterion was demonstrated by 4 students (5,63%) of the experimental group and 3 students (5%) of the control group.

After the pedagogical experiment, the basic level of professional identity according to the activity criterion was demonstrated by 5 students of the experimental group and 14 students of the control group, which is 7,04% and 23,33%, respectively. The advanced level of formation of professional identity according to the activity criterion was demonstrated by 24 students of the experimental group and 29 students of the control group, which is 33,08% and 48,33%, respectively. The highest level of professional identity formation according to the activity criterion was demonstrated by 42 students (59,15%) of the experimental group and 17 students (28,33%) of the control groups.

According to the results of the analysis of the data of the pedagogical experiment, we can say that the level of formation of the professional identity of future specialists in physical therapy, ergotherapy of the experimental and control groups according to the activity criterion has increased. This statement is confirmed by the fact that in the experimental group the number of students with the basic level of formation of professional identity by activity criterion decreased by 54,93%, in the control – by 35%; the number of students with advanced level increased in the experimental group by 1,41%, in the control group by 11,66%; the number of students whose professional identity is formed at the highest level increased in the experimental group by 53,52%, in the control by 23,33%.

These indicators indicate the positive dynamics of the formation of professional identity in future specialists in physical therapy, ergotherapy by activity criteria, which took place during the pedagogical experiment.

**Conclusions.** Based on the study, it is established that the formation of activity-operational component of professional identity of future specialists in physical therapy, ergotherapy in higher education, methodological approaches (acmeological, epistemological, personal, activity, axiological, synergetic and praxeological orientation) and principles, continuity and continuity, unity of individualization and differentiation). Diagnosis of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy in the study, we conducted on the basis of activity criteria. Indica-

tors and levels of activity-operational component are characterized. It is established that the activity criterion presupposes the understanding of competence as a component of professional identity. This criterion reflects the attitude to specific activities and categories of patients / clients, the result of which is self-expression. The conducted pedagogical experiment allowed to establish that the selected methodological approaches and principles allow to ensure the formation of the activity-operational component of the professional identity of future specialists in physical therapy, ergotherapy in higher education institutions.

A promising issue for further research is the study of other parts of the system of formation of professional identity of future specialists in physical therapy, ergotherapy.

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