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**DISTANCE LEARNING INFLUENCES ON THE PSYCHO-HYGIENIC ASPECTS OF THE MOTIVATION BEHAVIOR OF STUDENTS OF MEDICAL AND BIOLOGICAL SPECIALTIES IN TERMS OF PANDEMIC AND MARTIAL LAW STATE**

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*Educational activity motivation deserves particular attention. Motives directly affect the quality of professional training and personality formation. Meanwhile, while obtaining high-quality higher education, it is important to monitor the educational process organization under the conditions of current challenges: the COVID-19 pandemic and the introduction of martial law on the territory of Ukraine. The relevance defines the aim - to determine the psycho-hygienic aspects of the attitude of students of medical and biological specialties to the organization of distance learning in terms of the COVID-19 pandemic and martial law, as well as to investigate the structure of motivational orientation of students towards obtaining higher education. To achieve the set research objectives, the sociological method has been used. The first stage of the study was to analyze the features of distance learning in terms of quarantine associated with the COVID-19 pandemic (excluding the spring semester of 2022), compared to the period without distance learning (traditional face-to-face learning). The second stage of the study was to analyze the characteristics of distance learning (related to the introduction of martial law) compared to distance learning caused by the COVID-19 pandemic.*

*Key words: psycho-hygienic aspect; educational process; motivational behavior; distance learning; pandemic; martial law; students.*

*Особливої уваги заслуговує мотивація навчальної діяльності, тому що саме мотиви безпосередньо впливають на якість професійної підготовки та формування особистості професіонала. Разом з тим, важливим в контексті здобуття якісної вищої освіти залишається моніторинг організації освітнього процесу за умов викликів сьогодення: пандемії COVID-19 та впровадження воєнного стану на території України. Актуальність визначає мету - визначити ставлення студентів медико-біологічного напрямку підготовки до організації дистанційного навчання в умовах пандемії COVID-19 та воєнного стану, а також дослідити структуру мотиваційної спрямованості студентів до здобуття вищої освіти. Для досягнення поставлених дослідницьких цілей нами був використаний соціологічний метод. Першим етапом дослідження було*

*проаналізувати особливості дистанційного навчання в умовах карантину, пов'язаного з пандемією COVID-19 (без врахування весняного семестру 2022 року), порівняно з періодом без дистанційного навчання (традиційне очне навчання). Другим етапом дослідження було здійснити аналіз особливостей дистанційного навчання (пов'язаного із впровадженням воєнного стану) порівняно із дистанційним навчанням, викликаного пандемією COVID-19.*

*Ключові слова: психогігієнічний аспект, освітній процес, мотиваційна поведінка, дистанційне навчання, пандемія, воєнний стан, студенти.*

### **Introduction.**

The quality and availability of education have a direct impact on income, employment, development, and socialization of people. For a long time, it was believed that the main factor of qualitative assimilation of information is the level of development of the cognitive sphere of the individual. In the organization of the modern educational process, the level of development of the motivational sphere plays no less a role, and sometimes a much greater one. The motivation to study is one of the most important conditions for the implementation of the educational process, since motives directly contribute to the development of intelligence, and affect the quality of professional training and personality formation.

The task of teachers is to understand the motivation of students to study. In order to understand motivation and predict its dynamics, it is important to know its structure. Motivation is classified in different ways, for example, the following types are distinguished by direction and content (Unhuryan et al., 2013):

- social motives (responsibility, understanding of the importance of education for the whole society);
- cognitive motives (the desire to know more about all subjects, to become erudite);
- professional value motives (lack of knowledge means lack of good profession);
- aesthetic motives (you get pleasure from learning, you reveal your hidden abilities and talents);
- communicative motives (the opportunity to expand one's circle of communication thanks to the increase of one's intellectual level and new acquaintances);
- status-positional motives (the desire to establish oneself in society, in one's higher education institution, group, etc. through teaching or public activity);
- utilitarian-practical motives (need to obtain university diploma);
- educational and cognitive motives (the desire to master a separate interesting subject and learn self-education);
- unconscious motives (based on a complete misunderstanding of the content of the received information and a complete lack of interest in the cognitive process).

In the structure of educational activity motivation, internal and external motives are distinguished. Internal learning motivation includes deep motives for entering higher education institutions, broad educational and cognitive motives, and motives for self-education, which contribute to high interest in learning, successful learning, obtaining intellectual satisfaction, and self-realization. External motivation is the superficial motivation for admission and narrow cognitive motives that depend on the presence of external support (keeping up with fellow students, gaining the respect of teachers, avoiding condemnation and punishment) (Tepla et al., 2018).

Recently, the understanding of the so-called positive and negative motivation of students' educational activity has increased. Positive motivation is directly related to the learning process and the chosen profession and includes cognitive and professional motives. Negative motivation includes pragmatic motives (obtaining a diploma), which involve studying without the desire to study the material, without interest in the profession, and without the desire to attend a higher education institution (Tepla et al., 2018; Martyniuk, 2022).

Motivational processes during student education can and should be managed, creating conditions for the development of internal motives, and stimulating students. Students who are internally motivated, take on tasks, or successfully study in their interests, are genuinely interested in acquiring new professional knowledge and skills and achieving high goals.

The transition to distance learning became a serious challenge and led to the comprehensive use of modern digital tools, exacerbating several educational inequalities. But the Ukrainian education system faced a new challenge - a full-scale military invasion of the terrorist state of Russia in Ukraine. Meanwhile, the modern intense and stressful rhythm of life in terms of martial law leads to a negative impact on the mental and psychophysiological spheres of the individual, often causing the emergence of acute negative anxiety-depressive emotions. (Khomenko-Semenova & Prokhorenko, 2022; Bereziak et al., 2022).

At the same time, ensuring the educational process in higher education institutions can undoubtedly make corrections in the process of formation of motivation to study. Thus, the purpose of the research was to determine the psycho-hygienic aspects of the attitude of students of medical and biological specialties to the organization of distance learning in terms of the COVID-19 pandemic and martial law, as well as to investigate the motivational orientation of students towards obtaining higher education.

#### **Method and Contingent.**

To achieve the set research goals, the sociological method has been used. The survey has been conducted anonymously with the help of the Microsoft Forms application, using the Office 365 platform. The sample consisted of 46 full-time students of II-IV courses of the Faculty of Biology and Forestry and the Faculty of Medicine of Lesya Ukrainka Volyn National University. By gender, females predominated (73.08%), and the age of all respondents was from 18 to 25 years. The questionnaire contains 44 questions in both closed and open formats. The content of the questions related to the subjective assessment of the organization of the educational process and motivational orientation of students during the spring semester of 2022 (distance learning associated with the introduction of martial law), compared to the rest of the academic semesters with a distance form of learning (related to the COVID-19 pandemic). As options for answers to the separate questions "What is the motivation for you in terms of distance learning due to the COVID-19 pandemic" and "What is the motivation for you in terms of distance learning related to the introduction of martial law?" were as follows:

- the motive of external coercion, avoiding punishment;
- cognitive motive;
- the motive of prestige;
- the motive of material well-being (scholarships);
- motive for obtaining information;
- motive for achieving success;

- the motive of orientation towards socially dependent behavior;
- the socially oriented motive of duty and responsibility.

### **Results and Discussion.**

Our study showed that for the vast majority of respondents, obtaining a higher education remains important (84.62%), and the motivation to study depends on its conditions (69.23%).

The first stage of the study was to analyze the features of distance learning in terms of quarantine related to the COVID-19 pandemic (excluding the spring semester of 2022), compared to the period without distance learning (traditional face-to-face learning). Most often, students indicate their satisfaction with the teachers' organization of the distance learning format (69.23%). Moreover, 76.92% of respondents note that computer-oriented distance learning tools are used for the vast majority of disciplines. According to the results of the study, a subjective slight improvement in the success of students' studies was established (7.69% - improved completely, 30.77% improved more quickly; 7.69% - did not improve at all, 19.23% - did not improve more quickly; 34.62 - hard to decide).

From the point of view of the educational process, it is certainly important for students to observe the principles and rules of behavior during distance learning, aimed at forming an independent and responsible personality, capable of solving tasks in accordance with the educational level in compliance with the norms of law and social morality (Law of Ukraine "On Education"). Considering the analysis of the results of the survey, the vast majority of respondents (61.54%) adhere to academic integrity, and for 7.69%, unfortunately, they have not yet formed an idea about the importance, the necessity of its observance and implementation of actions in the educational process. It was established that in the conditions of distance learning, the main motives for students of higher education in medical and biological specialties were the motive of achieving success, obtaining information, and the cognitive motive.

The second stage of the study was to analyze the characteristics of distance learning (related to the introduction of martial law) compared to distance learning caused by the COVID-19 pandemic. For 100% of respondents, the introduction of martial law affected their psycho-emotional state, in particular, the level of situational anxiety increased. The share of higher education graduates (from 4% to 23.81%) who are abroad, including those who have temporary protection in the Republic of Poland, has increased. Meanwhile, in terms of distance education (related to the introduction of martial law), several students who are not satisfied with technical conditions, such as the quality of their technical support (gadgets, Internet signal quality, etc.), have increased. An important place in the context of motivation to study is its success. Analysis of the results of the answers to the question "Did your academic performance (grades) improve for the spring semester of 2022 (under martial law) compared to the fall of 2021 (under distance learning conditions caused by the COVID-19 pandemic)?" showed an increase in the percentage of people whose academic performance did not improve at all (up to 23.08%). When asked about the level of effectiveness of knowledge acquisition, the formation of skills and abilities, depending on the conditions of study, the majority of students claim (42.31%) that in terms of distance learning caused by the COVID-19 pandemic, the level of effectiveness of knowledge acquisition is significantly higher, compared to distance learning related to the introduction of martial law (38.46%).

During the educational process under martial law, the number of respondents

who noted that they spent more time on the educational process increased (from 38.46% to 42.31%), have more convenient forms of independent and modular control work (from 30.77% to 34.62%), but are characterized by greater fatigue (from 26.92% to 34.62%), a greater level of mental and psychoemotional stress (from 23.08% to 46.15%). Meanwhile, we have established an increase in the share of education seekers, for whom the motivation to study is precisely the socially-oriented motive of duty and responsibility and the motive of prestige.

### **Conclusion.**

In terms of quarantine associated with the COVID-19 pandemic (excluding the spring semester of 2022), compared to the period without distance learning (traditional face-to-face learning), the main motivations for those seeking higher education among students of medical and biological specialties were the motivation to achieve success, obtain information and cognitive motive.

The introduction of martial law in Ukraine undoubtedly affected both the psycho-emotional behavior of Ukrainian students and the psycho-physiological functions of the brain. The confirmation of the latter is the recorded decrease in students' academic performance, increase in fatigue, and level of mental and psychoemotional stress. All this, together with the original reason, subjectively made it difficult for to acquire knowledge, and develop skills and abilities in students of higher education. The share of people for whom the social-oriented motive of duty and responsibility and the motive of prestige is fundamental in the motivational structure has increased.

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