

## REVIEW ARTICLE

# THE RESULTS OF PSYCHOLOGICAL READINESS FOR STUDYING IN MEDICAL STUDENTS

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**Olena M. Shevchenko, Tatiana O. Leshchenko, Victoria G. Yufimenko**

POLTAVA STATE MEDICAL UNIVERSITY, POLTAVA, UKRAINE

## ABSTRACT

**The aim:** To analyze the psychological readiness of the first-year students to study at a medical university, difficulties in the educational process, and the formation of positive motivation to educational and professional activity.

**Materials and methods:** In the course of research, the following techniques have been used: bibliosemantic method for the analysis of scientific publications, methodology for study the main motives for choosing a profession, suggested by S. Yu. Daukilas, methodology for study the motives of academic activity, designed at the Department of Ukrainian Studies and Humanitarian Training of Poltava State Medical University (modified by A. Rean, V. Yakunin) to conduct a survey in the process of learning Ukrainian as a foreign language by the students of Medical Faculty at the Poltava State Medical University in 2021/2022 academic year.

**Conclusions:** Professional identity of medical students begins at the first course of study. First-year students' faces heavy academic load of general scientific, medical and biological disciplines, foreign languages, etc. It is important from the first days to create a positive psychological motivation for studying, for acquiring knowledge and skills that will be required in future professional activities. Therefore, the adaptation of educational material to the new student reality, the search for relevant forms of education, considering the individual psychological characteristics and cognitive capabilities of the new generation, the use of modern specialized multimedia tools, the involvement of students in independent research activities, etc. is of decisive importance for the formation of students' readiness for education in medical university. The study showed that the students were motivated to choose their medical profession with the method of self-reproducing for the first time and later the strength of this motive grew. The role of some motivational factors in the field of professional life, such as a personal pattern, personal life, and self-satisfaction were not so well formed. We also fixed a great motivation to implement professional knowledge abroad. Prospects for further research encompass the study of personal characteristics affecting the professional activity of future doctors is expected, including their psychological adequacy to the requirements of the profession - character, temperament, intelligence, communicative and organizational abilities, etc.

**KEY WORDS:** first-year students' psychological adaptation, psychological characteristics of the new generation, readiness for professional activity, motivation, medical students, educational and professional activity of students

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## INTRODUCTION

Preparation of medical students for professional activities has been the object of scientific works by domestic and foreign researchers on more than one occasion. This issue was considered from the point of view of its structure, stages of formation, etc. In our opinion, psychological characteristics of the first-year students, issues of educational motivation and difficulties in the educational process generally remain unresolved. The changes that are taking place in the world actualize the need to conduct this research, which will contribute to improving the professional training of future doctors.

## THE AIM

The aim of the research is to identify the main motives for choosing the physician's profession; provide prac-

tical recommendations for the formation of positive motivation for learning, as well as professional and cognitive interest.

## MATERIALS AND METHODS

A socio-psychological study of the first-year students' readiness for a future profession and motives for choosing a profession was conducted according to the methodology proposed by S. Yu. Daukilas, methodology for study the motives of academic activity, designed at the Department of Ukrainian Studies and Humanitarian Training of Poltava State Medical University (modified by A. Rean, V. Yakunin) to conduct a survey in the process of learning Ukrainian as a foreign language by the students of Medical Faculty at the Poltava State Medical University in 2021/2022 academic year. We conducted a

survey by the students of Medical Faculties at the Poltava State Medical University in 2021/2022 academic year.

## REVIEW AND DISCUSSION

The effectiveness of performing any type of activity largely depends on the formation of certain psychological qualities in the individual, which, in particular, includes psychological readiness and motivation to study.

O. Tarnovska proposed to understand psychological readiness for activity as an integrative formation consisting of three mutually determined and interdependent substructures: 1) functional, which includes components: motivational (motives for choosing a profession and specialty, orientation to its values, etc.); cognitive (knowledge of special disciplines); operational (availability of skills and abilities necessary for solving professional tasks, modulating one's activity); 2) emotional (disposition to solve professional tasks, self-confidence as a specialist, state of satisfaction with the profession, etc.); 3) personal (professionally important personality qualities: strong-willed, moral, etc.) [1].

E. Dyachenko and L. Kandybovich attributed the following to the components of psychological readiness:

1) motivational (positive attitude to the profession, interest in it and other sufficiently stable professional motives);

2) orientational (knowledge and understanding the features and conditions of professional activity, its requirements for the individual);

3) operational (possession of methods and techniques of professional activity, necessary knowledge, skills, abilities, processes of analysis, synthesis, comparison, generalization, etc.);

4) volitional (self-control, the ability to manage the actions that make up the performance of work duties);

5) evaluative (self-assessment of one's professional preparation and compliance of the process of solving professional tasks with optimal work samples) [2].

All five of the above components can be considered as the perspective of long-term readiness, and the first, fourth and fifth as the perspective of short-term readiness.

The future doctor's readiness for professional activity takes shape even before the start of professional training at a medical institution of higher education. N. Smila proved that readiness for professional activity is a complex formation that reflects the level of development of professionally important qualities and abilities of a specialist [3].

The author emphasizes that the active stage in the formation of psychological readiness includes the following stages: choosing a profession, enrolling in

training, adapting to training and, ultimately, to professional activity.

Classifications very close to the above are given in the works of V. Bochelyuk [4], L. Matohnyuk [5], O. Cherepyekhina [6] and M. Antipov [7].

Scientists claim that the first year of study at a medical institution of higher education is the stage of "initial education". At this stage, first-year students have a noticeable decrease in attention, cognition, communication and their organizational abilities. At the same time, first-year students need to learn to master professional standards and improve communication. Students master the rules and regulations of the profession, begin to qualify themselves professionally. At this stage, students need to learn a lot of new information. It is obvious that at this stage students' professional development begins and the educational load of the disciplines of the cycle of general training, the cycle of professional training, and the cycle of practical training increases significantly.

Therefore, readiness for professional activity is a complex dynamic structure containing the beliefs of an individual, his views, motives, feelings, volitional and intellectual qualities, knowledge, skills, and abilities. Such readiness is achieved in the process of moral, psychological and professional training and is the result of versatile development of the personality taking into account the requirements determined by the specifics of professional activity [8].

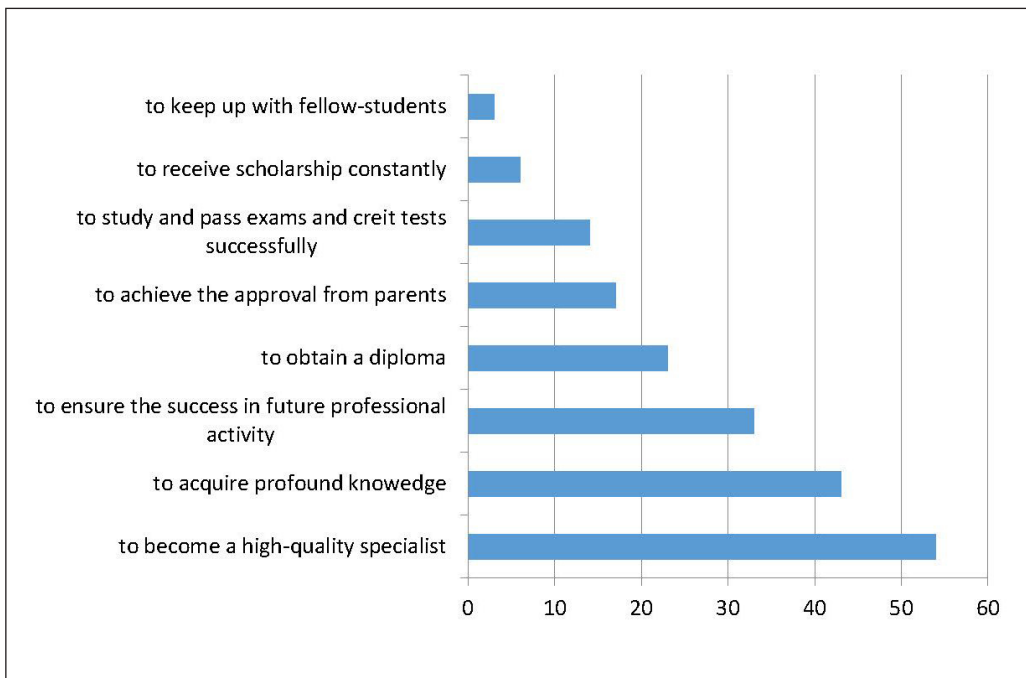
While studying at a medical educational institution, students must master modern knowledge of elementary subjects and show the ability to apply the acquired knowledge in practical situations, collect information, determine its level of reliability and critically evaluate it, use information obtained during training and self-improvement [9]. At the initial stage of education, students begin to form a professional identity that corresponds to the third stage of professional development. Therefore, we consider it expedient to consider in detail the motivational component of the readiness of students of a medical educational institution for professional activity.

Education seekers often use the following groups of motives on the way to choosing a profession: choosing a profession «for the company»; interest only in the external side of the profession; «black and white» version of ideas about the essence of professional activity; pressure from parents or other adults; profession for prestige; attitude towards the person representing the profession and attitude towards the profession itself.

A socio-psychological study of first-year students' readiness for a future profession and motives for choosing a profession was conducted according to the methodology proposed by S. Yu. Daukilas, A. Dumchene [10]. Respondents rated the degree of their attitude



**Fig. 1.** The main factors that determined the choice of profession



**Fig. 2.** Distribution of the results of the study in terms of motives of educational activity by the modified method of A.A. Rean and V.A. Yakunin

towards the provisions stated in the questionnaire as: agree, neutral, disagree.

We analyzed the learning process of 100 first-year students (medical faculty of PDMU) at the Department of Ukrainian Studies and Humanitarian Training during the study of the Ukrainian language in a professional direction. The peculiarity of the department of Ukrainian studies and humanities training is that its subjects are among the first to form the professional competence of the future doctor, they ensure the implementation of the educational program of the basic level of higher education in the professional direction of the disciplines assigned to the department.

The results of the study allow us to state that the majority of respondents, according to their personal traits and professionally important qualities, chose a profession according to the "Human - Human" type, whose representatives are characterized by: patience and demandingness, the ability to take responsibility, empathize and help, sensitivity, endurance, skill to restrain emotions, the ability to understand people, understand relationships, the ability to settle differences between them, organize their interaction.

The analysis of respondents' answers shows that 90% of future doctors have a pronounced orientation towards professional activity in working with people

**Table 1.** Attitude of first-year students towards the object of their chosen profession

Nº	Statement	Agree	I am neutral	Disagree
1	In my profession, I would like to work with people.	90	7	3
2	I believe that I am able to resolve conflict situations.	65	20	15
3	I believe that I could patiently, without irritation, explain to other people what they do not understand.	73	15	12
4	I believe that I have tendencies towards artistic creativity and etc.	54	10	36
5	I want to engage in organizational activities.	41	35	24
6	I would like to conduct research that requires precision and accuracy	56	28	16

(table 1), and only 3% of first-year students do not demonstrate such an orientation. At the same time, 65 students want and think that they know how to solve conflict situations. Among those who do not agree with the statement "I believe that I know how to solve conflict situations," 15% of first-year students. The majority of students, 73%, believe that they would be able to patiently, without irritation, explain to other people what they do not understand. A much smaller proportion of students (41% of first-year students in total) would like to be involved in organizational activities.

A significant proportion of students - 56% of first-year students demonstrate a tendency to clearly fulfill their duties ("I would like to conduct research that requires accuracy and accuracy"), which is in great demand for medical professionals. Such data show that students make the right choice of profession. Some of the students demonstrate personal qualities that are characteristic of other types of professions, along with the propensity for professional activity to work with people. 54% of first-year students demonstrated the possibility to engage in professions whose subject of work is the creation of artistic objects, choosing the statement "I believe that I have inclinations towards artistic creativity, etc."

The analysis of respondents' answers to the question about the motives for choosing a profession (Fig 1) showed that a significant majority of students (85%) choose the profession of a medical worker consciously in order to express themselves in the profession. More than 57.1% of students see their future profession as their life's purpose. When choosing a profession, 71.2% of future doctors sought to shape their life prospects. 73.4% of first-year students sought security for themselves and their loved ones in their future profession, 61.2% of students sought satisfaction of cognitive needs. Unfortunately, a rather significant share of students (54.3%) saw the advantages of their future specialty in the fact that it gives more opportunities to go to work in other countries, where the medical profession is valued more than in Ukraine.

In the course of the study, along with the motives for choosing a profession, we investigated the motives of

educational activity by the modified method of A.A. Rean and V.A. Yakunin. We interviewed 100 first-year students (medical faculty of Poltava State Medical University) at the Department of Ukrainian Studies and Humanitarian Training while studying Ukrainian. Having evaluated the results, we found the following distribution of motives (Fig. 2).

The test results indicate that there is a lack of readiness for professional activity and motivation for learning. In our opinion, the formation of readiness for professional activity is influenced not only by the content of educational material, but also by other factors: the forms and methods of teaching, relationships between participants of the educational process, the psychological atmosphere during classes, etc.

In our opinion, development of positive motivation for educational activity is of great importance for the formation of readiness for future professional activity. For holistic formation of motivation for educational activity in future physicians, the formation process should be systematic. An important element in the development of motivation is the interest, which is divided by the scientists into emotional, intellectual, professional and cognitive.

Emotional interest arises when special attention is drawn to what evokes positive emotions and is pleasant. Intellectual interest is associated with knowledge of the world and intellectual activity of a man. Professional and cognitive interest is defined as the integrated formation of the individual, which is expressed in the constant desire to understand new knowledge in the future profession and as a form of expression of cognitive needs that provide the professional orientation of the individual. Therefore, the essence of professional and cognitive interest is to independently acquire the necessary knowledge and use it to solve professionally important tasks.

In our opinion, the formation of professional and cognitive interest in education is due to the diversification of educational activities, involvement of future specialists in the self-directed research activities, and solving tasks of the professional nature. For

**Table II.** Educational Apps Designed for Learning Ukrainian Language

Application name	System / OS	Functions	QR-Code
Ukraine Podcasts	iOS / Android	It is a series of podcasts for students learning English, which can be downloaded to mobile phones and engaged in any time convenient for the user. Each issue lasts approximately 20 minutes and is accompanied by questions for listeners.	
Learn Ukrainian Words Free	iOS / Android	It is a vocabulary trainer for learning Ukrainian that contains flashcard dictionary with Ukrainian-English translations of 10,000 words carefully organized by topics, for instance Travel, Business, Dating, Study or School. The mobile application also includes 100% Free Ukrainian lessons for beginners, advanced learners, adults and kids.	
Duolingo	iOS / Android	The educational course is divided into stages according to the principle «from simple to complex». The Duolingo educational application boosts such skills as writing and speaking (you will be asked to pronounce the studied phrases), reading and listening.	
Ukraine Podcasts	iOS / Android	It is a series of lessons that involves a rich mix of listening and reading activities, so student can make sense of written and spoken contexts. A simplified learning environment presents content structure, review progress, and learning activities front and center, while streamlined navigation encourages students to explore different topics in their target language.	
Simply Learn Ukrainian – Ukrainian Travel Phrasebook	iOS / Android	App is a free language app that will assist you to speak Ukrainian quickly and effectively when visiting Ukraine. Its content includes basic conversational phrases and topical vocabulary. Educational data is divided by levels of education background. It also provides questions, tests, or exercises to monitor closely students’ learning process.	
Clozemaster	iOS	Clozemaster is gamified language learning through mass exposure to vocabulary in context. It contains listening transcribe mode punctuation fix, single and double quote fix, new SRS controls with legacy controls toggle, days played calendar with daily stats table.	
Learn Ukrainian. Speak Ukrainian Bluebird Languages	iOS / Android	App provides free daily lessons for beginner, intermediate and advanced learners. It contains interactive video lessons (over 5 years of lessons) that are aimed at improving speaking and understanding Ukrainian.	

instance, in teaching when learning the Ukrainian language, we recommend using the following online resources. Open access offers mobile applications of varying degrees of complexity (FunEasyLearn (<https://play.google.com/store/apps/details?id=com.fun easylearn.ukrainian&hl=uk&gl=US>), Language Course S.L (<https://play.google.com/store/apps/details?id=net.languagecourse.vt.uk&hl=uk&gl=US>),

Learning and playing Ukrainian language ([https://play.google.com/store/apps/details?id=free.langame\\_ua.rivex&hl=uk&gl=US](https://play.google.com/store/apps/details?id=free.langame_ua.rivex&hl=uk&gl=US)), Simply learn Ukrainian (<https://play.google.com/store/apps/details?id=simply.learn.ukrainian&hl=uk&gl=US>), Mondly: Learn Ukrainian Easily (<https://play.google.com/store/apps/details?id=com.atistudios.mondly.ua&hl=uk&gl=US>), Learn Ukrainian – 50 languages (<https://play.google.com/store/apps/details?id=com.learnukrainian50languages&hl=uk&gl=US>).

google.com/store/apps/details?id=com.goethe.uk&hl=uk&gl=US), Tobo Learn Ukrainian dictionary ([https://play.google.com/store/apps/details?id=free.langame\\_ua.rivex&hl=uk&gl=US](https://play.google.com/store/apps/details?id=free.langame_ua.rivex&hl=uk&gl=US)), LuvLingua (<https://play.google.com/store/apps/details?id=com.luvlingua.learnukrainian&hl=uk&gl=US>), LingQ (<https://www.lingq.com/ru/learn/uk>) etc.

The use of these resources makes it possible to expand the field of opportunities for the formation of learning motivation through new types of activities and new opportunities for realizing one's own competencies. The need to use the above-mentioned resources is due to the need to find information for practical classes, work on individual tasks, and independent work.

We paid special attention on to the didactic performance of educational mobile applications and their capabilities. This data is expressed in Table II. Applications from this list are suitable for teaching students with different levels.

An important aspect of students' educational activities in the context of studying a particular discipline is the individual work with educational material. Thus, students independently search for the necessary information, systematize the obtained search results, illustrate the submitted material with images from scientific articles, report on the results of the work, explaining the essence of the phenomenon based on the example of its clinical use [11].

## CONCLUSIONS

A clearly expressed orientation of first-year medical school students to professional activities related to working with people (90% of research participants) was revealed, which indicates the correspondence of psychological and professionally important qualities to the chosen profession.

It was established that the students chose the medical profession motivated, in order to express them in it. However, the role of individual motivational factors in the choice of a profession, such as the vision of the meaning of life in the future profession, satisfaction of one's cognitive needs, must be developed in the learning process.

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During the first year of study at higher education medical institution, students just begin to identify themselves with future professional activity, they learn the rules and norms of the profession, they are exposed to a large educational load, decrease their will, cognitive and communication skills.

During this period that it is very important to develop positive motivation for learning, acquiring knowledge and skills that will be needed in future professional activities. We suggest using modern multimedia tools (electronic journals, specialized websites) to form positive motivation for studying in the first year of medical faculty students; involve students in independent research activities, etc.

It is necessary to adapt the educational material to the new student reality, to search for relevant forms of education, considering the individual psychological characteristics and cognitive capabilities of the new generation.

We can motivate the students to educational and professional activities which are manifested in the awareness of the subjects of actual needs, such as education, self-development, professional development and others, satisfied through the implementation of educational tasks and encouraging them to study academic disciplines and master the skills of future professional activities. We consider the following pedagogical conditions effective for the formation of positive motivation of study in the first-year medical faculty students: to win modern multimedia research (electronic journals, specialized sites); get students to independent research activities and so on. It is necessary to adapt the educational material to the new student reality, to search for relevant forms of education, considering the individual psychological characteristics and cognitive capabilities of the new generation.

Thus, in modern conditions, the role of psychological and pedagogical support of the learning process is extremely increasing. Prospects for further research is to study of personal characteristics affecting the professional activity of future doctors is expected, including their psychological adequacy to the requirements of the profession - character, temperament, intelligence, communicative and organizational abilities, etc.

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#### ORCID and contributionship:

Olena M. Shevchenko: 0000-0002-5829-2048 <sup>A,D,E</sup>

Tatiana O. Leshchenko: 0000-0003-4682-3734 <sup>B,F,E</sup>

Victoria G. Yufimenko: 0000-0003-1770-1543 <sup>B,E</sup>

#### Conflict of interest:

*The Authors declare no conflict of interest*

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## CORRESPONDING AUTHOR

**Olena M. Shevchenko**

Poltava State Medical University

23 Shevchenko Str., 36011 Poltava, Ukraine

e-mail: Shevchenko.36028@gmail.com

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