#### **ORIGINAL ARTICLE**

# Professional self-determination of future doctors: priorities in conditions of the war in Ukraine

### Anna Dobrovolska

IVANO-FRANKIVSK NATIONAL MEDICAL UNIVERSITY, IVANO-FRANKIVSK, UKRAINE

#### ABSTRACT

**Aim:** Our goal was to find out the dynamics of the levels of professional self-determination of the higher medical education applicants who acquire information technology competence within the learning of 'Medical Informatics' and 'Modern Information Technologies in Medicine' during the war in Ukraine and investigate how the professional self-determination of future doctors develops.

**Materials and Methods:** The questionnaire for the survey consisted of 15 questions. 382 future specialists covered the questionnaire survey. All respondents studied majoring in 222 'Medicine' at the medical faculty of the Ivano-Frankivsk National Medical University. The results of this research we evaluated according to the defined algorithm.

**Results:** We established that under the condition of the formation of information technology competence, during the war there is a positive dynamic of the professional self-determination levels and their quality as the cognitive-reflexive component of future doctors' readiness to use digital technologies in their professional activity and there is also a change in the priorities of professional self-determination.

**Conclusions:** In extreme conditions, during the war in Ukraine, the future doctors as subjects of professional activity who use digital technologies within the information technology competence which formed during the learning of 'Medical Informatics' and 'Modern Information Technologies in Medicine' changed the priorities of professional self-determination, the quality of the levels of which has improved.

KEY WORDS: digital technologies, cognitive-reflexive component of readiness, information technology competence, professional self-determination

Wiad Lek. 2024;77(4):811-820. doi: 10.36740/WLek202404129 Dol 2

## **INTRODUCTION**

The large-scale war in Ukraine, which began on February 24, 2022, changed our country's economic structure and led to many new challenges in Ukrainian civil society. The massive migration of labour resources abroad, connected with the war, causes Ukraine to continue to lose a competitive population. Under such conditions, it's especially relevant for future specialists to obtain higher education not only in the territory of Ukraine but also to realize it in institutions of higher medical education in the direction of professional self-determination of the educational process participants.

In the conditions of the war in Ukraine, the accent is on aspects of the functioning not only of healthcare institutions but also institutions of higher medical education, some of which have changed dramatically. Therefore, during higher medical education, future healthcare professionals' professional self-determination should focus on choosing:

 Of direction and the content of the personal development;

- Of spheres of individual qualities and abilities, as well as means for their implementation;
- Of a social environment for the embodiment of moral values and life goals [1].

By researching, we believed that professional self-determination during higher medical education was a holistic and integrative process, the course of which depends on the activity of its participants and their responsibility for our own development. Socioeconomic conditions, interpersonal relationships, and situational factors impact this process [2]. Professional self-determination is also directed at the self-realization of each individual in the future professional activity of a doctor in the presence of constant reflection, the rethinking of professional choice and of one's being, professional self-affirmation, etc.

In our opinion, one of the ways to optimize future doctors' professional self-determination during higher medical education is to direct its applicants to the independent, conscious acquisition of readiness to use digital technologies in professional activity. This process occurs during the learning of 'Medical Informatics' ('MI') and 'Modern Information Technologies in Medicine' ('MITM'), which ensures the development of the information technology competence (IT competence) of the higher medical education applicants [1, 3]. It's also is conditioned by the future doctors' internal resources, including their life goals, supported by needs, abilities, motives, etc., that does not contradict the requirements and possibilities of the future profession.

By researching, we thought that the future specialist's professional self-determination is the complex process of personality development that involves the self-assessment of personal educational and professional potential, as well as the selection of criteria and standards for self-evaluation during the activity [2].

The phenomenon of self-determination is multifaceted and complex. Therefore, there is no unambiguous interpretation of the concept of 'professional self-determination' on the results of scientific research [4-16].

The future doctors' professional self-determination can be characterized as a person's attitude to his profession and toward himself as the professional activity subject that determines the entire path of becoming a professional.

By researching, we thought that:

- Professional self-determination is the permanent process at all stages of the higher medical education applicants' preparation for the use of digital technologies in professional activity;
- The periods of professional self-determination while studying the 'MI' and 'MITM' in time coincide with stages of professional becoming future doctors;
- The development of professional self-determination by studying the '*MI*' and '*MITM*' reflects the development of the cognitive-reflexive component of future specialists' readiness to use digital technologies in professional activity [2].

The purpose of scientific research was as follows:

- To find out the dynamics of the levels of the future specialists' professional self-determination by considering the peculiarities of the educational process in general and also the learning process of the 'MI' and 'MITM' in peacetime (the ascertaining stage of the research) and during the large-scale war (the formative stage) in Ukraine;
- To investigate in the process of learning the 'MI' and 'MITM' in extreme conditions during the war in Ukraine how the professional self-determination (reflects the cognitive-reflexive component readiness of future specialists to use digital technologies in professional activity) develops, i.e. find out whether his priorities are changing provided that IT competence of the higher medical education applicants formed.

# AIM

The research focuses on the professional self-determination of future doctors in the context of their training in institutions of higher medical education in the modern extreme conditions of Ukrainian society. Our goal was to find out the dynamics of the levels of professional self-determination of the higher medical education applicants who acquire information technology competence within the learning of '*Medical Informatics*' and '*Modern Information Technologies in Medicine*' during the war in Ukraine and investigate how the professional self-determination of future doctors develops.

# **METHODS AND MATERIALS**

The research took place at the Department of Medical Informatics, Medical, and Biological Physics of the Ivano-Frankivsk National Medical University within the teaching and studying of the '*MI*' and '*MITM*' in the 2017-2018, 2021-2022 academic years.

382 respondents (the higher medical education applicants) participated in the research:

- Two control groups (CG): 150 (CG 1) the second year of studying respondents and 52 (CG 2) the second year of studying after college graduation respondents (The educational process participants studied in January-June of the 2017-2018 academic year.);
- Two experimental groups (EG): 133 (EG 1) the second year of studying respondents and 47 (EG 2) the second year of studying after college graduation respondents (The educational process participants studied in January-June of the 2021-2022 academic year.) [1, 3].

The respondents studied at the Ivano-Frankivsk National Medical University, majoring in 222 'Medicine' at the Faculty of Medicine.

The creation of the questionnaire consisting of 15 questions preceded the research [2]. We formulated the questionnaire questions bearing in mind that the future specialists' professional self-determination under the condition of the *IT* competence development when studying the '*MI*' and '*MITM*' provides as follows:

- Delineation of the higher medical education applicants' professional interests;
- Identification of preferences for the self-assessment by the future specialists of their professional suitability;
- Finding the meaning of future professional activity considering the needs of society in doctors, capable of implementing professional activity according to standards.

We evaluated the answers to the questions from zero to two points (0, 1, or 2).

The levels (high, medium, satisfactory, low) of future

The criteria and conclusions		The second ye	ar of studying	The second year of studying after college graduation		
		CG 1, n = 150 (2018)	<i>EG 1,</i> n = 133 (2022)	CG 2, n = 52 (2018)	<i>EG 2,</i> n = 47 (2022)	
Deereen's r	r	- 0.84	- 0.91	- 0.94	- 0.75	
Pedisonsi	r*	0.51				
The co	onclusion	$ \mathbf{r}  \ge \mathbf{r}^*$ , there is statistically significant correlation				
Student's	t	- 5.65	- 7.72	- 9.87	- 4.04	
t-test t*			2.16			
The co	onclusion		$ t  > t^*$ , there is line	ear correlation		

<b>Table 1.</b> The correlation analysis results	(by the number of respondents'	answers to the questionnaire questions)
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doctors' professional self-determination, which we have characterized in advance, were evaluated by such an indicator as *the sum of points* (*SP*) according to the described algorithm [2, 17].

This research used methods such as analysis, synthesis, comparison, concretization, systematization, and generalization, as well as methods of mathematical statistics for the evaluation of data, namely correlation analysis, Kolmogorov-Smirnov test, Cronbach's alpha, Fisher's test (F-test of equality of variances), Student's t-test and ranking [17, 18].

The questionnaire survey data have been processed using Microsoft Excel (Microsoft Office 365) according to the described algorithm [2, 17].

This research was carried out under the Ethical Guidelines for Educational Research of the British Educational Research Association (fourth edition, 2018) and of the Code of Ethics of the American Educational Research Association (approved by the AERA Council, 2011).

## RESULTS

We claim that:

- The research participants answered the formulated questions thoughtfully and motivated because there is a statistically significant negative linear correlation  $(|\mathbf{r}| \ge \mathbf{r}^*, \mathbf{r} < 0, |\mathbf{t}| > \mathbf{t}^*$  in Table 1) between the numbers of positive (The answers have been evaluated by two points.) and negative (zero points) answers of the educational process subjects (the probability  $p \ge 0.95$  ( $p = 1 - \alpha$ , the type I error probability  $\alpha = 0.05$ ), Table 2);

- The internal consistency of the questionnaire survey results conducted among the respondents of *CG 1* and *CG 2* in 2018 was acceptable ( $0.7 \le \alpha < 0.8$ ), and among the respondents of *EG 1* and *EG 2* in 2022 was good ( $0.8 \le \alpha < 0.9$ ) (Table 3);

- The questionnaire survey results *SP* are subject to the normal distribution (the probability  $p \ge 0.99$  ( $p = 1 - \alpha$ , the type I error probability  $\alpha = 0.01$ ), Table 4).

We wanted to make sure that the learning of the 'MI' and 'MITM' (implementation of organizational and methodical measures, peculiarities of the course of the educational process at IFNMU in general (organisation of the educational process in the mixed form, namely, e-learning using MS Teams + studying in university classrooms at a safe time with access to information and educational resources) and at the Department of Medical Informatics, Medical, and Biological Physics in the conditions of the war in Ukraine) and of the IT competence formation of future doctors influenced the development of their professional self-determination. Therefore, we statistically tested the truth of the hypothesis about the equality of the distribution centres of two normal populations (CG 1 and EG 1, CG 2 and EG 2) at the ascertaining and formative stages of research. The criterion for testing the hypothesis was chosen, given that the variances of the studied populations are the same or not the same (Table 5).

By analysing the obtained results, we can claim that the organizational and methodical measures to ensure the educational process in IFNMU as a whole, as well as when studying the '*MI*' and '*MITM*' at the Department of Medical Informatics, Medical, and Biological Physics and features of their implementation in the conditions of the war in Ukraine in 2022 for the higher medical education applicants, didn't differ in terms of the opportunities regarding of the professional self-determination development in 2018 ( $|t| < t^* - the$  distribution centres of the two populations are equal (the probability  $p \ge 0.95$ ,  $p = 1 - \alpha$ , the type I error probability  $\alpha = 0.05$  in Table 5) which fully provided the development of the cognitive-reflexive component readiness of the future specialists to use digital technologies in professional activity.

## Table 2. The number of positive answers given by future doctors during the questionnaire survey, %

	The second year of studying					The second year of studying after college graduation						
The questionnaire question		CG 1, n = 150 (2018)		EG 1, n = 133 (2022)		3	<i>CG 2,</i> n = 52 (2018)		)	EG 2, n = 47 (2022)		, )
			The po	ints us	ed to e	valuat	e the re	espond	lents' a	nswers	;	
	2	0	1	2	0	1	2	0	1	2	0	1
<b>The question 1</b> : Do you understand the purpose of using <i>IT</i> competence in the future professional activity of doctors?	70.0	2.0	28.0	73.7	2.3	24.0	67.3	3.8	28.9	59.6	6.4	34.0
<b>The question 2</b> : Do you know when studying the ' <i>MI</i> ' and ' <i>MITM</i> ' about the basic requirements regarding the formation of <i>IT</i> competence of future doctors?	58.0	7.3	34.7	54.9	9.0	36.1	53.9	9.6	36.5	42.6	14.8	42.6
<b>The question 3</b> : Do you know what knowledge, skills and abilities a future dentist must have to carry out the professional activity within the confines of the formed <i>IT</i> competence?	53.3	8.0	38.7	66.9	5.3	27.8	57.7	9.6	32.7	51.1	17.0	31.9
<i>The question 4</i> : Are you familiar with the primary responsibilities that future doctors must perform within the confines of <i>IT</i> competence formed while studying the <i>'MI'</i> and <i>'MITM'</i> ?	57.3	8.7	34.0	54.9	5.3	39.8	50.0	13.5	36.5	57.4	14.9	27.7
<i>The question 5</i> : Do you agree that the formed <i>IT</i> competence is significant during the future professional activity of a dentist?	60.0	6.7	33.3	78.9	3.0	18.1	57.7	9.6	32.7	85.1	2.1	12.8
<b>The question 6</b> : Do you think it's necessary to independently form <i>IT</i> competence for professional development while studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	57.3	5.3	37.4	69.9	7.5	22.6	53.9	11.5	34.6	70.2	6.4	23.4
<i>The question 7</i> : Do you think it's necessary to form professionally oriented <i>IT</i> competence outside of studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	60.7	8.6	30.7	58.6	8.3	33.1	59.6	9.6	30.8	55.3	8.5	36.2
<i>The question 8</i> : Are you interested in forming professionally oriented <i>IT</i> competence while studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	56.7	6.0	37.3	55.6	9.0	35.4	51.9	5.8	42.3	53.2	8.5	38.3
<i>The question 9</i> : Are you trying to find new ways of performing professionally oriented tasks by forming <i>IT</i> competence while studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	50.0	9.3	40.7	49.6	12.0	38.4	48.0	13.5	38.5	57.5	10.6	31.9
<b>The question 10</b> : Are you interested in non-standard ways of forming <i>IT</i> competence under the condition of its use during future professional activity?	54.0	6.7	39.3	53.4	10.5	36.1	46.2	11.5	42.3	42.6	10.6	46.8
The question 11: Do you like to learn new facts about future professional activity by forming <i>IT</i> competence while studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	61.3	4.7	34.0	68.4	8.3	23.3	61.5	9.6	28.9	63.8	4.3	31.9
<b>The question 12</b> : Do you rely on the experience gained during the formation of <i>IT</i> competence by performing professionally oriented tasks?	59.3	6.7	34.0	70.7	7.5	21.8	46.1	15.4	38.5	70.2	10.6	19.2
<b>The question 13</b> : Do you think that the knowledge, skills and abilities acquired within the confines of the formation of <i>IT</i> competence while studying the ' <i>M</i> I' and ' <i>MITM</i> ' will allow you to become a highly qualified specialist?	66.7	6.0	27.3	65.4	8.3	26.3	44.2	19.2	36.6	57.5	10.6	31.9
<b>The question 14</b> : Do you ask for help if problems arise at runtime of professionally oriented tasks if you form <i>IT</i> competence by studying the ' <i>MI</i> ' and ' <i>MITM</i> '?	33.3	14.7	52.0	15.0	45.1	39.9	15.4	42.3	42.3	38.3	19.1	42.6
<b>The question 15</b> : Do you learn new terminology by forming <i>IT</i> competence and studying the ' <i>MI</i> ' and ' <i>MITM</i> ' that will use in future professional activity?	59.3	2.7	38.0	61.6	9.8	28.6	50.0	11.5	38.5	55.3	8.5	36.2

The other is a set		The second yea	ar of studying	The second yea after college g	The second year of studying after college graduation		
conclusion		CG 1, n = 150 (2018)	<i>EG 1,</i> n = 133 (2022)	CG 2, n = 52 (2018)	EG 2, n = 47 (2022)		
Cronbach's alpha	α	0.76	0.81	0.79	0.84		
		The internal consistency					
		is acceptable	is good	is acceptable	is good		

Table 3. Assessment the internal consistency of the questionnaire survey results (analysis of the respondents' answers to the questionnaire questions)

Table 4. The Kolmogorov–Smirnov test results (according	g to the questionnaire survey results SP)
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The suiteries and		The second ye	ear of studying	The second year of studying after college graduation		
conclusion	conclusion		<i>EG 1,</i> n = 133 (2022)	CG 2, n = 52 (2018)	<i>EG 2,</i> n = 47 (2022)	
Kalmagaray Smirnay tact	d	0.09	0.12	0.08	0.11	
	d*	0.13	0.14	0.23	0.24	
The conclusion		d < d*, there is a n	ormal distribution			

able 5. The results of statistical testir	g of the hypotheses	(according to the o	uestionnaire survey	results SP)
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The criteria and Th conclusions CG a		The second year of studying CG 1 (n = 150) and EG 1 (n = 133)	The second year of studying after college graduation CG 2 (n = 52) and EG 2 (n = 47)
F-test	f	1.58	1.34
of equality of variances	f*	1.32	1.61
The cor	nclusion	f > f*, the variances are not the same	f < f*, the variances are the same
Student's	t	- 0.14	1.38
t-test	t*	1.97	1.99
The cor	clusion $ t  < t^*$ , the distribution centres of the two populations are equal		of the two populations are equal

We established that because of the *IT* competence acquisition when studying the '*MI*' and '*MITM*' in 2022, the levels of the research participants' professional self-determination and their quality had positive dynamics in comparison with 2018 [19], namely [1]:

- In the second year of studying: the low level decreased by 1.2%, the satisfactory – by 10.8%, the medium level increased by 8.2%, the high – by 3.8%, and the quality of the levels – by 12.0% (Table 6);
- In the second year of studying after college graduation: the low level decreased by 4.3%, the satisfactory
  by 13.2%, the medium level increased by 11.8%, the high by 5.7%, and the quality of the levels by 17.5% (Table 6).

We found out that because of the *IT* competence formation, the quality of the levels of professional self-determination of research participants who studied in the second year, both in 2018 (52.7%) and in 2022 (64.7%), was higher (Table 6) than in the research participants of the second year studying after college graduation (In 2018, the quality of the levels was 44.3%, and in 2022 – 61.7% (Table 7).) [1].

In our opinion, for the research participants in the second year of studying, the *I*T competence formation was ensured by:

- The constant use of the developed manuals when studying the 'MI' and 'MITM' in 2018 and 2022 [20, 21];
- The responsible attitude to obtaining higher medical education in 2022, in the conditions of the large-scale war in Ukraine (Table 6).

We believed that in 2022, the positive dynamics of the professional self-determination levels and their quality (Table 6) of the research participants in the second year of studying after college graduation is because some of them using college education diplomas began the professional activity (evening and night shifts, working on weekends) outside of studies at IFNMU with the beginning of the large-scale war on February 24, 2022. During this activity, future doctors successfully used digital technologies to give medical care to various categories of patients in medical and preventive **Table 6.** The levels of the future doctors' professional self-determination and the dynamics of their quality (The quality of the levels characterise the medium and high levels in total.), %

The levels	The se	econd year of st	udying	The second year of studying after college graduation			
of the professional self-determination	<i>CG 1,</i> n = 150 (2018)	<i>EG 1,</i> n = 133 (2022)	EG 1, The n = 133 dynamics (2022)		<i>EG 2,</i> n = 47 (2022)	The dynamics	
low	14.0	12.8	- 1.2	19.2	14.9	- 4.3	
satisfactory	33.3	22.5	- 10.8	36.5	23.4	- 13.2	
medium	40.7	48.9	+ 8.2	30.8	42.6	+ 11.8	
high	12.0	15.8	+ 3.8	13.5	19.1	+ 5.7	
The quality of the levels	52.7	64.7	+ 12.0	44.3	61.7	+ 17.5	

Table 7. The questions' ranks by the number of positive answers (%) to them (The positive answers were evaluated with 2 points.)

	The second year of studying		The seco of studying after c	ond year ollege graduation	The final ranks		
The questionnaire question	CG 1, n = 150 (2018)	<i>EG 1,</i> n = 133 (2022)	CG 2, n = 52 (2018)	<i>EG 2,</i> n = 47 (2022)	2018 (n = 202)	2022 (n = 180)	
The question 1	1	2	1	5	1	4	
The question 2	8	11	6	13	5	13	
The question 3	13	6	4	12	9	9	
The question 4	9	11	9	6	10	7	
The question 5	5	1	4	1	4	1	
The question 6	9	4	6	2	6	3	
The question 7	4	9	3	9	3	9	
The question 8	11	10	8	11	12	12	
The question 9	14	14	11	6	14	11	
The question 10	12	13	12	13	13	14	
The question 11	3	5	2	4	2	5	
The question 12	6	3	12	2	10	2	
The question 13	2	7	14	6	8	6	
The question 14	15	15	15	15	15	15	
The question 15	6	8	9	9	6	7	

institutions (hospitals, polyclinics, emergency rooms) and also to refugees from occupied territories and active participants in the volunteer movement in Ukraine.

It was this activity that contributed to the understanding (because of the acquired practical experience) of the advisability of forming *IT* competence when studying the '*MI*' and '*MITM*' that ensured the development of the cognitive-reflexive component readiness of future doctors to use digital technologies in professional activity. That is why we believe that professional experience gained by the second year of studying after college graduation respondents in the first month and subsequent months of the large-scale war in Ukraine became the catalyst of *IT* competence development when learning the '*MI*' and '*MITM*.' In our opinion, the basis for the development of the professional self-determination of future doctors, and also increasing the quality of its levels, in the process of research, was understood that *IT* competence is a transversal competence because, without it, they will not be able to realize most of the professional competencies, even at a professionally sufficient level especially in times of war [2].

# DISCUSSION

To date, there is no scientific research by other scientists in the context of the purpose of this research. Therefore, the scope of the scientific discussion is limited only by our reflections.



By analysing the questionnaire survey results (Table 2) according to the ranks (Table 7 and Fig. 1.) assigned to the questions, we concluded that in 2022, compared to 2018, the future specialists have changed priorities during the development of the cognitive-reflexive component of their readiness to use digital technologies in the professional activity.

In 2018, for future doctors who studied the 'MI' and 'MITM' and acquired IT competence (Table 7 and Fig. 1.), it was primarily important to gain general ideas about the application of this competence, which provides for the use of digital technologies in future the professional activity, as well as find out interesting facts about her, forming professionally oriented IT competence outside the studying of the 'MI' and 'MITM.' In 2022, the educational process subjects, who were professionally self-determined by the results of studying the 'MI' and 'MITM', primarily were convinced that the IT competence formation was significant for the future professional activity of a doctor who uses digital technologies. By performing professionally oriented tasks, future doctors used the experience acquired earlier during the IT competence formation within the performance of other problems. Therefore, they considered it necessary to independently form IT competence for professional development by studying the 'MI' and 'MITM.'

In 2018, 60.0% of the second year of studying respondents (CG 1) emphasized the importance of forming IT

**Fig. 1.** The ranks of the survey questions by the number of positive answers (%) to them.

competence for the use of digital technologies in the doctors' future professional activity, compared to 57.7% of the second year of studying after college graduation respondents (*CG 2*). In 2022, the ratio of percentages changed to 78.9% (1.32 times more) of the second year of studying respondents (*EG 1*) against 85.1% (1.47 times more) of the second year of studying after college graduation respondents (*EG 2*) (Table 2) [3].

In 2018, by performing professionally oriented tasks, 59.3% of the second year of studying respondents (*CG 1*) relied on the experience gained during the formation of *IT* competence, compared to 46.1% of the second year of studying after college graduation respondents (*CG 2*). In 2022, the ratio of percentages was 70.7% (1.19 times more) of the second year of studying respondents (*EG 1*) against 70.2% (1.52 times more) of the second year of studying after college graduation respondents (*EG 2*) (Table 2) [3].

In 2018, 57.3% of the second year of studying respondents (*CG 1*) who studied the '*MI*' and '*MITM*' wanted to independently form the *IT* competence for professional development compared to 53.9% of the second year of studying after college graduation respondents (*CG* 2). In 2022, 69.9% (1.22 times more) of the second year of studying respondents (*EG 1*) and 70.2% (1.30 times more) of the second year of studying after college graduation respondents (*EG 2*) intended by themselves to form *IT* competence (Table 2) [3]. We believe that the change in the priorities of future doctors, who were professionally self-determined within the formation of *IT* competence when studying the'*MI*' and '*MITM*' in 2022, is due to their motivated understanding of the significance of using digital technologies in the future professional activity, in particular, due to of the social upheavals of Ukrainian society, that caused by the large-scale war in Ukraine.

In our opinion, by changing the priorities of professional self-determination while forming *IT* competence when studying the '*MI*' and '*MITM*' in the extreme conditions of today's Ukrainian state, higher medical education applicants find the personal meaning of future professional activity and also are acquiring the readiness to use digital technologies within its cognitive-reflexive component thanks to the development of the 'Self-concept' of a professional [22, 23].

We can say that the professional self-determination of future specialists who acquire *IT* competence during higher medical education is a continuous dynamic process that, in the conditions of the war in Ukraine, is significantly intensified and determines the professional development of each applicant of such education, considering:

- Understanding the significance of *IT* competence for the realization of future professional activity by a doctor who uses digital technologies;
- Increasing the specific weight of future specialists' self-education during the formation of qualities, gaining the experience necessary for them as future doctors;
- Acquisition of professional independence and readiness for future professional activity.

# CONCLUSIONS

- 1. The change in the professional self-determination priorities of future doctors, provided that they acquire *IT* competence during the war, reflects the development of the cognitive-reflexive component of the future specialists' readiness to use digital technologies in their professional activities, particularly in the special conditions of life and activity in Ukraine.
- 2. The acquisition by future doctors of readiness to use digital technologies in professional activities within the cognitive-reflexive component by improving its levels and their quality, which, as part of the research in 2022, increased by 12.0% (for future specialists in the second year of studying) and 17.5% (for future specialists in the second year of studying after college graduation) compared to 2018, was ensured by development the *IT* competence while learning at the higher medical education institution of Ukraine, whose education process now is often limited by war.
- 3. Understanding in the realities of wartime the importance of the development of the future specialists' readiness (within the cognitive-reflexive component) to use digital technologies in their professional activities and acquire *IT* competence for doctors' professional activity in the special conditions of the modern Ukrainian state is a guarantee of professionalism in providing quality medical care to all categories of patients in the most diverse situations in the country that seeks peace and fights for it.

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# **CONFLICT OF INTEREST**

The Author declare no conflict of interest

## CORRESPONDING AUTHOR Anna Dobrovolska

Ivano-Frankivsk National Medical University 2 Halytska st., 76018 Ivano-Frankivsk, Ukraine email: AnnaD68@meta.ua

### **ORCID AND CONTRIBUTIONSHIP**

Anna Dobrovolska: 0000-0003-0841-8076 (A) (B) (C) (D) (E) (F)

A – Work concept and design, B – Data collection and analysis, C – Responsibility for statistical analysis, D – Writing the article, E – Critical review, F – Final approval of the article

**RECEIVED:** 02.08.2023 **ACCEPTED:** 27.02.2024

