T.D. Shcherban, V.V. Hoblyk

DISTANCE (ONLINE) EDUCATION IN THE CONDITIONS OF EXTREME SITUATION

ON THE EXAMPLE OF SELF-ISOLATION: March–May 2020



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ МУКАЧІВСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ

Т.Д. Щербан, В.В. Гоблик

ДИСТАНЦІЙНА ОСВІТА В УМОВАХ ЕКСТРЕМАЛЬНОЇ СИТУАЦІЇ

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MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE MUKACHEVO STATE UNIVERSITY

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(ON THE EXAMPLE OF SELF-ISOLATION: March–May 2020)

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Using the results of a sociological survey of students, postgraduate students and university lecturers, the authors analyze the advantages and disadvantages of distance education in an extreme situation, in particular, in conditions of forced self-isolation due to the coronavirus epidemic. The comparison of the effectiveness of the educational process in the conditions of full-time and distance education has been carried out. The difference between distance education as a progressive form of communication in the educational process and education in conditions of forced self-isolation and mass syndrome of fear of the disease due to the epidemic has been shown.

The book is addressed to the heads of education authorities, leaders and instructors of vocational education organizations, as well as anyone interested in the sociology of education.

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CONTENT

SECTION ONE	STUDENTS	UNDER	THE QUARTIN
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Introduction	7
SECTION ONE. TRAINING STUDENTS UNDER CONDITIONS OF SELF-ISOLATION	
Chapter 1. Psychological and physical well-being of students during self-isolation	13
Chapter 2. Assessment of the quarantine measures validity and manifestation of involvement	22
Chapter 3. Learning conditions of students during self-isolation	30
SECTION TWO. TRAINING OF POSTGRADUATE STUDENTS UNDER CONDITIONS OF SELF-ISOLATION	
Chapter 4. Psychological and physical well-being of postgraduate students during self-isolation	58
Chapter 5. Assessment of the quarantine measures validity and manifestation of involvement	64
Chapter 6. Conditions for training postgraduate students during self-isolation	67
SECTION THREE. PARTICIPATION OF LECTURERS IN THE EDUCATIONAL PROCESS UNDER CONDITIONS OF SELF-ISOLATION	
Chapter 7. Social and psychological atmosphere in the team of lecturers	74
Chapter 8. Well-being of lecturers in conditions of self-isolation	76
Chapter 9. The participation of lecturers in the educational process in the conditions of self-isolation	86
Chapter 10. Lecturers' opinion on distance (online) education performance in isolation	89
Conclusion	95

Content

Appendix 1. Samples of sociological questionnaires	
for distance education performance research	
in extreme conditions situations (epidemics)	99
Appendix 1.1. Questionnaire for surveying students	99
Appendix 1.2. Faculty Survey	07
Appendix 2. Tables of indicators' conjugation based	
on the results of the students' study	18

INTRODUCTION

The idea of optimizing vocational education by introducing distance (online) learning for students has long been discussed in both scientific and entrepreneurial circles. The interest of the business community is mainly economic, therefore, they do not have much interest in the content or political side of such innovations as distance education, nor the potential shortcomings of education quality that are probable.

Along with the main function of vocational education organizations - the training of qualified specialists - the education system also performs a "secondary", but from the standpoint of social equilibrium, equally important role, consisting in restraining the pressure of the young generation on the social and professional structure of society. Education has always had this function, as evidenced by the experience of the educational policy of the state in previous decades. So from the post-war period (1945 onwards) there is a variation in the duration of the educational cycle: primary education – 7-8 years; secondary education 10-11 years; University -3-years for the training of lecturers - 5 years of training for the training of specialists. In the 2000s, for 15-20% of students seeking to obtain a highly qualified diploma in a graduate department (master's degree programs) - 6 years, and then, part of the youth – in full-time postgraduate school (3 years) - all in all 9 years. Due to the containment of youth pressure on the social and professional structure in the context of stagnation of enterprises in the 1990s, the number of universities throughout the country was significantly increased, and the conditions for admitting students were very liberal.

The social function of the vocational education system to stabilize society is excessively important and to a decisive degree determines the direction of educational policy, including inhibiting the introduction of distance education in economically developed countries (USA, Canada, economically developed countries of the European Union), which are undeniable leaders in the development of electronic and digital technology.

On the other hand, the priority of social and economic problems in educational (as in any other) policy raises certain shortcomings in the professional training of specialists. These shortcomings are manifested primarily in the imbalance

of supply and demand (industrial organizations and institutions professional education organizations) in the intellectual labor market. There is an assumption that the quotas for admission of students by profile do not correspond to the demand of enterprises according to the nomenclature of the required specialists, taking into account the rotation of personnel in enterprises. Further, the problem of overproduction of students (and postgraduate students) of the humanitarian profile (sociologists, economists, lawyers...) is known. There is "ballast" in other specialties: from previous studies it is known that at least a third of university graduates, after applying for a job, are forced to undergo retraining or change their specialty in order to meet the needs of enterprises and institutions. Up to 70% of university graduates are employed with the help of relatives, acquaintances, or by media announcement, and no more than 15-20% of university graduates receive employment assistance from university services.

There is also the problem of the imperfection of vocational guidance at school, as a result of which 20--30% of students make up "professional ballast", because they are disappointed in their chosen specialty already at the initial years of the university, or after graduation they are not employed in the specialty.

The above facts indicate that the transition to universal distance (online) education, which is economically rational for vocational education organizations, is not feasible in the next 15-20 years due to the contradictory practice of distance education in the social and economic policy of the state, and this is not specificity of our country, it is an objective regularity in all economically developed or developing countries of the world.

Nevertheless, there are extreme situations – for example, a coronavirus pandemic – when vocational education organizations (and general education too) are required, against their will, to switch to a distance form of education. In this case, the education system has to reckon with three serious problems of a general nature:

1. The most serious problem – lack of interactive textbooks adapted to distance (online) learning. Just posting the original mock-up of a textbook in PDF form on the site is no different from a textbook published on paper and reading in the first, and in the second case, is identical. The interactive textbook consists of 3 parts and, accordingly, 3 stages of the educational process: 1) the text of the textbook itself; 2) a problem book for checking the consolidation of acquired theoretical knowledge (this applies to humanitarian subjects, examples of such problem books are available); 3) a workshop that plays the role of a "simulator" for students to learn practical skills, which can be done using a computer model, similar to how novice pilots or car drivers train. The preparation of such textbooks requires at least 3-4 years and is the result of the creative interaction of specialists of several profiles: a subject specialist, logic (or mathematician), computer programmer, audio or video scriptwriter (for example, in a workshop on sociology, a video clip on the interview procedure is required, or conducting focus groups; in psychology - conducting situational games).

But this is not all, there is a fourth, no less important stage, which in most cases cannot be remotely implemented – this is actually practice, a student's testing of his/her intellectual and somatic abilities to really put into practice the knowledge learned theoretically: it is unlikely that a medical student will successfully perform an operation on a patient having only theoretical knowledge from the textbook, or maybe on the first visit to the dissecting room, he/she will faint (it is impossible to deliver a mini dissecting room to every student's home); and a novice pilot piloting an aircraft, even with brilliant theoretical knowledge, will fail if he/she does not fly off a certain number of hours with an instructor.

- 2. The second problem is the lack of technical readiness of vocational education organizations, and students, and some lecturers. This is simply a malfunction due to the diversity of technology that students and lecturers have, and the lack of uniformity of platforms; sometimes insufficient computer literacy or psychological phobia, as a brake on working with a computer; insufficient staffing of depositories with educational and scientific literature, often due to the delay in the transfer of this literature by libraries to electronic media.
- 3. The third problem is specific, pertaining to the remote educational process itself in extreme situations, like a coronavirus pandemic, is a danger syndrome that is permanently felt consciously or subconsciously by both students and lectur-

ers. Focusing on the pragmatic task, one should not forget about the role of extreme situations, including epidemics, in generating mass stress, as evidenced by world history: "Of the many and diverse disasters that fall on the human race. four disasters are likely to "happen most often and are the most destructive and terrible and at the same time the most instructive and significant, namely: war and revolution, famine and epidemic". And further: "The epidemic affects the emotional life of all those who are in contact with the patient"². This manifests itself in the form of anxiety, fear for the patient, if one of the relatives in the family becomes ill, anxiety for one's own safety, depression, which can be replaced by emotional excitement, lethargy, and an indifferent attitude to life. It is unlikely that such an atmosphere stimulates both students and lecturers to maximize attention to classes, which inadvertently damages the quality of the educational process, exacerbating discomfort for its participants.

From the foregoing it follows that distance education in extreme conditions, even if it is not a necessary measure, is not identical to distance education in ordinary conditions, similar to the well-being of participants in the educational process in full-time education. Therefore, it is very important to study the features and shortcomings of the organization of distance education in an epidemic, and in terms of the preparation of the educational process, its technical equipment, and the psychological state of the participants in this process.

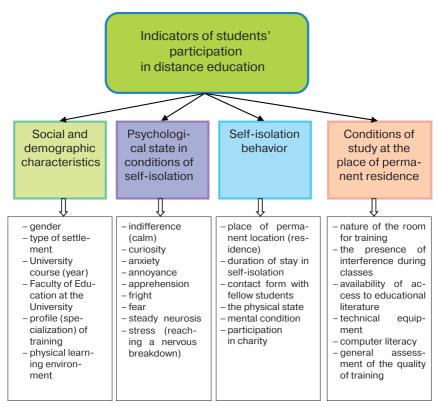
Such a study was conducted in May 2020 at Mukachevo State University of the Transcarpathian region. The study examined the features of distance education in the technical and psychological aspects. Students, postgraduate students and university professors were interviewed with the help of sociological questionnaires sent to the personal websites of respondents. Indicators that formed the basis of sociological questionnaires are displayed in diagrams 1 and 2.

¹ Pitirim Sorokin. Man and society in a disaster. Moscow State University, St. Petersburg, 2012, p. 17.

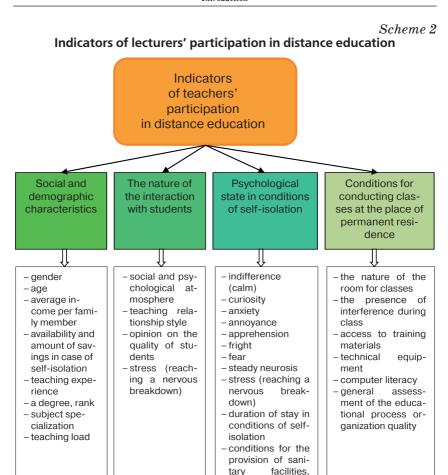
² Ibid., Pp. 23-24.

Scheme 1

Indicators of students' participation in distance education



The survey of respondents was carried out according to the continuous method, computer processing was carried out on average 90% of the questionnaires, the remaining 10% were not included in the processing due to poor quality of filling. A total of 954 completed students' profiles, 52 postgraduate students' profiles and 106 lecturers' profiles have been processed. All data have been analyzed in a fractional (percentage) ratio, since for small samples it is a convenient form of displaying trends, respectively, for these samples (lecturers and postgraduate students), the tabular form of conjugation of indicators was not calculated.



medicines
- health changes

SECTION ONE

TRAINING OF STUDENTS UNDER CONDITIONS OF SELF-ISOLATION

Chapter 1. Psychological and physical well-being of students during self-isolation

In order to have an idea of the public opinion of which students' group is displayed in this section, we give a brief description of the composition of those who filled out sociological questionnaire.

The computer–processed array represents students of all years³ (see Fig. 1) and all educational programs (see Fig. 2). Among them, those who study for a fee -73.9%, on a budgetary basis -25.5%, in the target area at the expense of the budget -0.4%, in the target area at the expense of the enterprise (institution) -0.2%.

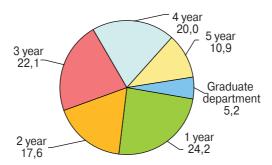
Composition by gender: female -87.8%, male -12.2%. Residents: Uzhgorod, Mukachevo -23.9%, another regional towns -17.6%, villages, settlements -58.5%.

As mentioned earlier, training in extreme conditions, especially in an epidemic, is only remote in form, in psychological well-being significantly different from full-time education conducted under normal conditions, that is, in the absence of an epidemic. This is proved by the results of our study, obtained using the self-assessment scale of the dynamics of the psychological state.

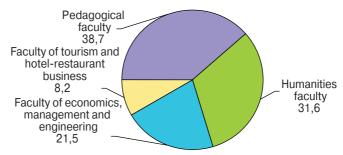
The psychological well-being of students was measured in dynamics in the following intervals: 1) on the day when they learned that the epidemic of coronavirus had occurred in the country; 2) on the day when they learned that in the country,

 $^{^3}$ Training of bachelor students in full-time form is 4 years, and in parttime form of study -5 years.

Figure 1
Distribution of students surveyed by years of study.%



 $Figure\ 2$ Distribution of surveyed students by educational programs, %

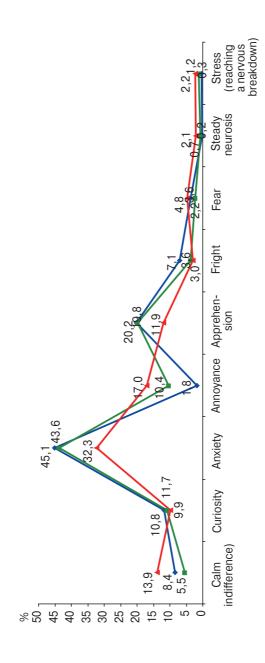


including for students, quarantine (self-isolation⁴) was introduced; 3) on the day of the survey (May 10-15).

As follows from the data in Figure 3, at the time of the epidemic announcement in the country, a sense of *anxiety* was most characteristic for students. The same feeling with a gradual attenuation was characteristic on the day when they learned that self-isolation was being introduced in the country (including for students); and also on the day of the survey (mid-May).

⁴ Self-isolation here means abstaining from contact with other people in order to reduce the risk of infection. These are any situations of close contact with other people (for example, close face-to-face contact at a distance of less than 1.5-2 meters), including mass events, work in a labor collective, classes in a training team, sports, cultural events, using transport, participating in excursions, visiting public catering organizations ... In conditions of self-isolation, the educational process is organized remotely, and students do not visit the educational organization, they are mostly at home.

Figure 3 that coronavirus epidemic arose in the country; 2) when they learned that in the country, including for Indicators of the psychological state of students in three situations: 1) on the day when they learned students, self-isolation was introduced; 3) on the day of the survey (mid- May),%



On the day when they learned that in the country, including for students, self-isolation was introduced

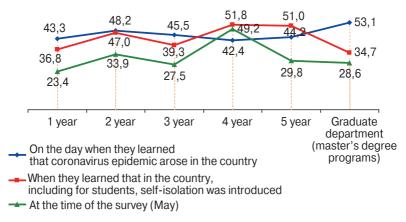
On the day when they learned that coronavirus epidemic arose in the country

At the time of the survey (May)

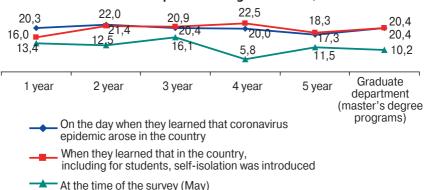
Among the significant forms of students' psychological state, *apprehension* can still be mentioned, as well as *annoyance* and *indifference* as of May (see Fig. 3).

Let us analyze the dynamics in two basic mental states of students – "anxiety" and "apprehension" – according to years of study. Such analysis is simultaneously equivalent to age-related dynamics, see Fig. 4 and 5, more detailed data are contained in Appendix 2, tables 1–11).

 $Figure\ 4$ The dynamics of students' feeling of anxiety in different periods being in isolation, %



The dynamics of students' feeling of apprehension in different periods being in isolation, %



Figures 3 and 4 show that the maximum indicators for students feeling anxiety or apprehension occur during the period when the country declared quarantine (self-isolation). By mid-May, that is, by the time the survey was conducted (60 days after the announcement of self-isolation), the sense of *apprehension* had sharply decreased and the number of students in this mental state had become minimal. The feeling of *anxiety* also decreased, but even in mid-May it was characteristic of a large number of students.

And then a rhetorical question arises: if a student is "agitated" for two months, how can he/she concentrate his/her attention on study? And if the teacher is at the same time "agitated", especially representatives of the senior age group? Then they can only "empathize" remotely, but not be enthusiastic about the process of intellectual creativity.

Route diagram 1 shows the directions of students' transition from the first mental state (the day of receiving the news about the epidemic) to the second (the day of self-isolation announcement) and, accordingly, the third (the day of the survey):

 $Calm \rightarrow Calm \rightarrow Calm$

 $Curiosity \rightarrow Anxiety \rightarrow Calm$ or Curiosity or Anxiety

Annoyance \rightarrow Annoyance, or Apprehension \rightarrow Calmness, or Anxiety, or Annoyance

 $Anxiety \rightarrow Anxiety$, or Apprehension $\rightarrow Anxiety$

Apprehension \rightarrow Anxiety \rightarrow Anxiety

Fright \rightarrow Anxiety, or Apprehension \rightarrow Anxiety

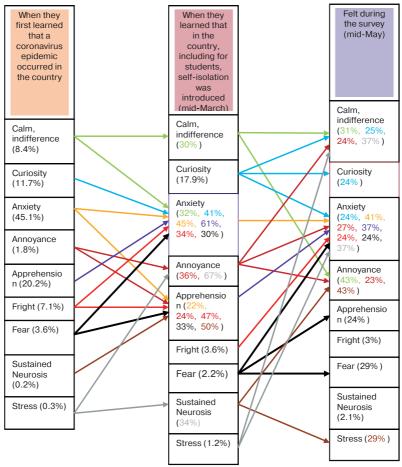
 $\textbf{Fear} \rightarrow \textbf{Anxiety} \text{ or Apprehension} \rightarrow \textbf{Anxiety} \text{ or Apprehension or Fear}$

 $\begin{array}{ccc} \textbf{Sustained} & \textbf{Neurosis} & \rightarrow & \textbf{Apprehension} & \rightarrow & \textbf{Annoyance,} \\ \textbf{or Stress} & & \end{array}$

 $\mathbf{Stress} {\rightarrow} \ \mathbf{Annoyance}, \ \mathbf{or} \ \mathbf{Sustained} \ \mathbf{neurosis} {\rightarrow} \ \mathbf{Calm} \ \mathbf{or} \ \mathbf{Anxiety}$

It can be assumed that the psychological tension of students is due to the general state of their health, well-being. However, this is not confirmed by students' self-esteem. 64.7% of students rate the general state of their health as always good, 30.5% – sometimes they get sick, but with common diseases, i.e. 95.2% of students should be considered quite healthy. Often sick – 0.9%, 2.7% – have a chronic disease, 1.2% of students have a disability.

Route diagram 1
The trajectory of the students' transition into various mental states⁵



⁵ Explanation. The first column of psychological states shows the proportion of respondents who were in the corresponding mental state at the time the epidemic was announced in the country. The second column shows the proportions of respondents distributed from the first mental state to the second, existing at the time of the announcement of self-isolation. The third column reflects the shares of respondents distributed from the second mental state to the third, which had developed at the time of the survey (mid-May), that is, during a 60-day stay in self-isolation. Transitions from each mental state are indicated by arrows with identical colors, the corresponding colors are shown in rectangles (in brackets) the proportion of respondents who switched to a new state from a previous state.

Not all students complied with the conditions of self-isolation. If from the beginning of the announcement of self-isolation (March 12) and until the survey (mid-May) we take the duration of the mandatory period of self-isolation for 60 days, it turns out that the average duration of students' compliance with the conditions of self-isolation (theoretically, because it is impossible to check) is 86% (52 days). This applies to 94% of those students who complied with the conditions of self-isolation. By their own admission, 6% of students did not comply with the requirements of self-isolation.

During self-isolation, students who complied with the conditions were mostly at home, with parents or in their family (a small number), as shown by the indicators in table 1.

 $Table\ 1$ The place of permanent or predominant location of students who complied with the conditions of self-isolation, %

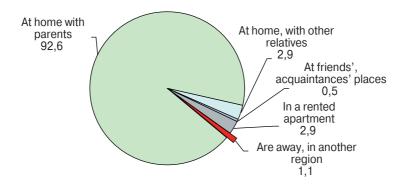
Place of stay during self- isolation	The whole period $(a = 1)$	Predominantly $(b = 0,7)$	Sometimes $(c = 0,3)$
At home with parents	77.8	14.0	1.4
At home, with other relatives	2.4	13.0	21.4
At friends', acquaintances' places	0.4	2.2	23.6
In a rented apartment	2.4	0.9	4.4
Are away, in another region	1.0	0.5	5.1

For clarity, we present the indicators of table 1 in a normalized form. Figure 6 shows that 80.2% of students who complied with the conditions of self-isolation were constantly either at home with their parents (some with their family), or at home with other relatives. Another 3.8% were in a rented apartment or in a dormitory – a total of 84%. Some students who complied with the conditions of self-isolation were in other regions of the country.

Using the indicator of the percentage of students who complied with the conditions of self-isolation (94%) and the indicator of the proportion of students who were constantly

at their place of residence (84%), we can calculate the conditional index of compliance with the conditions of self-isolation (J): J = 0.94 * 0.84 = 0.79 (conditionally -79%) with a maximum index value of J = 1 (100% observing the conditions of self-isolation).

Figure 6 Normalized indicator of the specific weight of students permanent residence (for 100% we accepted 94% of students who complied with the conditions of self-isolation), $\%^6$



More than half (58.4%) of students indicated that being in conditions of self-isolation partially created physical inconvenience for them, but they tried to move, do exercises, and another 19.4% were actively involved in exercises, sports, and 30.6% actively engaged in physical work, which is quite typical for students living in agricultural areas. Among students, 14.6% felt physical inconvenience during self-isolation, however, they did not have conditions for active physical activity, and 7% "do not like to move a lot."

During the stay in self-isolation the state of health of 78.3% of students in general has not changed, of 6.6% – a little, and 0.5% – physical health severely deteriorated (in total – 7.1%). In 13.4% of students a little and another 1.2% mental health severely deteriorated (in total – 14.6%).

⁶ Normalized indicators (In, where n = 1, ..., 5) are calculated from the ratio (the values of the characters a, b, c are given in the first line of table 1): In = (a+0.7b+0.3c)/100.

Despite the fact that we are talking about young people, in normal conditions, most of them are completely healthy, during their stay in conditions of self-isolation, many students' health has deteriorated to some extent, especially those who used to be often ill or have chronic disease (see Table. 2).

 $Table\ 2$ Changes in the health status of students during their stay in self-isolation, depending on their state of health earlier, under normal conditions, %

	General health status (under normal conditions)						
The state of health for the period of be- ing in conditions of self-isolation	Health is excellent, good	Sometimes get sick, but with ordinary illnesses	Health is not very good, of- ten sick	Have a chronic disease	Have a disabil- ity		
In general, it has not changed	86.5	66.7	44.4	23.1	81.8		
Has slightly deteriorated physically	4.2	10.7	44.4	7.7	0.0		
Has slightly deteriorated mentally	8.1	20.6	11.1	57.7	18.2		
Has severely deteriorated physically	0.3	0.3	0.0	7.7	0.0		
Has severely deteriorated mentally	0.8	1.7	0.0	3.8	0.0		
Total health has de- teriorated physically	4.5	11.0	44.4	15.4	0.0		
Total health has de- teriorated mentally	8.9	22.3	11.1	61.5	18.2		
Total health has de- teriorated overall	13.4	33.3	55.5	76.9	18.2		

From the data in table 2 it is valid to conclude that the state of mental sensation of students in the current epidemic varies according to the patterns identified in past world research practice in similar events⁷.

⁷ See: Pitirim Sorokin. Man and society in a disaster. Moscow State University, St. Petersburg, 2012.

Chapter 2. Assessment of the quarantine measures validity and manifestation of involvement

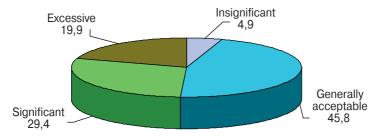
Students' examinations obligations overstress them when a certain barrier, especially an epidemic, gets in the way of the familiar rhythm of education. Therefore, they can be annoyed by the duration of self-isolation, especially if there are technical failures in the organization of distance learning. In such cases, psychological stress portrays the image of self-isolation in the minds of students as an excessively long period, and the administrative measures taken are excessive.

The results of the study showed that 56.9% of the surveyed students consider the measures of isolation to be quite adequate to the risk of coronavirus infection and 27.4% – generally acceptable for the epidemic, although the risk of infection is low. Thus, the taken administrative measures of self-isolation 84.3% of students consider as a whole justified. 9.6% of students consider administrative measures of self-isolation to be somewhat exaggerated or not entirely justified, and 6.4% believe that self-isolation measures are excessive, and the public opinion about the danger of infection from coronavirus is not true (2% found it difficult to answer).

Under quarantine conditions, an individual experiencing for too long such feelings as fear, sustainable neurosis, stress can lead to the formation of phobias, which is a serious mental illness, which in each case of forced self-isolation, and even simply with any distance education, leads to student attention disintegration, a sharp deterioration in mental state.

Duration of stay in conditions of self-isolation, most students consider acceptable or insignificant. Judging by the data in Figure 7, every second student was weighed down by the length of the period of self-isolation, which apparently violated the usual rhythm of their life, including study. The survey data indicate that every second student was burdened by the duration of stay in self-isolation at different years of study of all faculties, and similarly – every second student was not burdened by this (see Tables 3 and 4).

Figure 7 Students' opinion on the length of stay in conditions of self-isolation, $^{\circ}$



 $Table\ 3$ Evaluation by students of different years of study the length of stay in conditions of self-isolation, %

	Year of Study						
Estimated Duration	1 year	2 year	3 year	4 year	5 year	Graduate department	
Insignificant	3.9	7.7	8.5	2.1	1.0	4.1	
Generally acceptable	43.3	44.6	42.2	52.9	51.0	38.8	
Significant	33.3	29.2	30.3	27.2	18.3	38.8	
Excessive	19.5	18.5	19.0	17.8	29.8	18.4	
Total evaluated negatively	52.8	47.7	49.3	45.0	48.1	57.2	

 $Table\ 4$ Estimation by students of different faculties the length of stay in conditions of self-isolation, %

	Faculty					
Duration Estima- tion	Peda- gogical faculty	Humani- ties Fac- ulty	Faculty of Economics, Management and Engineer- ing	Faculty of Tourism and Hotel-Restau- rant Business		
Insignificant	5.4	3.0	6.8	5.1		
Generally acceptable	46.6	47.5	39.5	51.9		
Significant	28.2	27.6	36.1	24.1		
Excessive	19.8	21.9	17.6	19.0		
Total evaluated negatively	48.0	49.5	53.7	43.1		

In connection with the presence of complaints about the duration of self-isolation, it is advisable to analyze the structure of daily activities of students in conditions of self-isolation, excluding the time spent sleeping. At the same time, it will show what part of their time during the day in self-isolation students use for education.

Figure 8 shows the proportion of students who, in conditions of self-isolation, performed one or another activity during the day, not counting the time for sleep. Types of activity are various. At least 70% of students did not deprive themselves of the opportunity to hike, to meet friends, and a large proportion of those who did sports. Housework and household chores were performed by the same proportion of students as educational activities.

Figure 8 The share of students performing various activities in conditions of self-isolation, without taking into account the time spent sleeping,

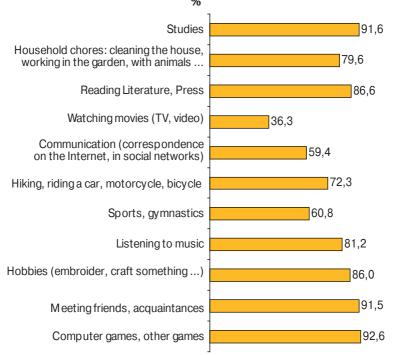


Figure 9 shows the normalized (under 100%) share of time spent on various activities by students on average during the week, excluding time spent on sleep. This indicator can also be considered as the structure of the average daily activity, due to the large variance of activities averaged over the week.

Such indicators of activity of participation in various activities during the week are characteristic both for students of different sexes and for those living in settlements of different types (see Tables 5 and 6).

 $Table\ 5$ The share of students of different sexes performing different types of activity during the week, excluding time spent on sleep, %

A -4::4:	S	Sex
Activities	Male	Female
Studies (all types in total)	91.4	92.7
Watching movies. TV. video	89.7	91.8
Reading literature.	81.0	86.6
Listening to music	71.6	82.6
Meeting friends. acquaintances	66.4	60.0
Hiking. riding a car. motorcycle. bicycle	62.1	73.7
Hobbies (embroider. craft something)	45.7	61.3
Computer games. other games	58.6	33.2
Communication. correspondence on the Internet. including in social networks	77.6	87.8
Sports. gymnastics	69.8	80.9
Various household chores: housekeeping. work in the garden. with animals	86.2	92.4

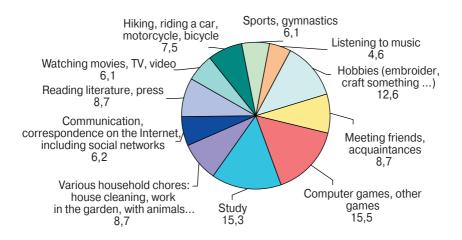
 $Table\ 6$ Proportion of students in different types of settlements performing various activities during the week. excluding time spent on sleeping, %

	Type	of settleme	ent
Activities	Uzhhorod, Mukache- vo	Another regional town	Village, settle- ment
Studies (all types in total)	94.7	85.7	93.7
Watching movies. TV. videos	93.0	84.5	93.0
Reading literature. press	88.6	81.0	86.4
Listening to music	79.8	76.8	83.2
Meeting with friends. acquaintances	55.7	49.4	66.3
Hiking. car. motorcycle. bicycle rides	66.2	64.3	77.2
Hobbies (embroidering. craft something)	60.5	47.0	62.7
Computer games. other games	39.0	38.7	34.4
Communication. correspondence on the Internet. including social networks	89.0	77.4	88.4
Sports. gymnastics	81.6	75.0	80.1
Various household chores: house cleaning. work in the garden. with animals	91.7	83.3	94.1

Judging by the data in Figure 9, the main time during the week students spent studying, playing computer games, hobbies, meeting with friends (girlfriends). These four activities together took up 52.2% of their time during the week, excluding sleep. Leisure activities (watching movies, reading, listening to music, games...) accounted for 19.4%, hiking and sports -13.6%, meeting with friends, acquaintances -8.7% of the total time student activities during the week in conditions of self-isolation.

Under the epidemic, students were characterized by an attitude toward charity, a sense of compassion: during self-isolation, at least 90% of students provided assistance to those in need of some form of help. For our case, it is appropriate to note that most of the students of the university where the study was conducted are female, and for women, the feeling of compassion and helping those in need is inherent in nature. Help was provided, first of all, to their close relatives, but not only: to familiar adults, and to their friends, and acquaintances of their peers (see Table. 7).

Figure~9 Normalized (under 100%) share of various activities performed by students during the week, not taking into account sleeping time, %



 $Table\ 7$ Frequency of provision help to those who needed it by students in isolation, %

Who was helped?	Helped once	Helped more than one time	Were ready to help, but it was not needed	Help was needed, and they were ready to provide it, but there was no way	There was no order to help (or there was no need)	Together provided help
N e a r e s t relatives	11.7	43.8	34.6	1.3	8.6	45.5
Familiar adults	11.9	13.7	38.4	3.4	32.6	25.6
Friends, peers	13.0	15.3	35.8	2.7	33.1	28.3
Unfamil- iar adults	6.6	4.2	36.7	13.4	39.1	10.8

As shown in Figure 9, interpersonal contacts of students in conditions of self-isolation narrowed: less than 9% of surveyed students met with friends, acquaintances, during self-isolation. However, remote contacts with their group mates in conditions of self-isolation were maintained by at least 90% of surveyed students, including 93.2% – via the Internet, 46.1% – by phone, i.e. almost all students maintained remote contact with group mates through these two technical electronic means. The intensity of contacts with group mates is generally similar for students of all years of study and does not depend on the type of settlement where students live (see Tables 8 and 9).

Table 8 The share of students of different years of study who, in conditions of self-isolation, maintained contact with fellow students through various means of communication, %

	Year of Study						
Contact form	1 year	2 year	3 year	4 year	5 year	Graduate depart- ment	
Via the internet	87.4	92.9	92.9	97.9	96.2	98.0	
By telephone	48.5	42.3	33.6	55.0	55.8	46.9	
Personal meetings	1.3	4.8	0.0	0.5	6.7	0.0	
Did not support contacts	3.5	1.8	7.1	0.0	1.0	0.0	

 $Table\ 9$ The share of students in different types of settlements who, in conditions of self-isolation, maintained contact with fellow students through various means of communication, %

Contact mainte-	Type of settlement					
nance form	Uzhhorod, Mu- kachevo	Another regional town	Village, settle- ment			
Via the internet	90,4	96,4	93,4			
By telephone	41,2	39,3	50,2			
Personal meetings	4,4	0,0	1,6			
Did not support contacts	4,8	3,0	2,0			

Among the surveyed students, 89.3% were worried that in conditions of self-isolation they had to stop direct interpersonal contacts with fellow students, 9.7% of students were indifferent to this situation. In particular, they noted that: there aren't enough direct contacts, but treat it calmly - 52.8%, lack of direct contact worries, but treat it with understanding - 33.6%, lack of direct contact with group mates is very disturbing, feel uncomfortable - 2.9%. These data suggest that the full-time form of learning is not only a method of transmitting educational content, but also a consolidating environment that contributes through collective empathy to the development of a sense of social community, similarity of worldview and civic identity. Without a sense of civic community, the state has not citizens, but a set of spiritually impersonal biological robots. Here, the comparison with the archaic peoples dancing around the fire, who are in a trance for emotional empathy and at the same time strengthening the cohesion of the tribe is not allegorical, but has a direct genetic cause. Nature does not destroy what was once created as the basis for strengthening human community, that is, what progress is based on. In the course of the development of civilization, only the forms of manifestation of life-affirming acts of behavior change.

"Nostalgia" for direct contact with group mates was characteristic of students of all years of study and faculties (see Tables 10 and 11).

Table 10 Attitude of students of different years of study to the fact that during the period of self-isolation they have ceased direct contact with group mates. %

			Year	r of Stu	dy	
Attitude	1 year	2 year	3 year	4 year	5 year	Graduate department
Treat it with indifference	10.8	6.5	12.8	7.9	4.8	20.4
Not enough direct contacts, but they treat it calmly	48.1	45.2	59.7	51.8	66.3	46.9
Lack of direct contact is worrying. but treat it with understanding	39.0	43.5	20.4	37.7	27.9	28.6

End of the table 10

			Year	r of Stu	dy	
Attitude	1 year	2 year	3 year	4 year	5 year	Graduate department
Lack of direct contact with group mates is very disturbing, they do not feel comfortable	2.1	4.8	7.1	2.6	1.0	4.1
Together there is a lack of direct contacts	89.2	93.5	87.2	92.1	95.2	79.6

 $Table\ 11$ The attitude of students of different faculties to the fact that during the period of self-isolation they have ceased direct contact with group mates, %

			Faculty	
Attitude	Peda- gogical faculty	Hu- mani- ties Faculty	Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business
Treat it with indifference	6.5	11.6	6.8	25.3
Not enough direct contacts. but they treat it calmly	42.3	60.1	63.9	45.6
Lack of direct contact is worrying. but treat it with understanding	47.2	24.9	24.4	27.8
Lack of direct contact with group mates is very disturbing, they do not feel comfortable	4.0	3.4	4.9	1.3
Together there is a lack of direct contacts	93.5	88.4	93.2	74.7

Chapter 3. Learning conditions of students during self-isolation

Teaching students in the conditions of self-isolation, implemented in a remote form, had an impact on the quality of assimilation of educational material both in the aspect of technical support of the educational process, and in the aspect of content, the degree of preparedness of the educational

material for the full-fledged convey of the mastered subject to students, and in terms of stress or experiences of students and lecturers due to the general danger to their own health and the health of loved ones.

As the study showed, according to the majority (52.1%) of the surveyed students, self-isolation did not affect their participation in the educational process as a whole. However, according to 37.7% of the surveyed students, during self-isolation, the learning conditions worsened, including, in the opinion of 6.3%, they worsened significantly; in the opinion of only 9%, the learning conditions improved, 1.2% of the students were unable to give an unambiguous assessment.

The quality of education in the conditions of self-isolation was positively assessed by master's students, and complaints were heard, first of all, from 1st and 2nd year undergraduate students (see Table 12).

 $Table\ 12$ Opinion of students of different years of study on how self-isolation affected participation in the educational process as a whole, %

				Year		
Opinion	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- gram)
Training conditions have worsened somewhat	35.1	36.3	33.6	27.2	26.9	14.3
Training conditions have worsened significantly	8.2	5.4	4.3	8.9	4.8	2.0
Training conditions generally have not changed	46.3	55.4	50.7	50.8	61.5	59.2
Training conditions have improved	6.9	2.4	9.0	12.6	5.8	14.3
Training conditions have improved significantly.	1.7	0.6	0.5	0.0	0.0	8.2
Could not answer	1.7	0.0	1.9	0.5	1.0	2.0
Overall conditions have improved	8.6	3.0	9.5	12.6	5.8	22.5
Overall conditions have worsened	43.3	41.7	37.9	36.1	31.7	16.3

Table 13 The opinion of students of different faculties about how self–isolation influenced participation in the educational process as a whole, %

			Faculty	
Opinion	Peda- gogical faculty	Hu- mani- ties Faculty	Faculty of Economics, Manage- ment and Engineering	Faculty of Tourism and Hotel- Restaurant Business
Training conditions have worsened somewhat	29.8	27.9	35.6	41.8
Training conditions have worsened significantly	4.1	6.0	12.2	2.5
Training conditions generally have not changed	57.5	57.8	39.5	38.0
Training conditions have improved	6.2	6.6	12.2	10.1
Training conditions have improved significantly.	1.4	0.0	0.5	5.1
Could not answer	1.1	1.7	0.0	2.5
Overall conditions have improved	7.6	6.6	12.7	15.2
Overall conditions have worsened	33.9	33.9	47.8	44.3

The quality of education during self-isolation deteriorated, first of all, among students of the faculty of economics, management and engineering, the faculty of tourism and the Hotel-Restaurant business (see Table 13).

Complaints come mainly from students living in towns, among those living in villages and urban-type settlements there are fewer complaints about deterioration of the quality of education during self-isolation (see Table. 14).

The success of inclusion in the educational process remotely is influenced by the conditions in which a student can be isolated together with electronic equipment and fully participate in the educational process. The conditions for classes at the students' place of residence during self-isolation were generally favorable. In particular:

 67.6% of students had a separate room in which it was possible to retire while participating in distance learning;

 $Table\ 14$ The opinion of students in different types of settlements about how quarantine influenced participation in the educational process as a whole, %

		Type of settleme	nt
Opinion	Uzhhorod. Mukachevo	Another regional town	Village, settle- ment
Training conditions have worsened somewhat	37.7	35.7	27.6
Training conditions have worsened significantly	9.6	4.8	5.4
Training conditions generally have not changed	45.2	46.4	56.6
Training conditions have improved	5.7	9.5	8.4
Training conditions have improved significantly.	0.9	2.4	0.7
Could not answer	0.9	1.2	1.3
Overall conditions have improved	6.6	11.9	9.1
Overall conditions have worsened	47.3	40.5	33.0

- 19% of students did not have a separate room, but there was a relatively autonomous place where they could participate in distance learning without interference;
- 11.1% of students did not have a permanent place to study, each time they had to adapt to participate in distance learning;
- 2.3% of students had poor conditions, there was no convenient place to participate in distance classes.

In total, 86.6% of students had good or satisfactory conditions for classes during self-isolation, and 13.4% of students had poor conditions.

The situation is similar both for the years of study of students and the types of settlements in which they live (see Tables 15 and 16).

Table 15 The opinion of students of different faculties about the conditions for studying at the place of their stay during self-isolation, %

Conditions for classes			Faculty	
at the place of stu- dents' permanent res- idence during the pe- riod of self-isolation	Peda- gogical faculty	Humani- ties Fac- ulty	Faculty of Economics, Manage- ment and Engineering	Faculty of Tourism and Hotel-Restau- rant Business
There was a separate room in which it was possible to retire while participating in distance learning	66.7	67.1	72.2	62.0
There was no separate room, but there was a relatively autonomous place where they could participate in distance learning without interference	22.2	18.3	12.7	22.8
There was no permanent place for classes, each time they had to adapt to participate in distance classes	9.5	12.3	12.7	10.1
The conditions were poor, there was no convenient place to participate in distance learning	1.6	2.3	2.4	5.1
Overall conditions were good or satisfac- tory	88.9	85.4	84.9	84.8
Overall conditions were poor	11.1	14.6	15.1	15.2

Despite the generally convenient place for classes, 53.4% – of students indicated that they had interference during classes (nobody bothered 46.6% of students during classes). Interference during classes sometimes occurred but did not bother much – 31.7%; interference during classes often occurred, but also did not bother much – 10.1%. Thus, 88.4% of students were not disturbed by the interference that occurred during classes.

 $Table\ 16$ The opinion of students in different types of settlements about the conditions for studying at the place of their stay during self-isolation, %

Conditions for classes		Type of settlement	
at the place of stu- dents' permanent res- idence during the pe- riod of self-isolation	Uzhhorod, Mukachevo	Another regional town	Village, settlement
There was a separate room in which it was possible to retire while participating in dis- tance learning	74.6	67.9	64.7
There was no separate room, but there was a relatively autonomous place where they could participate in distance learning without interference	15.4	21.4	19.7
There was no permanent place for classes, each time I had to adapt to participate in distance classes	5.7	7.7	14.3
The conditions were poor, there was no convenient place to participate in distance learning	4.4	3.0	1.3
Overall conditions were good or satisfactory	90.0	89.3	84.4
Overall conditions were poor	10.0	10.7	15.6

Various obstacles very much interfered with classes -11.6% of students, including 6.8% were interfered infrequently, but still it did not disturb much, while 4.8% of students had constant interference which was very disturbing. As can be seen from the data in tables 17 and 18, in general, if we consider the different categories of students, the proportion of people who experienced interference at the place of permanent residence during self-isolation and who participated in the educational process ranges from 10-14%.

Table 17 interference for students of different faculties during participation in distance learning in conditions of self-isolation, %

The procession of external interference dur-			Faculty	
ing participation in distance learning in conditions of self-isolation	Pedagogi- cal faculty	Humani- ties Fac- ulty	Faculty of Economics, Management and Engineering	Faculty of Tourism and Hotel-Restau- rant Business
Nobody bothered	42.8	40.5	63.4	44.3
Sometimes there was interference, but not very disturbing	36.6	34.6	17.1	35.4
Interference often arose. but did not disturb much	11.1	11.6	6.3	8.9
Sometimes there was interference, and very disturbing	8.9	8.3	5.9	3.8
Interference often arose and was very disturbing	2.2	2.3	4.4	9.7
There was constant interference and very disturbing	0.5	2.7	2.9	0.0
Together in the process of classes there was external interference that prevented students from training	9.5	13.3	13.2	11.4

 $Table\ 18$ The nature of interference for students in various types of settlements during participation in distance learning, %

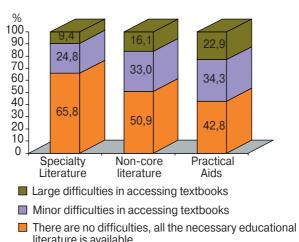
The presence of exter-		Type of settlement	
nal interference during participation in distance learning in conditions of self-isolation	Uzhhorod, Mukachevo	Another regional town	Village, settlement
Nobody bothered	51.3	46.4	44.8
Sometimes there was interference. but not very disturbing	24.6	38.1	32.6
Interference often arose. but did not disturb much	10.5	7.1	10.8
Sometimes there was interference. and very disturbing	3.5	6.0	8.4
Interference often arose and was very disturbing	7.5	1.2	2.0
There was constant interference and very disturbing	2.6	1.2	1.4
Together in the process of classes there was external interference that prevented students from training	13.6	8.4	11.8

According to the surveyed students, the difficulties in accessing the educational literature during self-isolation were not very large, and mainly these difficulties concern practical aids and literature on non-core subjects (see Fig. 10).

For faculties, the indicators of accessibility of educational literature are more differentiated (see Tab. 19-21, for years of study and types of student housing settlements, detailed data are given in Appendix 1, tables 50-58).

First-year students (see Table 19) had difficulties accessing the required basic educational literature on vocational training, and students of the pedagogical faculty and the faculty of tourism and Hotel-Restaurant business – non-core disciplines literature (see Tab. 20), students of the pedagogical faculty – practical aids (see Table. 21).

 $Figure\ 10$ The nature of students' difficulties in access to educational literature during self-isolation, %



 $Table\ 19$ The opinion of students of different faculties about the difficulties in accessing the required basic educational literature in the specialty, %

			Faculty	
Opinion	Peda- gogical faculty Humani- ties Fac- ulty		Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel- Restaurant Business
No difficulties, all the necessary educational literature was avail- able	60.2	67.4	71.2	72.2
There were difficulties in accessing textbooks, but insignificant	28.2	25.2	20.5	19.0
Difficulties in accessing textbooks were great	6.5	4.0	3.9	3.8
Did not answer	5.1	3.4	4.4	5.0
Total there were difficulties	34.7	29.2	24.4	22.8

 $Table\ 20$ The opinion of students of different faculties about the difficulties in accessing the required educational literature in non-core disciplines, %

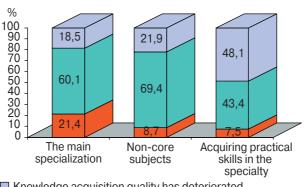
			Faculty	
Opinion	Peda- gogi- cal fac- ulty	Human- ities Faculty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business
No difficulties, all the necessary educational literature was available	43.6	60.8	48.3	54.4
There were difficulties in accessing textbooks, but insignificant	33.9	30.2	40.5	20.3
Difficulties in accessing textbooks were great	11.1	3.0	1.5	5.1
Did not answer	11.4	6.0	9.7	20.2
Total there were difficulties	45.0	33.2	42.0	25.4

 $Table\ 21$ The opinion of students of different faculties about the difficulties in accessing the required practical aids, %

	Faculty						
Opinion	Peda- gogi- cal fac- ulty	Human- ities Faculty	Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel- Restaurant Business			
No difficulties, all the necessary educational literature was available	35.8	50.8	44.9	39.2			
There were difficulties in accessing textbooks, but insignificant	36.0	31.9	35.1	32.9			
Difficulties in accessing textbooks were great	18.4	8.3	6.8	8.9			
Did not answer	9.8	9.0	13.2	19.0			
Total there were difficulties	54.4	40.2	41.9	41.8			

The majority of students believe that the introduction of distance learning did not affect the quality of education, acquisition of knowledge, in comparison with full-time education at the university, in general, but the conditions for acquiring practical skills in the specialty have deteriorated (see Fig. 11). This opinion is held, first of all, by students of 1–2 years of the Faculty of Economics, Management and Engineering (see Tables 22 and 23).

Figure 11 The nature of the impact of the distance learning introduction on the quality of student education, compared with full-time education at the university, %



- Knowledge acquisition quality has deteriorated
- Knowledge acquisition quality as a whole has not changed
- Knowledge acquisition quality has improved

Table 22 The share of students of different years of study who believe that in conditions of self-isolation the quality of acquiring knowledge in subjects has generally deteriorated, %

	Year					
Academic subjects	1 year	2 year	3 year	4 year	5 year	Graduate department
The main qualification	15.2	19.6	9.5	14.1	9.6	8.2
Non-core disciplines	12.1	19.0	14.2	11.5	10.6	10.2
Getting practical skills in the specialty	40.3	41.7	39.8	47.1	36.5	32.7

 $Table\ 23$ Proportion of students from different faculties who believe that in conditions of self-isolation the overall quality of knowledge in subjects has deteriorated, %

	Faculty						
Academic subjects	Peda- gogical faculty	Hu- mani- ties Faculty	Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business			
The main qualification	10.0	11.3	24.4	10.1			
Non-core disciplines	8.4	13.6	22.0	13.9			
Getting practical skills in the specialty	48.5	35.2	35.6	41.8			

Some students see the advantages of distance education in conditions of self-isolation in the following:

- 18,3% more time can be devoted to learning material;
 - 8.3% more opportunities for independent work with information;
 - 8.1% it is possible to plan time between studies and other matters, family activities;
 - 5.0% more convenient, more comfortable doing at home:
 - 3.2% an interesting new learning experience;
- 65.2% found it difficult to express an opinion.

For better understanding, we give the opinions expressed by some students:

"The form of training improved during quarantine because, in the home environment, the content is better remembered, it is more convenient to sit on the couch than at the desk, and of course, any choice of time to complete practical tasks is a big plus."

"I learned to independently search for, process information that lecturers used to provide."

"More time for independent study of tasks, in a calm environment, you can read the necessary literature at home, and calmly, with verification, do everything; you can calmly ask the teacher, ask the right question, and get an answer." With regard to the deterioration of the conditions of training in self-isolation, they are, according to students, in the following:

- **14,3**% independent elaboration of the material without explanations of the teacher is not quite effective;
- 11,3% there is no live communication;
 - **8,2**% lack of practical skills (computer skills, Internet skills, the use of interactive learning technologies);
 - 5.2% there are problems with the Internet (freezing up), electricity;
 - 2.1% it is difficult to study at home, combine studies with household chores;
- 63.3% found it difficult to express an opinion.

For better understanding, we give the opinions expressed by some students:

"There is not enough time for the complete processing of information, because there is too much information, lectures are not conducted, and information is received only through messengers."

"At home, electricity problems often arise, so it is difficult to complete practical tasks on time."

"Little time for studying because of housework. I just don't have time to hand in everything on time."

"In the conditions of distance learning, it is difficult to tell content during exams and tests. When the exam or test is held in person, you can tell and explain everything, but in the conditions of distance learning I just wrote and mailed it. The teacher can never be replaced by a computer, because the teacher must explain a certain issues to the students and in the process of communication give answers to the questions that arise, so my opinion is: distance learning is for robots."

"With distance learning, the time and effort spent on assignments increase, the quality of their implementation decreases due to insufficient access to educational literature, or its lack of availability. There is educational literature in the paid access network, but the cost of access to such a network for a student is significant. Also, there are no necessary skills of self-organization and discipline, which under quarantine conditions negatively affects the quality of education."

"It is impossible to perform certain educational tasks qualitatively due to the closure of non-food stores under quaran-

tine" (student of the Department of Economics, Management and Engineering."

An important prerequisite for the successful implementation of distance education in general is the level of technical equipment of students. The results of the survey indicate that students are satisfactorily equipped with equipment for remote communication, in particular: 69.4% have a personal iPod, 59.2% have a personal laptop, 21.5% have a personal desktop computer. There is no personal equipment, but they have one in the family, and 6.8% of the students surveyed can use it, and another 1.4% have rented computer equipment, or took from friends for a while. Another thing is how much the equipment available to students is convenient for distance learning.

Students of the Faculty of Economics, Management and Engineering, as well as the Humanities Faculty (see Table 24) living in towns (see Table 25) are equipped with the best equipment).

 $Table\ 24$ Equipment of students of different faculties for participating in distance learning, %

			Faculty	
Technical equipment of stu- dents to participate in dis- tance learning	Peda- gogi- cal fac- ulty	Hu- mani- ties Fac- ulty	Faculty of Economics, Manage- ment and Engineering	Faculty of Tourism and Hotel– Restaurant Business
Have a personal desktop computer	19.0	22.9	28.8	8.9
Have a personal laptop	60.7	62.5	52.7	57.0
Have a personal mobile phone or tablet	69.6	75.4	57.6	75.9
Don't have personal equipment, but there is one in the family and they can use it	8.1	2.7	5.9	19.0
Do not have personal equipment, but it was taken for temporary use from acquaintances, relatives, friends	0.5	0.3	0.5	0.0
Don't have personal equipment, but rented it	0.0	0.0	0.5	0.0
Total do not have personal equipment	8.6	3.0	6.9	19.0

 $Table\ 25$ Equipment of students in various types of settlements for participating in distance learning, \%

Technical equipment of stu-	Ty	pe of settlemen	ıt
dents to participate in distance learning	Uzhhorod, Mukachevo	Another regional town	Village, settlement
Have a personal desktop computer	26.3	21.4	19.5
Have a personal laptop	61.8	58.9	58.2
Have a personal mobile phone or tablet	65.8	66.1	71.9
Do not have personal equipment, but there is one in the family, and they can use it	4.8	10.1	6.6
Do not have personal equipment, but it was taken for temporary use from acquaintances, relatives, friends	0.4	0.0	0.5
Don't have personal equipment, but rented it	0.4	0.0	0.0
Total do not have personal equipment	5.6	10.1	7.1

According to the results of the study, there were difficulties in using computer equipment by students. The equipment worked without fail for 44.4% of students. 21.8% of students – the technique is not new and sometimes (or often) "froze up" during classes. 41.3% of students had serious problems, since there were problems (sometimes, or often) with the Internet, and 5.5% of students generally did not have the opportunity to work with a computer for some stable time, mainly due to failures with electricity or the fact that the equipment was borrowed from friends for a limited time. With regard to interruptions in the supply of electricity – this is mainly a problem for students living in villages and urban-type settlements.

Students of all years of study had difficulties in using computer equipment, but to a lesser degree among students of 4-5th year students (see Table. 26), Pedagogical and Humanities faculties (see Table. 27), residents of villages, towns (see. Table 28).

 $Table\ 26$ Students have different problems in the process of use technique while participating in distance learning, %

	Year of study						
Problems	1 year	2 year	3 year	4 year	5 year	Gradu- ate depart- ment	
There are no problems, the equipment works smoothly	38.1	42.9	37.0	54.5	54.8	51.0	
There are problems, the equipment is not new and sometimes (or often) "freezes up"	25.1	23.2	23.7	16.8	19.2	18.4	
There are problems, the equipment is not own and it is not always possible to use it for all the necessary time	2.2	3.0	4.7	2.1	3.8	0.0	
There are problems because there are interruptions (sometimes, or often) with the Internet, electricity	45.9	39.3	52.1	28.8	35.6	40.8	
In total, there are problems with the technique when using it for distance education	61.9	57.1	63.0	45.5	45.2	49.0	

 $Table\ 27$ Students of different faculties have problems in the process of using the equipment during participation in distance learning, %

	Faculty					
Problems	Peda- gogi- cal fac- ulty	Hu- mani- ties Faculty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel– Restaurant Business		
There are no problems, the equipment works smoothly	40.4	44.5	46.8	57.0		
There are problems, the equipment is not new and sometimes (or often) "freezes up"	25.5	16.3	22.9	22.8		

End of the table 27

Faculty				
Problems	Peda- gogi- cal fac- ulty	Hu- mani- ties Faculty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel– Restaurant Business
There are problems, the equipment is not own and it is not always possible to use it for all the necessary time	2.2	3.3	2.9	5.1
There are problems because there are interruptions (some- times, or often) with the In- ternet, electricity	44.4	46.2	33.7	27.8
In total, there are problems with the technique when using it for distance education	59.6	55.5	53.2	43.0

Table~28 Students of different types of settlements have problems in the process of using equipment while participating in distance learning, %

	Type of settlement					
Problems	Uzhhorod, Mukachevo	Another regional town	Village, settlement			
There are no problems, the equipment works smoothly	51.3	53.0	39.1			
There are problems, the equipment is not new and sometimes (or often) "freezes up"	16.2	14.9	26.2			
There are problems, the equipment is not own and it is not always possible to use it for all the necessary time	3.9	5.4	1.8			
There are problems because there are interruptions (some- times, or often) with the Inter- net, electricity	35.1	38.1	44.8			
In total, there are problems with the technique when using it for distance education	48.7	47.0	60.9			

The situation was more favorable for students' perception of educational materials during distance learning. Thus, 54.7% of students, by their own admission, have fully adapted to the distance form of classes; 35.5% of students had problems due to the unusual perception of lectures (classes); 4.7% – had problems due to unsatisfactory forms of teaching; another 5.6% of students had problems due to technical failures during teaching due to the technical service of the university, 1.8% – due to technical failures due to the teacher. In students' opinion (6.1% of the surveyed students) study material is poorly adapted for its translation in electronic form (not visual) – this is a relatively low figure.

Problems of perception of educational material during distance learning had, first of all, students of 1-4 years of study (see Tab. 29), students of faculty of Economy, management and engineering, Pedagogical faculty (see Tab. 30), students from the central towns of the region and students from villages (see Table 31).

 $Table\ 29$ Problems that students of different years of study had in perception of educational material during distance learning, %

	Year					
Problems	1 year	2 year	3 year	4 year	5 year	Graduate School (master's degree pro- grams)
There are no problems, I managed to fully adapt to the distance learning	48.5	39.9	55.0	57.6	75.0	79.6
There are problems due to the unusual percep- tion of lectures (classes)	42.9	50.0	35.1	29.8	17.3	14.3
There are problems due to the unsatisfactory form of conducting classes	4.8	5.4	6.2	5.8	0.0	2.0
Problems are due to technical failures dur- ing teaching due to the fault of the teacher	1.7	1.8	1.4	3.1	0.0	2.0

End of the table 29

	Year					
Problems	1 year	2 year	3 year	4 year	5 year	Graduate School (master's degree pro- grams)
Problems are due to technical failures dur- ing teaching due to the fault of the technical service of the university	5.6	6.5	7.1	4.7	4.8	0.0
The training course content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text, does not have an interactive form)	8.2	7.1	6.6	5.8	1.0	2.0
In total, there are problems in the per- ception of educational material during dis- tance learning	63.2	70.8	56.4	49.2	23.1	20.3

 $Table~30 \\ {\it Students~of~different~faculties~have~problems~with~the~perception} \\ {\it of~educational~material~during~distance~learning,\,\%} \\$

	Faculty					
Problems	Peda- gogical faculty	Humani- ties Fac- ulty	Faculty of Economics, Manage- ment and Engineering	Faculty of Tourism and Hotel- Restaurant Business		
There are no problems, I managed to fully adapt to the distance learning	53.4	62.5	44.4	58.2		
There are problems due to the unusual percep- tion of lectures (classes)	38.2	29.9	43.4	24.1		
There are problems due to the unsatisfactory form of conducting classes	5.4	3.0	6.3	3.8		

End of the table 30

	Faculty				
Problems	Peda- gogical faculty	Humani- ties Fac- ulty	Faculty of Economics, Manage- ment and Engineering	Faculty of Tourism and Hotel- Restaurant Business	
Problems are due to technical failures dur- ing teaching due to the fault of the teacher	2.2	2.0	1.5	0.0	
Problems are due to technical failures dur- ing teaching due to the fault of the technical service of the university	0.8	9.3	6.8	10.1	
The training course content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text, does not have an interactive form)	8.1	3.7	5.9	6.3	
In total, there are prob- lems in the perception of educational mate- rial during distance learning	54.7	47.9	63.9	44.3	

 $Table\ 31$ Students of different types of settlements have problems with the perception of educational material during distance learning, %

	Type of settlement				
Problems	Uzhhorod, Mukachevo	Another regional town	Village, settlement		
There are no problems, I managed to fully adapt to the distance learning	42.5	57.1	59.0		
There are problems due to the unusual perception of lectures (classes)	43.4	28.6	34.4		
There are problems due to the unsatisfactory form of conducting classes	5.7	3.0	4.8		
Problems are due to technical failures during teaching due to the fault of the teacher	0.4	2.4	2.2		

End of the table 31

	Type of settlement				
Problems	Uzhhorod, Mukachevo	Another regional town	Village, settlement		
Problems are due to technical failures during teaching due to the fault of the technical service of the university	9.2	4.8	4.3		
The training course content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text, does not have an interactive form)	7.5	6.0	5.6		
In total, there are problems in the perception of education- al material during distance learning	66.2	44.8	51.3		

The main *advantages* of distance learning during the period of self-isolation students see in the following:

- **34.5**% it is more convenient, more comfortable to study at home:
- 24.0% it is possible to allocate time for study, other matters, and family;
- 23.0% more time is available for the mastering of the course content:
- 11.8% there is the possibility of independent work with information;
 - 7.7% no need to spend time and money to get to the university;
 - 3.1% an interesting new learning experience is gained;
- 0.9% there is a constant online connection with the teacher:
- 3.2% less likely to get coronavirus;

For clarity, we give typical statements of individual students:

"The advantages of distance learning are that, for example, in a home-like setting, learning content is better remembered, it's more convenient to sit on the couch than at the desk, and of course, the plus is a large degree of freedom in choosing the time to perform practical tasks."

"The student receives all the necessary materials, and has the opportunity to return to them at any time. Therefore, the problem of lack of textbooks and manuals disappears."

"Thanks to gamification, interactive classes, and control by the teacher, the student is immersed in the process of studying the material very quickly and with great interest."

"Conveniently, no need to leave home, no need to waste time getting to the university."

"There is an opportunity to independently study the subject, and at the same time spend time with relatives; there is enough free time to read additional literature."

"A student always has an online connection with a teacher who oversees his/her tasks and helps in solving them."

"There is an opportunity to realize access to education for all those who, due to various reasons, do not have the opportunity to study in an institution in a classical form. In addition, distance learning favorably affects personal development, increases the level of student self-organization and responsibility, and helps to improve computer literacy."

The main disadvantages of distance learning during the period of self-isolation, students see in the following:

- 27.4% lack of live communication;
- **21.9**% independent study of the material without explanation of the teacher is ineffective;
- 12.5% there are problems due to "freezing" of the Internet, blackouts;
- 12.3% there is a lack of necessary practical computer skills, working on the Internet, and using interactive learning technologies;
 - 3.8% it is hard to study at home, to combine study with household chores;
 - 2.3% the site does not operate well, it is impossible to go to the Moodle online broadcast (there is a technical glitch);
 - 1.9% there is often no feedback from lecturers;
 - 1.7% there is no own equipment, or there is, but old one, or there is only a telephone, but it is inconvenient; it happens that a computer is occupied by other family members when a student needs it to participate in the educational process;

- 1.7% in some cases there is no clear schedule of classes, practical work;
- 0.4% a very large volume of tasks and little time is given for their implementation;

For clarity, we give typical statements of individual students:

"With distance learning, personal contact with each other and with lecturers is minimal, so this form does not help in developing communication skills, confidence, and teamwork skills."

"Lack of conventional storage media (books), lack of a clear schedule of classes (practical work)"

"An annoying online broadcast, which is sometimes difficult to enter, when trying to explain it to the teacher, instead of understanding the situation, he/she says: "you don't know something there, or don't want to join", or "try to join again and MORE MORE." And you must definitely join the online broadcast, otherwise they won't give an assessment, and if you didn't log in, these are your problems."

"A student learns almost all the educational course content remotely and independently. This requires sufficient willpower, responsibility and self-control. Most likely, no one will "push" or encourage. Not everyone succeeds in maintaining the right pace of learning without external control."

"There are many tasks that require a written statement of the answers; there was not as much work in full-time, since most of the tasks could be voiced. Writing thoughts takes time." "A large amount of information that you need to process yourself. Of course, lecturers are doing everything possible so that quarantine does not affect learning. However, there used to be time to distribute the processing of a large number of subjects for a certain period of time, now most tasks are sent simultaneously, or every other day. It's physically hard to work out everything, even knowing the discipline to a sufficient degree."

"The main disadvantage of distance learning is that it is generally not suitable for musical specialization, since students do not have the opportunity to acquire the practical skills that they would acquire in full-time education."

"Poor quality of internet connection. Often sites may not load, and if the test needs to be completed in 30 minutes,

then the Internet will certainly "freeze" at this time, as it usually happens."

"There are significant shortcomings: in my family there is one computer for all family members and, as you can understand, they also need to work, I can't just physically do many of the assigned tasks from lecturers in one day. This is due to the fact that I have a limited time spent at the computer. I slowly do my homework in order to better understand the received content, but I often do not fit into the deadlines for the following reasons: 1) time is limited; 2) a large number of tasks."

"The bad thing is that some lecturers think that if a student is staying at home, then he/she can be given an excessive number of tasks, both theoretical and practical. Of course, then it's difficult to pass the test or exam in discipline of such a teacher, because he/she discourages the student's desire to learn."

In the students' statements, there is also irritation, which is natural in an epidemic, and dissatisfaction with the work of electronic equipment, and interference at home that impedes full participation in classes, and the inability to tune into the permanent form of classes after the habit of "sleeping" before examinations and activating a week before examinations.

There is also dissatisfaction, quite justified by objective circumstances – this is the loss of the ability to form practical skills, such as in such specialties as music or sewing technology. Such a situation may arise in all subjects of a practical orientation.

Based on the experience of being in isolation and participating in online education, students offer to improve the quality of distance education in similar situations:

- **8.2**% create a unified website with lectures and practical exercises to find the necessary information;
- **6.4**% conduct lectures on-line on a single unified and convenient platform;
- **4.1**% better to think over lecture options for online broadcasting;
- 3.9% to develop a class schedule taking into account optimal connectivity opportunities for students living in different types of settlements;

- **3.1**% it is advisable to use more interactive techniques during class;
- 2.9% to devote more time to explaining practical tasks in a detailed form;
- 2.7% it is necessary either to reduce the burden on students, or to provide them with more time for homework;
- 2.6% to increase the possibility of more frequent contact with lecturers;
- 1.5% it is necessary to solve the problems of students who have difficulties with communication (for example, allow sending homework to lecturers by mail);
- 0.9% students should be provided with the necessary technical resources;
- 0.3% it is advisable to develop and install an electronic version of a point-rating system for assessing knowledge;
- 0.2% it is necessary to cancel the scoring of students' knowledge, it is necessary to leave the assessment only in the form of credit / no credit;
- 67.9% made no suggestions.

For clarity, we give typical statements of individual students:

"Pay more attention to explaining practical problems, as difficulties arise."

"It is necessary to provide an opportunity to contact lecturers more often, to contact them personally to clarify some questions. It is necessary to develop a concise and understandable form of practical training."

"It would be very good for me if the teacher sent the necessary tasks at the beginning of the week, and before the end of the week they could be worked out calmly. In general, distance learning is very comfortable. I would like to see more situational tasks that I can think about and express my opinion."

"I think, first of all, it is necessary that all lecturers use a single program (platform) for communication between students, the use of various programs by lecturers during classes requires a waste of time to register in the program, a lot of time is lost. It is most convenient to establish a connection early in the morning, while the family is sleeping and no one is bothering. According to the same unified program, tests should be taken. And the day before them, it is advisable for the teacher to draw up mock tests, similar to the real ones, so if the student receives the test only on the day of the test, then there is not enough time to understand it, to understand the essence of how to write answers and where to put the table. Usually a lot of time is wasted on secondary matters in study, and not on the main thing. And of course, 2 hours is not enough to complete and pass a test, which has a high degree of complexity."

"It is advisable to precede lectures with short presentations for a better perception of the content. Lectures should be held in video communication format, for the possibility of clarification or explanation of the content. Take care of a good technical connection. Attract more interactive techniques: broadcast presentations, watch videos."

"I propose creating an accessible electronic library with all the necessary manuals, since the Internet does not contain all the necessary literary sources."

"It is necessary to test the tasks, better adapt them to the conditions of distance learning, and exclude tasks for which you need to use the library. To select an adequate number of questions and tasks for one seminar so that the completed seminar does not take 24, but only 4 pages, and to warn students a few days before it is necessary to hand over the finished work."

45.6% of students have concerns that as a result of distance education, they will not be able to get the necessary quality education in their specialty. In particular, 23.6% of the surveyed students are, 30.2% are not concerned about it in general, but they do not exclude the possibility of this. 37.4% have concerns to some extent, although they believe that a lot depends on themselves; 6.1% of students are very concerned, but they will do something to avoid this. The proportion of apprehensive students is relatively large up to the 3rd year, inclusive, and decreases starting from the 4th year (see Fig. 12). The Pedagogical Faculty has the largest number of apprehensive students (see. Fig. 13).

Figure 12 The share of students of different years of study who have concerns that as a result of distance education they will not receive the necessary quality education in the specialty, %

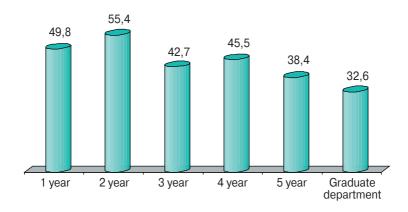
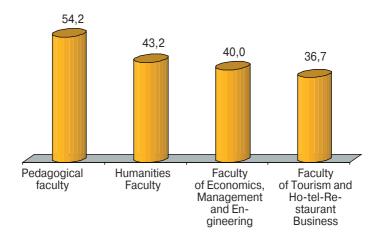


Figure 13

The share of students from different faculties who have concerns that as a result of distance education they will not receive the necessary quality education in their specialty, %



These concerns are associated more with the general tense situation due to self-isolation (epidemics) than with real difficulties of a technical or educational nature that arise, in particular, in passing tests and exams. This is also due to the fact that students first encountered distance education in their educational practice. As shown by the empirical data obtained during the study, the students have a good state of health; however, they transform a subconscious fear of getting sick into a fear of not getting knowledge. That is, according to the psychoanalytic concept of Sigmund Freud, the students *force out* of the subconscious mind the main fear – *getting sick* – into the virtual one, which has been substantiated in fear of remaining "undereducated" (both the first and the second can be denoted by a single concept – being with "inferiority").

SECTION TWO

TRAINING OF POSTGRADUATE STUDENTS UNDER CONDITIONS OF SELF-ISOLATION

Chapter 4. Psychological and physical well-being of postgraduate students during self-isolation

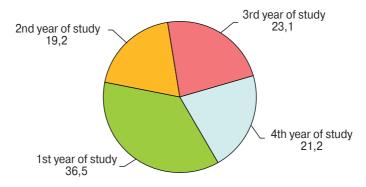
The attitude of postgraduate students to distance education is in many ways similar to the attitude of extramural students to it. This is due to the similarity of the style of participation in the educational process, although lectures are given for postgraduate students of the 1–2 year of study and the educational process is in many ways similar to the educational process of full-time students. Therefore, the behavior of postgraduate students in conditions of self-isolation, as well as the expressed assessments often correlate with what the students expressed.

Among the respondents, postgraduate students of all years (see Fig. 14) and all specializations (see Fig. 15) are represented. Among postgraduate students 80.8% study for a fee, on a budget basis – 19.2%.

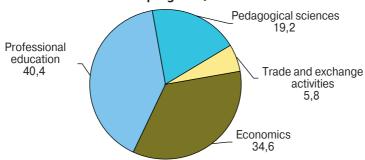
The composition of the surveyed postgraduate students by gender: female -75% , male -25% .

Residents: 71.2% live in Uzhgorod, Mukachevo, 17.3% in another regional towns, and 11.5% in the villages and settlements.

Figure~14 Distribution of interviewed postgraduate students by years of study, %



 $Figure~15 \\ \textbf{Distribution of interviewed postgraduate students by educational} \\ \textbf{programs, \%}$



The psychological well-being of postgraduate students, as well as students, was measured in dynamics: 1) on the day when they learned that an epidemic of coronavirus arose in the country; 2) on the day when they learned that in the country, self-isolation (quarantine) was introduced, including for postgraduate students; 3) on the day of the survey (mid-May). Figure 3 shows that at the time of the announcement of the epidemic in the country, for postgraduate students, as well as for students, the most characteristic feeling is anxiety. The same feeling with a gradual attenuation was characteristic of them on the day when they learned that self-isolation (quarantine) was introduced in the country, including postgraduate students and on the day of the survey (mid-May).

Among the significant forms of the psychological state of postgraduate students, we can also mention *calmness* (curiosity), *annoyance* and *apprehension*. But, like anxiety, by the degree of prevalence, these sensations reached maximum indicators at the initial stage, that is, when postgraduate students learned that an epidemic of coronavirus arose in the country. Subsequently, these sensations gradually faded by mid-May – the time of the survey (see Fig. 16).

Not all postgraduate students complied with the requirements of self-isolation. If from the beginning of the announcement of self-isolation (March 12) and before the survey, the duration of the mandatory term of self-isolation is 60 days, then it turns out that the average duration of post-graduate students' self-isolation (theoretically, since this is impossible

to verify) is 85% (51 days). This applies to 96.2% of those postgraduate students who maintained self-isolation. By their own admission, 3.8% of postgraduate students did not observe self-isolation.

During self-isolation, postgraduate students who complied with its conditions were mostly at home, with parents or in their family (a small number), as shown by the indicators in table 32.

 $Table\ 32$ The place of permanent or predominant location of postgraduate students who complied with the conditions of self-isolation, %

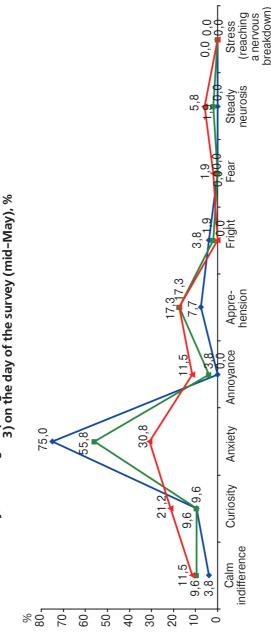
Place of stay during self-isolation	The whole period $(a = 1)$	Predominantly $(b = 0,7)$	Sometimes $(c = 0,3)$
At home with parents	67,3	17,3	9,6
At home, with other relatives	7,7	5,8	9,6
At friends', acquaintances' places	0,0	0,0	11,5
In a rented apartment	7,7	9,6	3,8
Are away, in another region	0,0	0,0	1,9

For clarity, we present the indicators of table 32 in a normalized form. Figure 17 shows that 83.1% of postgraduate students who complied with the requirements of self-isolation were always at home with their parents (some with their family) or at home with other relatives: another 13.1% were in a rented apartment or in dormitories, total -86.2%.

Route diagram 2 shows the directions of the postgraduate students' transition from the first mental state (the day of receiving the news about the epidemic) to the second (the day of self-isolation announcement) and, accordingly, the third (day of the survey, end of May).

Using the indicator of the proportion of postgraduate students who complied with the conditions of self-isolation (96.2%) and the indicator of the proportion of postgraduate students who were constantly at their place of residence (83.1%), we can calculate the conditional index of compliance with self-isolation (J): J = 0.962 * 0.831 = 0.8 (conditionally -80%) with a maximum index value of J = 1 (100% observing the conditions of self-isolation).

Figure 16 Indicators of the psychological state of postgraduate students in three situations: 1) on the day when they learned that coronavirus epidemic arose in the country; 2) on the day when they learned that in the country, including for postgraduate students, self-isolation conditions were introduced;

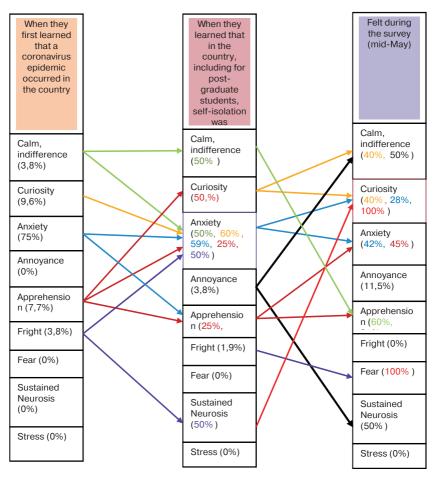


→ On the day when they learned that coronavirus epidemic arose in the country

Felt themselves at the time of the survey (May)

 On the day when they learned that in the country, including for post-graduate students, self-isolation conditions were introduced

 ${\it Route~diagram~2} \\ {\it The~trajectory~of~the~transition~of~postgraduate~students~into~various} \\ {\it mental~states}$



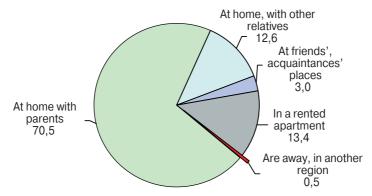
 $Calm \rightarrow Calm$, or Anxiety \rightarrow Apprehension $Curiosity \rightarrow$ Anxiety \rightarrow Calm, or Curiosity

 $\mathbf{Anxiety} \to \mathbf{Anxiety}, \text{ or Apprehension } \to \mathbf{Curiosity}, \text{ or } \mathbf{Anxiety}$

 $Apprehension \rightarrow Curiosity$, or Anxiety, or Apprehension \rightarrow Anxiety, or Apprehension

Fright → Anxiety, or Sustained Neurosis → Fright

Figure 17 Normalized indicator of the specific weight of permanent residence of postgraduate students (for 100% we accepted 96,2% of students who complied with the conditions of self-isolation), $\%^8$



The general state of their health (before quarantine) 50% of postgraduate students evaluate as always good, 42.3% – sometimes get sick, but with ordinary diseases, i.e. 92.3% of graduate students should be considered quite healthy. 7.7% of postgraduate students have a chronic disease.

The majority (78.8%) of postgraduate students indicated that being in conditions of self-isolation partially created physical inconvenience for them, but they tried to move, do exercises, and another 13.5% were actively involved in exercises, sports and 9.6% – actively engaged in physical work. Among postgraduate students, 7.7%, although they felt physical inconvenience during self-isolation, however, they did not have conditions for active physical activity, and 9.6% "do not like to move a lot."

During their stay in conditions of self-isolation, 86.5% of postgraduate students did not have changes of general health condition, 7.7% didn't have much, and 1.9% had very bad health conditions (a total of 10.6%) and 3.8% — physically worsened a little.

⁸ Normalized indicators (In, where n = 1, ..., 5) are calculated from the ratio (the values of the characters a, b, c are given in the first row of the table 1): In = (a+0.7b+0.3c)/100.

Chapter 5. Assessment of the validity of quarantine measures and manifestation of involvement

71.2% of postgraduate surveyed students considered quarantine measures quite adequate to the threat of coronavirus infection, and generally acceptable for an epidemic, although the risk of infection is low -19.2%. Thus, the taken quarantine measures 90.4% of postgraduate students consider to be justified. 9.6% of postgraduate students consider quarantine measures to be somewhat exaggerated or not entirely justified.

Duration of stay in conditions of self-isolation, most postgraduate students consider acceptable or insignificant. Judging by the data in Figure 18, every second graduate student is weighed down by the length of the term of self-isolation, apparently violating the familiar rhythm of their life, including study. In this regard, it is advisable to analyze the structure of behavior (activities) of postgraduate students in conditions of self-isolation.

Figure 18
The opinion of postgraduate students on the duration of stay in conditions of self-isolation, %

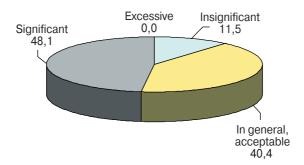


Figure 19 shows the proportion of postgraduate students performing a particular type of activity during the day, not counting the time for sleep. The activities are diverse. At least 80% of postgraduate students did not deprive themselves of the opportunity to hike; the proportion of those involved in sports was also great. The same proportion of postgraduate students performed housework as well as educational activities.

Figure~19 The share of postgraduate students performing various activities during the week, not taking into account the time spent on sleep, %

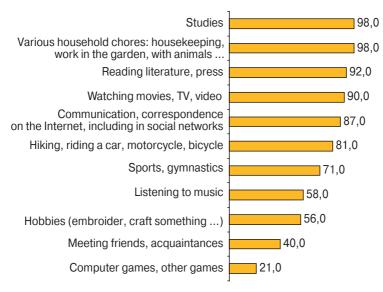
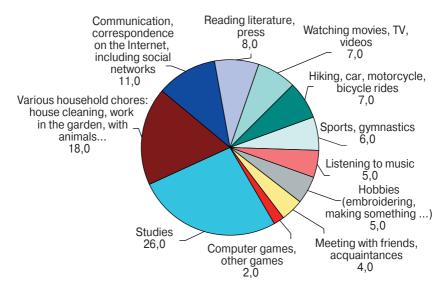


Figure 20 shows the normalized (at 100%) proportion of the time that postgraduate students spent on average over the course of the week on various activities, excluding the time spent on sleep.

Judging by the data in Figure 20, postgraduate students spent most of the week on study, household chores, and communication via the Internet. These three types of activity together occupied 55% of the time of day, excluding sleep. Occupations of an entertaining (leisure) nature (watching films, reading, listening to music, games...) occupied 27%, hiking and playing sports -13%, meeting with friends and acquaintances - only 4% of the time in the total activity of postgraduate students during the week.

Postgraduate students are characterized by an attitude toward charity, a sense of compassion: during self-isolation, at least 90% of postgraduate students provided help to those in need of such assistance. Help was provided primarily to their close relatives, but not only: to familiar adults, and to their friends, and acquaintances of their peers (see Table 33).





As shown in Figure 20, in conditions of self-isolation, interpersonal contacts of post-graduate students narrowed to a minimum: only 4% of the surveyed postgraduate students met with friends and acquaintances during self-isolation. Nevertheless, 96.2% of the surveyed postgraduate students maintained remote contacts with their fellow students, including 82.7% via the Internet, 86.5% by telephone, i.e. almost all postgraduate students maintained remote contact with fellow students using these two technical means.

Among surveyed postgraduate students, 96.2% were generally worried that in conditions of isolation they had to stop direct interpersonal contacts with fellow students; 3.8% of postgraduate students were indifferent to this situation. In particular, they noted that: there are not enough direct contacts, but they take it calmly -51.9%, the lack of direct contacts is worrying, but they treat this with understanding -40.4%, the lack of direct contacts with fellow students is very worrying, they feel uncomfortable -3.8%

Table~33 Frequency of provision help to those who needed it by postgraduate students in isolation. %

Who was helped	Helped once	Helped more than one time	Were ready to help, but it was not needed	Help was needed, and they were ready to provide it, but there was no way	There was no order to help (or there was no need)
Nearest relatives	1.9	59.6	30.8	0.0	7.7
Familiar adults	3.8	25.0	28.8	1.9	40.4
Friends, peers	11.5	23.1	28.8	1.9	34.6
Unfamiliar adults	3.8	9.6	25.0	9.6	51.9

Chapter 6. Postgraduate study conditions during self-isolation

It is legitimate to assume that the unusual technology for organizing the educational process and the psychological stresses associated with the epidemic have introduced some destabilizing elements into distance education. However, the results of the study indicate that the majority (63.5%) of the surveyed postgraduate students did not feel any special changes in the educational process in comparison with full-time education in normal conditions. Only in the opinion of 25% of the surveyed postgraduate students, during self-isolation, the conditions of study somewhat worsened; in the opinion of 1.9% of postgraduate students, the conditions of study improved somewhat, and 9.6% of postgraduate students were unable to give an unambiguous assessment.

The conditions for studying at the place of permanent stay of postgraduate students during self-isolation were generally favorable. In particular:

- 67.3% of postgraduate students had a separate room in which they could retire while participating in distance learning;
- 21.2% of postgraduate students did not have a separate room during classes, but there was a relatively autonomous place where they could participate in remote classes without interference;

11.5% – of postgraduate students did not have a permanent place to study, each time they had to adapt to participate in distance learning.

None of the surveyed postgraduate students said that he had poor conditions and there was no convenient place to participate in distance learning.

Despite the generally convenient place for classes, 65.4% of postgraduate students indicated that they encountered interference during classes (34.6% of postgraduate students were not bothered during classes). 36.5% of surveyed postgraduate students indicated that interference during classes sometimes occurred, but did not bother much; 15.4% of postgraduate students often had interference during classes, but they didn't really disturb. Thus, 51.9% of postgraduate students were not generally disturbed by the interferences that occurred during classes. Various interferences disturbed 13.5% of postgraduate students, including 7.7%, of postgraduate students – interference occurred infrequently, but still disturbed, and 5.8% of postgraduate students had permanent and very disturbing interference.

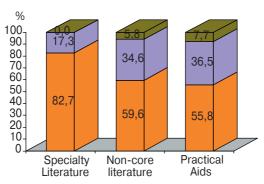
According to the surveyed postgraduate students, the difficulties in accessing textbooks during self-isolation were not very large and mainly concerned practical aids and literature on non-core academic subjects (see Fig. 21).

The bulk of postgraduate students believe that the introduction of distance learning has not changed the quality of education, the acquisition of knowledge, in comparison with full-time study at the university. There was a slight inconvenience for individual postgraduate students in acquiring practical skills in their specialty (see Fig. 22). This is not just about practical exercises in understanding professional practice for students, but about the availability of conditions for scientific research and experiments, which constitute the empirical basis for testing hypotheses and writing a dissertation.

Part of postgraduate students sees the improvement in distance education mainly in the following:

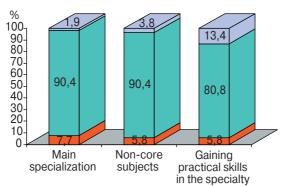
- there was more free time to work on a dissertation;
- skills of independent creative work, rational planning of time have strengthened, self-discipline has developed;
- an opportunity to master new methods of distance education has appeared;
- due to reduced travel, more time has appeared for individual lessons.

Figure 21 The nature of the difficulties that postgraduate students had in accessing textbooks during self-isolation, %



- Large difficulties in accessing textbooks
- Minor difficulties in accessing textbooks
- There are no difficulties, all the necessary educational literature is available

Figure 22 The nature of the impact of distance learning on the quality of postgraduate students education, compared with full-time study at the university, %



- Knowledge acquisition quality has deteriorated or there was no response
- Knowledge acquisition quality as a whole has not changed
- Knowledge acquisition quality has improved

As for the deterioration of the quality of education in conditions of self-isolation, it consists, according to postgraduate students, in the following:

- a significant reduction of the conditions for interpersonal communication, creative discussions;
- there is no possibility of practical implementation and testing of the results of the dissertation research;
- the opportunities for direct educational contact with the teacher have worsened;
- there is no possibility for conducting research experiments for the dissertation;
- there is no opportunity to participate in collective discussions, excursions;
- there are difficulties regarding access to the necessary scientific literature.

An important prerequisite for the successful implementation of distance education is the level of technical equipment of postgraduate students. The results of the survey indicate that in general, postgraduate students are well equipped for remote communication, in particular: 80.8% have a personal iPod, 71.2% have a personal laptop, 40.4% have a personal desktop computer. 1.9% of the surveyed postgraduate students do not have personal equipment, but they have one in the family, and can use it.

However, when using computer equipment, postgraduate students had difficulties. The equipment worked smoothly -57.7% of postgraduate students. 17.3% of postgraduate students have old technique and sometimes (or often) it "froze up", 34.6% of postgraduate students had serious problems, as there were failures (sometimes or often) with the Internet.

There is better situation with the perception of course content by postgraduate students during distance learning. Thus, 86.5% of postgraduate students have fully adapted to the remote form of learning; for 11.5% of postgraduate students there are problems due to the unusual perception of lectures (classes); for 1.9% – there are problems due to the unsatisfactory form of teaching; for another 1.9% – due to technical failures during teaching due to the fault of the technical service of the university. According to 3.8% of surveyed postgraduate students, learning content is poorly

adapted for electronic transmission (insufficient visual material, bulky text, no interactive form...).

The main *advantages* of distance learning during the period of self-isolation of post-graduate students are as follows:

- classes are held for post-graduate students in comfortable conditions:
- there is an opportunity to independently plan and decide for yourself where, in what conditions, with what mobility to join the learning process;
- it is possible more rationally to use the time for training, including due to savings on transport trips;
- there is an opportunity to combine the education process with caring for the family, performing a number of housework and household tasks;
- the learning conditions for postgraduate students fulltime students and postgraduate students – external students are aligned⁹;
- it is possible to join the educational process, regardless of the health status of the postgraduate student.

The main *disadvantages* of distance learning during the period of self-isolation, post-graduate students see in the following:

- excessive theorizing of the learning process¹⁰;
- you have to master too much training material on your own;
- lack of ability to work with educational, scientific literature in the library (stationary)¹¹;
- it is difficult to conduct experiments for the dissertation;
- no live communication;
- there are interruptions in the operation of computer equipment, the Internet;

⁹ It seems that in this case, from the standpoint of improving the quality of education, extramural post-graduate students win as much as extramural students.

¹⁰ This is because in conditions that complicate the practical or laboratory classes, teachers are forced to fill in classes with theoretical material; otherwise it is difficult to report on the planned (normative) load.

¹¹ This situation is correctable if the library has a rich depository of educational and scientific literature, as well as periodical scientific publications on electronic media.

- out of habit it's hard to adapt to new forms of classes;
- there is a "background" effect of social tension caused by quarantine on mood and the ability to focus on the educational process;
- the lack of the opportunity to consult with the teacher with the necessary frequency, the possibility of individual contact (in a group lesson);
- in some cases, the lack of computer training of the teacher has a negative impact on the educational process;
- excessive nervous tension caused by the need to constantly be in touch with the educational portal on the Internet;
- there are methodological difficulties in objectively assessing the knowledge of the postgraduate student during participation in online classes;
- the inability to implement, together with fellow students, mutual stimulation and control of knowledge, due to the lack of direct contacts;
- not enough interactive textbooks;
- there is no opportunity to directly participate in competitions, conferences, symposia, other discussions.

Based on the experience of being in isolation and participating in online education, postgraduate students offer the following to improve the quality of distance learning in similar situations:

- the preparation of interactive textbooks should be substantially expanded and deepened;
- it is necessary to develop methodological manuals for postgraduate students on the technology of distance learning;
- it is necessary to significantly modify the didactics of the presentation of educational material (course content) in various conditions of distance education, for different subjects and for various courses of study;
- a unified platform, generally accessible for postgraduate students, with access to the depository of electronic textbooks and teaching aids is needed, which would facilitate the preliminary preparation of postgraduate students for classes;
- it is advisable to conduct classes for postgraduate students (and for lecturers of a number of disciplines) in

computer skills, and in individual subjects – in computer programming¹²;

- in connection with the diversity and often low power of the computer equipment available to postgraduate students, it is advisable to have a "technical bank" of unified modern computer technology at the university to provide temporary use to postgraduate students who need it¹³;
- it is advisable to introduce an electronic version of a point-rating system for monitoring and evaluating knowledge into distance education;
- a wider use of video materials (visual aids) is needed when conducting theoretical classes (lectures);
- it is advisable to optimize the information richness of text materials used in lectures¹⁴;
- it is advisable to develop a methodological manual for both postgraduate students and lecturers on the organization and participation in distance education¹⁵;
- it is necessary to systematize the informing of postgraduate students about the available electronic databases of information on science, about available scientific literature in electronic form.

About a third of postgraduate students have concerns that as a result of distance education they will not be able to receive the necessary quality education in their specialty. 50% of the surveyed postgraduate students are not at all concerned; on the whole, they are not concerned, but the possibility of this is not excluded -21.2%. To some extent, they are concerned -26.9%, very concerned, but will do something to avoid this -1.9% of postgraduate students. Total fears of one degree or another are characteristic of 28.8% of postgraduate students. Given the tension in the epidemic, this is a small amount.

 $^{^{\}rm 12}$ This recommendation is also relevant for undergraduate and graduate students.

 $^{^{\}rm 13}$ This recommendation is also relevant for undergraduate and graduate students.

 $^{^{14}}$ Apparently, this also applies to lectures for undergraduate and graduate students.

¹⁵ This is also relevant for undergraduate and graduate students.

SECTION THREE

PARTICIPATION OF LECTURERS IN THE EDUCATIONAL PROCESS UNDER CONDITIONS OF SELF-ISOLATION

Chapter 7. Social and psychological atmosphere in the team of lecturers

The surveyed lecturers involved in distance education process carry out their activities in the following specializations: economics, hotel and restaurant business, psychology and pedagogy, humanities and social sciences, art and music, professionally applied subjects, technology, mathematics, philology, foreign language, geography, tourism, preschool education.

Among the surveyed lecturers degrees have:

12.3% - PhD (two doctoral dissertations);

49.1% - PhD;

38.6% - no degree.

Have the academic rank:

7.5% - professors;

39.6% - associate professors;

52.9% - noscientific rank.

The average indicator of the total length of teaching work of the surveyed university lecturers is 20 years; the average teaching experience at this university is 13 years.

The demographic characteristics of the composition of the surveyed lecturers are as follows.

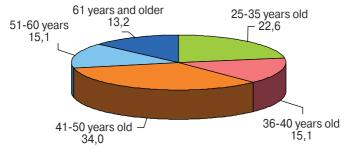
The composition of the surveyed lecturers by gender: female -78.3%, male -21.7%.

Residents: of Uzhgorod, Mukachevo -84.9%, another regional towns -3.8%, villages and settlements -11.3%.

The average age of university lecturers is 40 years old, which is a good indicator, given the content (scientific) of the work. The age composition of the teaching staff is uniform; all generations are represented in approximately equal proportions (see Fig. 23).

Unlike students and most postgraduate students, in extreme situations for lecturers, as people mostly with families, the financial aspect is important as a source of life support for the family or the teacher personally, if he/she does not

Figure 23 The composition of the university teaching staff by age, %



have a family. This problem is compounded by the fact that in conditions of self-isolation, as in any extreme situations, the economic situation worsens in the country and in the regions. According to the data of the study, during their time in conditions of self-isolation, the financial situation of the family of the majority (60.4%) of lecturers (or the teacher himself/herself, if he/she does not have a family), according to their own estimates, has not changed. However, 30.6% stated that it has worsened (no one's has improved), which is a negative phenomenon that affects the mood of the teacher and, naturally, the effectiveness of his/her participation in the educational process.

With the expansion of the epidemic and the introduction of self-isolation in the country, 57.5% of lecturers had some savings in order to ensure acceptable life for the family (or for himself/herself, if there is no family), and 42.5% of lecturers did not have such savings.

The average period of duration for which lecturers (57.5%) had reserves so that the family (or the teacher himself/herself, if he does not have a family) in conditions of self-isolation could generally live normally -4 months. It is legitimate to assume that after this period a crisis will occur in the family or in the personal budget of lecturers, although this may not happen. Nevertheless, there is a likelihood of a crisis in the family, as 49.1% of the surveyed lecturers have no idea how they would solve this problem of the budget crisis if money was depleted. Surveyed lecturers have some idea of - a virtual way out of the cash shortage situation: they would have taken up part—time jobs -41.5%; 9.4% —would borrow money

from relatives, acquaintances; 2.8% – would take a loan from a bank; 3.8% – would sell something from their property.

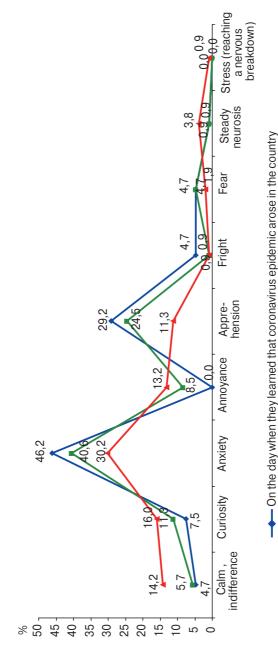
If we talk about psychological comfort in relations between lecturers and students, which is very important when complicating the technology of the educational process, the majority (68.9%) of university lecturers tries to build relationships with students based on mutual understanding, and 31.1% of lecturers build their relationships with students on a par, democratic basis.

Chapter 8. Well-being of lecturers in conditions of self-isolation

The psychological well-being of lecturers in any conditions is the key to effective work - both in full-time and in distance education. The deterioration in the psychological well-being of lecturers is probably not due to a temporary transition to distance education in conditions of self-isolation, although a likely deterioration in the financial situation of the family also affects negatively, but actually because of the epidemic, that is, fears of getting sick by themselves or family members. As in the case of undergraduate, graduate and postgraduate students, the psychological well-being of lecturers was measured in dynamics: 1) on the day when they learned that an epidemic of coronavirus occurred in the country; 2) on the day when they learned that in the country, including for lecturers, self-isolation (quarantine) was introduced; 3) on the day of the survey (mid-May). Figure 24 shows that at the time of the announcement of the epidemic in the country, lecturers were most characterized by a sense of anxiety and fear. The same feeling with a gradual attenuation was characteristic of them on the day when they learned that in the country, including for lecturers, self-isolation (quarantine) was introduced; 3) and on the day of the survey (mid-May), the most characteristic feeling was anxiety.

The degree of awareness of lecturers about the main characteristics of the corona virus and the course of the disease of those infected is unlikely to have a decisive influence on their psychological well-being. However, it is advisable to take this factor into account: 50% of the surveyed lecturers are familiar with the main symptoms of coronavirus disease, and another 50% have such information in general terms.

Figure 24 including for lecturers, self-isolation conditions were introduced; 3) on the day of the survey (mid- May), Indicators of the psychological state of lecturers in three situations: 1) on the day when they learned that coronavirus epidemic arose in the country; 2) on the day when they learned that in the country,



On the day when they learned that in the country, including for teachers,

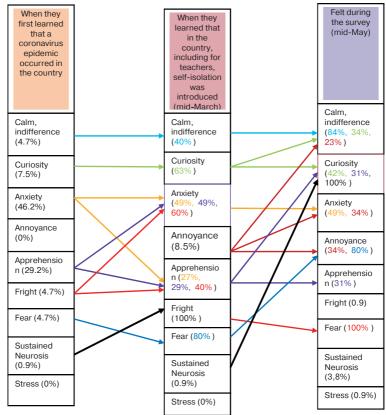
self-isolation conditions were introduced

At the time of the survey (May)

Among the significant forms of the psychological state of lecturers, one can also mention calmness (curiosity) and annoyance. But these feelings reached maximum indicators in terms of prevalence at the initial stage, when lecturers found out that the epidemic of coronavirus arose in the country. Subsequently, these feelings gradually faded by the time of the survey (mid-May).

Route diagram 3 shows the following directions of lecturers' transition from the first mental state (the day of receiving the news about the epidemic) to the second (day of self-isolation announcement) and, accordingly, the third (day of the survey):

 $Route\ diagram\ 3$ The trajectory of the transition of respondents to various mental states



 $Calm \rightarrow Calm \rightarrow Calm$

Curiosity \rightarrow Curiosity \rightarrow Curiosity, or Calm

 $\mathbf{Anxiety} \to \mathbf{Anxiety}$, or $\mathbf{Apprehension} \to \mathbf{Curiosity}$, or $\mathbf{Apprehension}$

Apprehension \rightarrow Anxiety, or Apprehension \rightarrow Anxiety, or Apprehension

Fright \rightarrow Anxiety, or Apprehension \rightarrow Fear

Fear \rightarrow Fear \rightarrow Annoyance

Sustained Neurosis \rightarrow Fright \rightarrow Curiosity

Not all lecturers complied with the conditions of self-isolation. If from the beginning of the self-isolation announcement (March 12) and before the survey, the duration of the mandatory self-isolation period is 60 days, then it turns out that the average duration of the lecturers' self-isolation (theoretically, since this is impossible to verify) is 90 % (55 days). This applies to 96.2% of those lecturers who complied with the conditions of self-isolation. By their own admission, 3.8% of lecturers did not comply with the conditions for self-isolation.

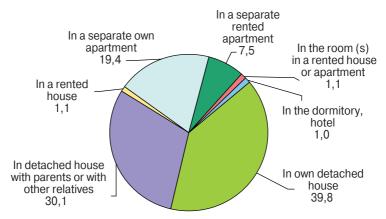
During self-isolation, lecturers who complied with conditions were *predominantly at home with their families*, at home with parents or other relatives, in their own apartment, as shown in the table 34.

Table~34 The place of permanent or predominant location of lecturers who complied with the conditions of self-isolation, %

Place of stay during self- isolation	The whole period $(a = 1)$	Predominantly $(b = 0,7)$	Sometimes $(c = 0.3)$
In own detached house	34.9	0.9	0.9
In detached house with parents, or with other relatives	26.4	2.8	13.2
In a rented house	0.9	0.0	3.8
In a separate own apartment	17.0	13.2	3.8
In a separate rented apartment	6.6	0.0	3.8
In the room (s) in a rented house or apartment	0.9	0.0	3.8
In the dormitory, hotel	0.9	0.0	3.8

For clarity, we present the indicators of table 34 in a normalized form. Figure 25 shows that 78.3% of lecturers who complied with the conditions of self-isolation were constantly in their house (apartment) with their family, or in the house with their parents (other relatives). Another 6.6% of lecturers were in isolation in a rented apartment and 2.7% in a rented house (room, dormitory) or in a hotel — a total of 87.6%.

Figure 25 Normalized indicator of the specific weight of permanent residence of lecturers (for 100% we accepted 87,6% of lecturers who complied with the conditions of self-isolation), $\%^{16}$



Using the indicator of the percentage of lecturers who complied with the conditions of self-isolation (96.2%) and the indicator of the percentage of lecturers who were constantly at their places of residence (87.6%), we can calculate the conditional index of compliance with self-isolation (J):

J = 0.962 * 0.876 = 0.8 (conditionally 80%) with a maximum index value of J = 1 (100% observing the conditions of self-isolation).

54.7% of the surveyed lecturers were fully able to comply with the requirements of self-isolation, and another 43.4% were able to comply in general, but not in everything and

¹⁶ Normalized indicators (*In*, where n = 1, ..., 5) are calculated from the ratio (the values of the characters a, b, c are given in the first row of the table 1): In = (a+0.7b+0.3c)/100.

1.9% of lecturers were not able to comply with the requirements of self-isolation.

The nature of the difficulties encountered by lecturers in providing sanitary facilities and medicines in the early days of self-isolation announcement is shown in table 35. Judging by the index value in the last column (Z=0), the main difficulties arose when they wanted to buy protective masks when creating a stock of sanitary disinfectants (Z=0.2), and also, if desired, purchase protective gloves (Z=0.4).

A comparison of the data in tables 35 and 36 (2nd column on the right) shows that during self-isolation, the opportunity for lecturers to purchase sanitary protective means has increased significantly, including for the purchase of medicines, which is clearly shown in Figure 26, i.e. collateral index are close to *+1.

The opinions of lecturers about the length of their stay in conditions of self-isolation were divided: a third considers measures acceptable or insignificant, and two-thirds – significant or excessive (see. Fig. 27).

The health status of lecturers, if we talk about an earlier period, that is, before the outbreak of the epidemic, is generally satisfactory: 23.6% of lecturers have good or excellent health, 59.4% of lecturers sometimes suffer from common diseases. Often 1.9% are sick and 15.1% of lecturers have a chronic disease, i.e. total -17% of university lecturers have poor health.

During the period of being in conditions of self-isolation, the health status of 65.1% of lecturers as a whole has not changed, in 18.9% their health has worsened physically, including 1% – it has worsened greatly; 16% of lecturers have a slightly worse mental health condition. Despite this, only 9.4% of lecturers needed social assistance during their stay in conditions of self-isolation, and then, among them 8.5% – only once.

If 9.4% of lecturers who needed help during self-isolation are taken as 100%, then the nature of the assistance will have the following structure (see. Fig. 29).

66% of lecturers feel physical inconvenience of varying degrees from being in isolation. In general, lecturers try to compensate for the quarantined physical activity (see Fig. 28).

Table 35

The nature of the difficulties encountered by lecturers in providing sanitary means, in the early days of the announcement of self-isolation (March), $\%^{'}$

						_	
$Provision \ index (Z)^{17}$	<i>5.</i> 0+	9.0+	+0.2	+0.7	0	+0.4	6.0+
There was no need for these means	47.2	17.9	5.6	13.2	4.7	11.3	20.8
There was no difficulty $(c = +1)$	33.0	50.9	38.7	70.8	30.2	48.1	8.69
There were difficulties of medium or minor degree $(b = 0)$	15.1	27.4	34.0	7.5	34.9	23.6	9.4
There were great dif- ficulties $(a = -1)$	4.7	3.8	21.7	8.5	30.2	17.0	0.0
Provision of sanitary means	The formation of a stock of medicines necessary in connection with the presence of a chronic disease	Formation of a conventional medicine stockpile	Formation of a stock of sanitary, disinfectants (including for spraying)	Formation of a stock of household sanitation (washing powder, soap, toothpaste)	Purchase of protective masks	Protective gloves	Food Product Stock For- mation

¹⁷ Note. The index is calculated using the weighted average formula: Z = (a+c)/(a+b+c).

Table 36The nature of the difficulties that lecturers had in providing sanitary means at the time of the survey (May), %

$Provision \ index (Z)^{18}$	0.8	9.0	8.0	6.0	9.0	9.0	6.0
There was no need for these means	30.2	5.5	3.6	2.7	3.6	4.6	3.5
There was no difficulty $(c = +1)$	56.6	79.2	78.3	85.8	77.4	79.2	81.1
There were difficulties of medium or minor degree $(b = 0)$	10.4	8.5	9.4	5.7	12.3	7.5	7.5
There were great difficulties $(a = -I)$	2.8	2.8	4.7	2.8	4.7	5.7	1.9
Provision of sanitary means	The formation of a stock of medicines necessary in connection with the pres- ence of a chronic disease	The formation of a conventional medicine stockpile	Formation of a stock of sanitary, disinfectants (including for spraying)	Formation of a stock of household sanitation (washing powder, soap, toothpaste)	Purchase of protective masks	Purchase of protective gloves	Food Product Stock Formation

¹⁸ Note. The index is calculated using the weighted average formula: Z = (a+c)/(a+b+c).

Figure 26 The nature of the difficulties that lecturers had in providing sanitary means in the first days of the announcement of self-isolation (March) and during the survey (May), %

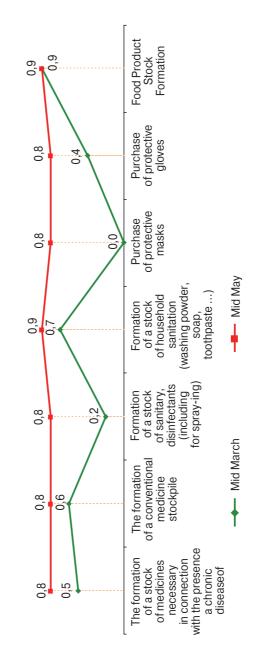


Figure 27 The opinions of lecturers about the length of their stay in conditions of self-isolation, %

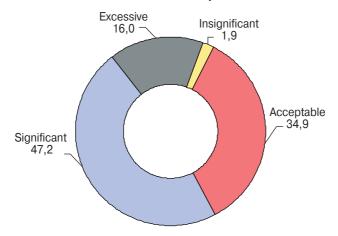
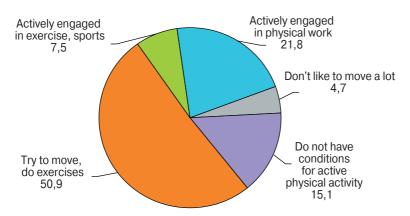
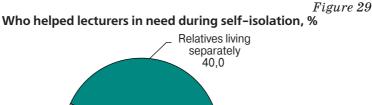
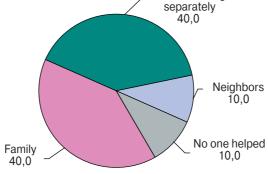


Figure 28 Forms of compensation of lecturers' self-isolation constraint – physical activity, %



The main type of assistance provided to lecturers in need is financial. But they also were helped with the purchase of food and water, establishing the Internet for conducting classes with students.





Quarantine measures taken against the spread of the epidemic, 53.8% of the surveyed lecturers consider adequate to dangers of infection with coronavirus, and 29.2% of the lecturers consider these measures generally acceptable for the epidemic, although the risk of infection, in their opinion, is low; 13.2% of lecturers consider the measures taken somewhat exaggerated, and the quarantine in its current form is unnecessary; 3.8% consider quarantine measures excessive, and that the official opinion about the danger of coronavirus infection is not true. In total, 83% of the surveyed lecturers consider measures of self-isolation as adequate to the danger that has arisen.

Chapter 9. The participation of lecturers in the educational process in conditions of self-isolation

The transition to distance education in an extreme situation was not only unexpected for the teaching staff, but for objective, largely independent of the university reasons, was not fully prepared both technically and in terms of educational technology. As for technical preparedness, even with a high-quality base at the university, the imperfection of technical equipment among students, postgraduate students and lecturers was impossible to avoid, not mentioning the presence of problems in the operation of computer equipment

in a previously untested environment. As for the shortcomings of the content of the educational process, in this case it is appropriate to talk about the insufficient adaptation of textbooks and teaching aids to interactive forms of learning. And another equally important problem is the inability to remotely conduct practical classes and undergo skills-strengthening practice. Therefore, it is completely justified that the lecturers' opinion on the effectiveness of the educational process in conditions of self-isolation is not optimistic: 66.1% of the surveyed lecturers expressed the opinion that quarantine as a whole negatively affected the effectiveness of teaching students, including the opinion of 47.2% of lecturers, conditions of teaching students has somewhat deteriorated, and in the opinion of 18.9% of lecturers, teaching conditions have significantly deteriorated. Only 7.5% of lecturers believe that the conditions for teaching students have improved slightly, and according to 22.6%, the conditions for teaching students as a whole have not changed.

The lecturers organized classes with students through the Internet: 73.6% sent assignments for independent work, 68.9% conducted consultations, 56.5% conducted seminars, 54.7% conducted lectures.

There were situations when some lecturers could not conduct classes remotely. The main reasons were:

- at the beginning of self-isolation, they counted on its quick completion and the ability to catch up on missed classes;
- there were organizational disruptions in the teaching process;
- there were interruptions in the Internet connection, or unplanned outages;
- there were cases when students themselves did not connect to the Internet;
- there were physical ailments, both among students and lecturers.

Let's consider how the conditions at the place of lecturers' stay contributed to the fact that they could effectively conduct online classes with students. 71.7% of lecturers had a separate room in which it was possible to retire during distance classes. 11.3% of lecturers did not have a separate room, but there was a relatively autonomous place where they could conduct

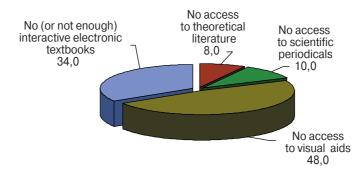
distance classes without interference. 16% of lecturers had a bad situation: 13.2% did not have a permanent place, each time they had to adapt to conduct distance teaching; 2.8% – the conditions for conducting distance teaching were poor, there was absolutely no convenient place to work.

With regard to extraneous interference during distance training, 45.3% of lecturers noted that they *sometimes* had interference, but it didn't interrupt work with students, and 11.3% of lecturers often had interference, but it didn't interrupt the work. Thus, the interference as a whole did not interrupt the work of 56.6% of lecturers. Frequent or occasional hindrances interfered with work with students for 10.4% of lecturers. The remaining 33% of lecturers either found it difficult to answer, or, most likely, did not actively participate in distance education.

During the period of self-isolation, 54.7% of lecturers had difficulties in accessing the necessary teaching materials, but only 1.9% of the surveyed lecturers had great difficulties. For 45.3% of lecturers there were no such difficulties.

Difficulties arose primarily because of the lack of access to visual aids, but the lack of interactive textbooks also hindered. If the aforementioned 54.7% of lecturers, for whom during self-isolation there were difficulties in accessing the necessary educational materials, are taken as 100%, then in a normalized form the causes of difficulties are distributed as follows (see Fig. 30).

Figure 30
The reasons why lecturers had difficulties in accessing the necessary teaching materials (standardized distribution, 54.7% of lecturers who had difficulties were taken as 100%), %



The technical equipment of lecturers for conducting distance classes with students is generally favorable: 67.9% have a personal laptop, 57.5% have a personal iPod, 36.8% have a personal desktop computer. 8.4% of lecturers do not have personal computer technology, including 7.5% of them using the equipment available in the family, and 0.9% rented the equipment.

The situation is somewhat different regarding possessing computer skills: 65.1% of the surveyed lecturers possess skills to a good degree, 32.1% possess at an average level, 2.8% – slightly.

The situation is even worse during the operation of existing equipment for conducting distance classes with students: only 31.1% of lecturers work without fail, while the rest have operational problems: 31.1% of lecturers have old equipment and sometimes (or often) it "freezes up", 30.2% of lecturers have crashes (sometimes or often) with the Internet, 2.8% of lecturers have only one computer in the family and it is not always possible to use it for the entire necessary time (4.8% did not answer).

Thus, an unexpected forced transition to distance education revealed the problem of insufficient technical readiness of students, postgraduate students, and lecturers for this form of training.

Chapter 10. The opinion of lecturers on the effectiveness of distance education in isolation

Regarding the impact of distance teaching in conditions of self-isolation on the quality of education, the acquisition of knowledge by students, in comparison with full-time study at the university, lecturers do not have a consolidated opinion: a few have a positive opinion; those who are of the opinion that the quality of education as a whole has not changed, and those who believe that the quality of education have deteriorated are divided approximately equally (see Table 37).

The values of the integral directional index of changes in the quality of education (the last column in Table 37) are all with a negative ("-") sign, that is, as a result, according to lecturers, the quality of education in conditions of self-isolation has worsened, relatively speaking, main spe-

cialization — by 50%, in non-core subjects — by 30%, in acquiring practical skills in a specialty — by 60%. This is the result of not a weak level of theoretical training of lecturers, and not the lack of students and postgraduate students desire to study — they were just worried about this, but the result of a forced emergency decision in an emergency situation on the introduction of educational practice, to which the university didn't prepare either on the basis of preliminary directives of the educational authorities — there simply weren't ones before the epidemic, or on the basis of autonomous initiatives by the university regarding the transition to distance education — this is not adaptive for the educational profile of the university, which trains specialists mainly in applied areas, even in that case (or even more so), if we talk about the training of specialists in preschool education.

 $Table\ 37$ Lecturers' opinion on how distance teaching affected the quality of education, the acquisition of knowledge by students, in comparison with full-time study at the university, %

	The quality of students' knowledge acquisition has improved $(a = +1)$	The quality of students' knowledge acquisition as a whole has not changed $(b=0)$	The quality of students' knowledge acquisition has deteriorated $(c=-1)$	Education Quality Change In- dex (Q) ¹⁹
Main specialization	2.8	49.1	48.1	-0.5
Non-core subjects	3.8	61.3	37.9	-0.3
Gaining practical skills in the specialty	3.8	31.1	65.1	-0.6

A small part of lecturers (not more than 4%) who believe that as a result of distance teaching the quality of education has improved, substantiate their opinion as follows:

- the ability to use interactive technologies has improved;
- the quality of students' information competence has improved;

 $^{^{19}}$ Note. The index is calculated using the weighted average formula: Q=(a+c)/(a+b+c).

- there was an opportunity to practice distance communication of lecturers and students;
- students' skills in solving test problems, searching and selecting educational material, presentations to the topics of lectures have expanded and deepened;
- students' self-organization skills, rational allocation of time for independent studies have improved.

According to lecturers (almost every second), the negative consequences of "quarantine education" are as follows:

- it is difficult to judge the conscientiousness of students performing educational tasks, there is no way to check the degree of students' independence in completing tasks;
- there is no verbal (direct) contact with students and the conditions for the direct verification of their knowledge;
- it is impossible to control whether students copied ready assignments from each other, there are no conditions for the exclusion of plagiarism;
- individual lessons in music, especially in the piano class, are especially difficult, rhythm is drowned out in the Internet space and is poorly perceived by the teacher by ear; moreover, almost all students' instrument (piano) is disordered in sound:
- some students relax, are distracted, take distance education lightly, their attention is scattered, they are distracted from classes;
- in engineering specialties, it became impossible to conduct laboratory classes for technical reasons: students do not have the equipment, tools and materials that are in the university's laboratory. This also applies to the training of lecturers who have lost the opportunity to conduct classes with students in school as part of teaching practice (training in didactics, educational communication);
- it has become difficult to carry out an objective assessment of knowledge;
- many students "take off" from the implementation of educational tasks;
- not all students have access to high-quality Internet;
- there are difficulties in the formation of practical skills of students at the course "technology of sewing production", since it is difficult to verify whether a student is

holding correctly a needle, a marking pencil or a brush in his/her hands and correct him/her, prompt him/her;

- at the level of practical training or seminars, students are deprived of the opportunity for active collective discussion, to acquire speaking skills in front of an audience;
- there is no way to develop SOFT SKILLS, which requires the ability to work in pairs, as a team;
- remotely it is difficult to explain to students some practical and situational tasks;
- not all students are psychologically prepared for longterm work with a computer to participate in distance education.

Let's consider the judgments of lecturers about distance education in general, taking into account that they judge mainly by the experience of participating in distance teaching in conditions of self-isolation.

The opinion of lecturers about the main *advantages* of distance teaching in the period of self-isolation:

- for lecturers it saves time due to the lack of the need to go to work;
- with regard to the study of a foreign language, the experience of distance learning has shown that synchronous technologies can be successfully used: ICQ, SKYPE, video conferencing; and asynchronous technologies: e-mail, blogs, forums, Twitter, video and audio podcasts, online testing. During classes via the Internet, students' anxiety decreases and they become more confident;
- students and lecturers can independently choose the time convenient for classes;
- it is possible to form students' skills for independent work. Students learned how to work independently in new technological conditions, to communicate using the Zoom, Classroom platforms.

The opinion of lecturers about the main *disadvantages* of distance learning in the period of self-isolation:

- poor quality of Internet connection; low bandwidth for conducting an Internet conference;
- lack of direct ("live") contact with students;
- lack of theoretically sound, methodically and technologically high-quality developed distance education logistics;

- both students and lecturers are poorly equipped with computers of sufficient power - high-speed and with large memory to process a large amount of information;
- insufficient preparedness of many students, as well as part of the lecturers on the effective use of computer technology and its software;
- ineffective control of students' knowledge, significantly lagging behind the possibilities of control with direct contact in the educational process;
- due to the predominance of the written form of tests and exams, it is difficult to identify the student with the actual task performer;
- excessive number of checks of tests, low objectivity in assessing students' knowledge;
- a significant overload (beyond the official norm) of lecturers with contacts with students (the need to develop numerous variable tests and a long check of a large number of written assignments performed by students);
- uncertainty about the conscientiousness of students in the performance of educational tasks;
- frequent technical communication failure due to the great variety of students' computer hardware and software:
- excessive theorization of distance education, the lack of opportunities for students to engage in laboratories;
- lack of students' operational access to sources of scientific information in professionally oriented disciplines;
- excessive physical and mental stress for lecturers due to a long stay at the computer;
- it is difficult to master the technology and skills of cutting products, production safety techniques at a distance;
- students do not have the opportunity to provide technical materials for practical training (textiles, applied materials, Whatman paper, tracing paper, graph paper, paints), including due to the inoperative state of specialized stores, especially in remote settlements;
- some students show excitement, and sometimes stress, in an epidemic that interferes with effective participation in classes;
- some students lack the skills of self-organization and self-discipline;

- lack of collective stimulation and competitiveness in the educational process, lack of "team" work;
- some students have poor computer skills.
- Based on the gained experience, lecturers made the following suggestions to improve the quality of education in the context of distance education:
- to develop unified standards in the form of modules for distance education;
- to increase the bandwidth of the Internet channel for Internet conferences;
- to develop courses and train lecturers and students on new technologies of electronic distance learning, conduct relevant trainings;
- to allocate the necessary amount of time (up to 15 minutes) for individual counseling to students;
- to reduce the number of students per teacher;
- to introduce a cumulative student assessment system in accordance with the success of their acquisition of knowledge;
- to introduce the ECTS system, which will also contribute to improving the quality of extramural learning;
- to conduct testing of lecturers for their willingness to participate in distance education;
- to introduce the mandatory course "Information Pedagogy" in the first year of university, improving the skills of working with information material in a computer;
- to create a unified computer and peripheral equipment fund at the university with unified software for temporary transfer to lecturers and students for free use, if necessary;
- to create own (university) high-quality online platform;
- to pay increased attention to the development of interactive textbooks and teaching aids.

In the face of a radical change in the educational technology – the transition from full-time to distance education – the lecturers' fear of losing their jobs is quite objective. The study showed that 49% of the surveyed lecturers are not concerned, but among them 41.5% do not exclude the possibility of losing their jobs, 44.3% have a clear fear of losing their jobs and 6.7% of lecturers were not able to express an unambiguous opinion on this matter.

CONCLUSION

In conclusion, it is appropriate to summarize the experience of distance education in an extreme situation, as reflected in the empirical results of the study. This experience is generally universal due to the general situation for the country's universities.

The most general conclusion relates to distance education as such and consists in the fact that the education system as a social institution is limited in the autonomy of decisionmaking (regardless of the form of ownership of the educational organization) related to the competence of state policy. or in other words - affecting the interests of the state in the field of social or macroeconomic policies. Universal distance education in today's social realities is unacceptable due to its excessive dispersion, in which the education system loses most of the functions of a social (including socializing) institution. It turns predominantly into a dispersed intermediary organization for the transfer and control of students' assimilation of scientific information, mostly theoretical. The personification of distance education is acceptable for personal studies with specialists engaged in production, having industrial experience and deciding to improve their skills. But even in this case, the personification of classes, which is inevitable in the case of distance technology, imposes great financial obligations on the course participants, since due to technological differences at different industries it is difficult to conduct classes in a collective form and expenses for the provision of personal services by lecturers fall on 1-3 students. Only time-limited personal consultations are possible. There is no doubt that the transition of the vocational education system to distance learning is possible only as a result of a national decision after a thorough study of the likely social and economic costs of such a step on a national scale. This does not exclude the effective use of distance education by individual vocational education organizations to improve the quality of extramural education and for consulting activities in the case of the provision of continuing education services for former university graduates or other specialists, or for the conduct of charitable cognitive classes of mainly educational nature for representatives of various social groups of population, including retiree (most likely on a paid basis, including through charitable organizations or social funds).

However, there are events of a national scale when the transition to a distance-based form of education is a necessary measure and is envisaged by state policy. As a rule, these are extreme situations like the current coronavirus epidemic. In this case, it is a matter of national security, and the transition to distance education is the fulfillment of a national task, that is, for educational organizations - a compulsory measure, a directive binding on them. And then the question is relevant: how to make the transition from full-time to distance education effective? Given that this experience of organizing education in conditions of self-isolation is the first in the history of the state, it is advisable to study and generalize it. The intention to solve such a problem stimulated Mukachevo State University to conduct a sociological study of students, postgraduate students and lecturers, which also aims to maintain the level of education quality that is characteristic of full-time education in the conditions of distance education.

Although the study is dedicated to solving particular problems in the interests of the university, nevertheless, the study identified a number of problems that are of a general nature and allow us to draw conclusions that are acceptable for other vocational education organizations. These findings are as follows.

- 1. It must be borne in mind that the current form of forced distance education in conditions of self-isolation due to an epidemic is a mass phenomenon at the scale of the entire state and does not depend on the rhythm of the work of a professional educational organization; it can be reintroduced by the state in any extreme situation. For this reason, improving and optimizing methods of distance education remains an urgent task for all organizations of vocational education, primarily for extreme situations.
- 2. Based on the foregoing, as well as the results of the study, it is advisable to focus the attention of vocational education organizations on the following tasks:
 - the creation (or selection) of unified electronic computer platforms to guarantee uninterrupted remote communication with students over a long period;
 - the development of a training manual for both staff and university students, according to the rules for using

- electronic technology for long-distance remote communication;
- the creation of the unified computer equipment "bank" of the required power at the University, as well as computer peripheral equipment for their subsequent provision for temporary use to lecturers and students, if necessary;
- the formation of a unified public depository of educational and scientific literature, including scientific periodic (free) for lecturers and students. Such a depository can be formed on the basis of a library, in which a methodological center with a staff, including at least a programmer and a computer operator, must be created;
- what is most important: large-scale adaptation of textbooks, manuals and educational aids to interactive forms of learning should be developed, or such textbooks should be prepared, which may take several years. An interactive textbook must necessarily consist of 3 parts: 1) the actual textual part of the textbook; 2) a task book combined with the text of the textbook (including on humanitarian subjects) for student self-control of the degree of theoretical material assimilation; 3) a training simulator that allows students to use practical examples to go through the logistics of production activities in accordance with the profile of the mastered specialty. This does not exclude the fourth stage - real professional practice, the organization and feasibility of which depends on the type of specialization and the heuristic potential of the university.
- 3. In the event of extreme situations such as the coronavirus epidemic, a social fund appropriate to its size should be created at the university to assist lecturers and students in the event of a protracted nature of the extreme situation. The results of the study indicate that the crisis of financial opportunities, for example, for 60% of lecturers at Mukachevo State University, with some cash reserve, occurs about 4 months after self-isolation. Further, 50% of lecturers have no idea from which source they will be able to replenish their budget if the reserve of money runs out (say, after 4 months). The situation is worse for those 40% of lecturers who do not have a reserve of money. As the interviewed lecturers said, in the event of a financial crisis in the family

budget, they will be forced to look for forms of part-time work. Someone will be able to become a tutor (although in quarantine it is quite difficult), someone will take up taxi driving (who has an automobile), and someone in the agricultural regions will try to sell their agricultural products. But all the lecturers working part—time will actually drop out of the educational process or will "crumple" it due to lack of time. It is advisable for universities to identify such a situation on the eve of the announcement of self-isolation, so that there is time to assess the potential size of the help sought in order to maintain the stability of the educational process in the context of distance learning.

Appendix 1

Samples of sociological questionnaires for the study of the effectiveness of distance education in an emergency (epidemic)

Appendix 1.1

Questionnaire for surveying students

STUDENT QUESTIONNAIRE (LEARNING UNDER CONDITIONS OF SELF-ISOLATION)

In an epidemic and, as a consequence introduced universal selfisolation, the university provides distance learning. We are interested in the effectiveness of such training, how it promotes, or makes it difficult for students to master their specialties.

When filling out the questionnaire, circle the corresponding numerical code of the answer option that matches your opinion, or write your answer if it is not given.

1.		is your year of study?
2.	What	educational program (specialization)?

- 3. What are the conditions for studying at the university??
- 1 Study for a fee
- 2 At the expense of the budget (government-subsidized student)
- 3 In the target area at the expense of the budget
- 4 In the target area at the expense of the enterprise (institution)
- 4. Please indicate what you felt in these three situations: 1) when you first learned that a coronavirus epidemic occurred in the country; 2) when you learned that in the country, including for students, self-isolation conditions were introduced; 3) what are you currently feeling? (Select one numerical code in each column)

Feeling	1. When you first learned that a coronavirus epidemic occurred in the country	2. When you learned that in the country, including for students, self-isolation conditions were introduced	3. What are you currently feeling			
Indifference	1	1	1			
Curiosity	2	2	2			
Anxiety	3	3	3			
Annoyance	4	4	4			
Apprehension	5	5	5			
Fright	6	6	6			
Fear	7	7	7			
Steady neurosis	8	8	8			
Stress (reaching a nervous break- down)	9	9	9			
Other condition (write)						

5. Where are you in isolation? (Please give an answer in <u>the lines</u> <u>for each situation</u>.)

Location	The whole period	Mostly	Sometimes			
1. At home with parents	1	2	3			
2. At home, with other relatives	1	2	3			
3. At friends', acquaintances' place	1	2	3			
4. In a rented apartment	1	2	3			
5. Away, in another region	1	2	3			
Other (what exactly?)						

- 6. How do you react to the fact that under quarantine you have stopped direct (not virtual!) contacts with fellow students, with the student team?
- 1 I'm indifferent to this
- 2 There are not enough direct contacts, but I take it calmly
- 3 Lack of direct contact is a concern, but I take this with understanding

- 4 The lack of direct contacts with fellow students is very worrying, I feel uncomfortable
- 5 Other opinion (what?) _

7. In what way do you keep in touch with your fellow students?

- 1 via the Internet
- 2 By phone
- 3 Meet
- 4 I do not support

8. Does being in conditions of self-isolation create physical inconvenience for you?

- 1 Does not create, I do not like to move much
- 2 Creates, but there are no conditions for active physical activity
- 3 Partly creates, but I try to move, do exercises
- 4 I am actively engaged in exercises, sports
- 5 I am actively engaged in physical work

9. How can you characterize your overall health?

- 1 Health is excellent, good
- 2 Sometimes I get sick, but with common diseases
- 3 Health is not very strong, I am often sick
- 4 I have a chronic disease
- 5 I have a disability

10 What is your state of health during the period of being in isolation?

- 1 In general, has not changed
- 2 Has slightly worsened physically
- 3 has slightly worsened mentally
- 4 Has strongly worsened physically
- 5 Has strongly worsened mentally

11. During the period of being in conditions of self-isolation, did you provide help to others who need it? (Select one numerical code in the corresponding lines)

Who was helped	Helped once	Helped more than one time	Was ready to help, but it was not needed	Help was needed, and I was ready to provide it, but there was no way
Nearest relatives	1	2	3	4
Familiar adults	1	2	3	4
Friends, peers	1	2	3	4
Unfamiliar adults	1	2	3	4
Others (Who?)				

12.	How	many	days	in	total	are	you	in	isolation?
	(Wri	te)			do	ays			

- 13. Do you consider the length of time in isolation:
- 1 Insignificant
- 2 Overall acceptable
- 3 Significant
- 4 Excessive
- 14. To what extent do you think the quarantine measures taken against the spread of the epidemic are adequate to the risk of infection?
- 1 Quite adequate to the threat of coronavirus infection
- 2 Generally acceptable for an epidemic, although the risk of infection is low
- 3 Somewhat exaggerated, quarantine in its current form was hardly required
- 4 Excessive, the view of the danger of coronavirus infection does not correspond to reality

5	Another	opinion	(what?)	
			(,	

- 15. How did quarantine affect your participation in the educational process as a whole??
- 1 Training conditions have worsened somewhat
- 2 Training conditions have deteriorated significantly
- 3 Training conditions generally have not changed
- 4 Training conditions have improved slightly
- 5 Training conditions have improved significantly

Ŭ	Tanovior opinion (mass)
_	
_	

- 16. What are the conditions for studying at the place of your stay?
- 1 There is a separate room in which I can retire during my participation in distance learning
- 2 There is no separate room, but there is a relatively autonomous place where I can participate in distance learning without interference
- 3 There is no permanent place for classes, each time I have to adapt to participate in remote classes
- 4 The conditions for participating in distance learning are bad, there is absolutely no convenient place for participating in distance learning

- 17. During your participation in distance learning, is there extraneous interference?
- 1 No, no one bothers
- 2 Sometimes, but not very disturbing
- 3 Often, but not very disturbing
- 4 Sometimes, and very disturbing
- 5 Often, and very disturbing
- 6 Constantly, and very disturbing
- 18. In conditions of self-isolation, do you have difficulty accessing textbooks? (Give an answer in each column)

	1. Literature on core spe- cialization	2. Literature on non-core sub- jects	3. Practical aids
There are no difficulties, all the necessary educational literature is available		1	1
There are difficulties in accessing textbooks, but insignificant		2	2
Difficulties in accessing textbooks are great	3	3	3

19. In general, how did the introduction of distance learning affect the quality of your education, the acquisition of knowledge, in comparison with full-time study at the university? (Give an answer in each line)

	Knowledge acquisi-tion	Knowledge acquisition quality as	Knowledge acquisition
	quality has improved	a whole has not changed	quality has deteriorated
	mproved	Changed	deterrorated
1. Main specialization	1	2	3
2. Non-core subjects	1	2	3
3. Gaining practical skills in the specialty	1	2	3

20. If, with the introduction of distance learning, the quality of your education, the acquisition of knowledge, has improved in comparison with full-time study at the university, then what exactly has this affected?

21	If, with the introduction of distance learning, the quality of
	your education, the acquisition of knowledge, in comparison with
	full-time study at the university has deteriorated, then what
	exactly has this affected?
	enactly has this affected.

22. What is your technical equipment for distance learning?

- 1 I have a personal desktop computer
- 2 I have a personal laptop
- 3 I have a personal iPod
- 4 I don't have personal equipment, but there is one in my family, and I can use it
- 5 I don't have any personal equipment, but I took for a while for use from friends, relatives, friends (girlfriends) to use, from other people
- 6 I don't have personal equipment, but I rented

7 – Another	situation	(what?)	
		(,	

23. Are there any problems using the equipment during the educational process?

- 1 No, the equipment runs smoothly
- 2 There are, because the technique is not new and sometimes or often "freezes up"
- 3 There are, the equipment is not mine and it is not always possible to use it for all the necessary time
- 4 There are, as there are failures (sometimes or often) with the Internet

7 – Another	situation	(what?)

24. Are there any problems in the perception of educational content during distance learning?

- 1 No, I managed to fully adapt to the distance learning
- 2 There are problems due to the unusual perception of lectures (classes)
- 3 There are problems due to poor teaching
- 4 There are problems due to technical failures during teaching due to the fault of the teacher
- 5 There are problems due to technical failures during teaching due to the fault of the university technical service
- 6 The training content is poorly adapted for its broadcast in electronic form (insufficient visual content, bulky text, no interactive form ...)

25.	Please write the main disadvantages of distance learning in the conditions of self-isolation:
26.	Please write the main disadvantages of distance learning in terms of self-isolation:
	According to your current experience, what would you be able to offer to improve the quality of distance education in similar situations?

28. If you do not take into account sleep, how do you spend time in quarantine? (Indicate on a percentage scale, on average per week, what proportion of time (approximately) you spend on various types of activities)

Activities	Percentage scale		
1. Studies (all types in total)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
2. Watching movies, TV, video	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
3. Reading literature, press	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
4. Listening to music	$\begin{matrix} 0\% & 5\% & 10\% & 15\% & 20\% & 25\% & 30\% & 35\% & 40\% \\ 45\% & 50\% & 60\% & 70\% & 80\% & 90\% & 100\% \end{matrix}$		
5. Meeting with friends, acquaintances	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
6. Hiking, riding a car, motorcycle, bicycle	0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 60% 70% 80% 90% 100%		
7. Hobbies (embroider, craft smth, etc.)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
8. Computer games, other games	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		

Activities	Percentage scale		
9. Communication, correspondence via the Internet, including social networks	$\begin{matrix} 0\% & 5\% & 10\% & 15\% & 20\% & 25\% & 30\% & 35\% & 40\% \\ 45\% & 50\% & 60\% & 70\% & 80\% & 90\% & 100\% \end{matrix}$		
10. Sports, gymnastics	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
11. Various household chores: housekeeping, work in the garden, with animals, cleaning	0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 60% 70% 80% 90% 100%		

29. Do you fear that as a result of distance education you will not receive the necessary quality education in your specialty?

- 1 I'm not concerned at all
- 2 In general I'm not concerned, but I don't exclude the possibility of this
- 3 To some extent I'm concerned, although a lot depends on me
- 4 I am very concerned, but I will do something to avoid this
- 5 The quality of education by specialization will definitely be bad
- 7 Another opinion (what?)

IN CONCLUSION A FEW WORDS ABOUT YOURSELF:

30. What's your gender:

- 1 Male
- 2 Female

31. Where do you live?

- 1 In Uzhgorod, Mukachevo
- 2 In another regional town
- 3 In the village, settlement

THANKS FOR HELP IN RESEARCH!

Appendix 1.2

Questionnaire for surveying lecturers

TEACHER QUESTIONNAIRE (TEACHING IN THE CONDITIONS OF SELF-INSULATION)

In an epidemic and, as a result introduced universal self-isolation, the university provides distance learning. We are interested in your opinion about the effectiveness of such training, how it has changed the style of your work.

When filling out the questionnaire, highlight in any background color the corresponding numerical code of the answer option that matches your opinion, or write your answer if it is not given.

1.	What is your total teaching experience?	years
2.	How long have you been working at this university?	_ years
1 - 2 -	Your degree: Doctor of Science Candidate of Science I do not have a degree	
$\frac{1}{2} - \frac{1}{2}$	Scientific rank Professor Associate Professor I do not have a scientific rank	
5.	Which subject(s) is the main one you are currently tea	aching?

6. What is your workload at the university?

- 1 I work over full time
- 2 I work full time
- 3 Workload is less than full time

7. What is your relationship with students?

- 1 Complete Understanding
- 2 Sometimes there are disagreements
- 3 Complete misunderstanding ⇒⇒⇒ Go to Question 8

8. If you have conflicts with students, for what reason? 1 - Difficulties related to age 2 - The attitude to study does not satisfy 3 - They do not prepare seminars, practical exercises 4 - They miss classes 5 - Rude 6 - Substance abuse (smoke, consume alcohol, drugs) 7 - Other reasons (what?)

9. On what principles do you build relationships with students?

- 1 Students must adhere to teacher requirements
- 2 Relations with students are based on mutual understanding
- 3 Relations with students are built on an equal footing
- 4 Formal relationships with students 5 Other

10. Please give an assessment of the quality of the students' contingent with whom you work:

	High	Medium	Low
1. The level of performance	1	2	3
2. Fatigue level	1	2	3
3. The level of stress resistance	1	2	3
4. The level of self- regulation	1	2	3
5. Physical health	1	2	3
6. Humanity of ways of interaction, relationships	1	2	3
7. Culture of behavior	1	2	3
8. Constructive activity in social behavior	1	2	3

11. Please indicate what you felt in these three situations: 1) when you first learned that a coronavirus epidemic occurred in the country; 2) when you learned that in the country, including for students and lecturers of the university, self-isolation conditions were introduced; 3) what do you personally feel at the moment? (Select one numerical code in each column)

Ощущение	1. When you first learned that a coronavirus epi- demic occurred in the country	2. When you learned that in the country, including for students and lecturers of the university, self-isolation conditions were introduced	3. What do you personally feel at the moment
Indifference	1	1	1
Curiosity	2	2	2
Anxiety	3	3	3
Annoyance	4	4	4
Apprehension	5	5	5
Fright	6	6	6
Fear	7	7	7
Steady neurosis	8	8	8
Stress (reaching a nervous break- down)	9	9	9
Other condition (w	rite)		

12. What are your living conditions??

- 1 Detached house, own
- 2 Detached house, not own (parents' or other relatives')
- 3 Detached house, rented
- 4 Apartment, own
- 5 Apartment, rented
- 6 Room (s) in the house, apartment, rented
- 7 Dormitory, hotel

O	- Another	prace or	residence	(wilati) -		

13. Where are you in isolation? (Please give an answer in the lines for each position)

Location	The whole period	Mostly	Sometimes
1. In own detached house	1	2	3
2. In detached house with parents or other relatives	1	2	3
3. In a rented house	1	2	3
4. In apartment, own	1	2	3
5. In apartment, rented	1	2	3
6. Room (rooms) in a house or apartment, rented			
7. Dormitory, hotel			
Other (what exactly?)			

14. To what extent are you familiar with the main signs of coronavirus disease?

- 1 I fully possess such information
- 2 I possess such information in general
- 3 Do not possess such information
- 4 I am not interested in such information

15. To what extent do you manage to comply with the quarantine requirements?

- 1 It is possible to comply in full
- 2 In general it is possible to comply, but not in everything
- 3 For the most part it is not possible to comply
- 4 I do not see the need for this

16. Did you have any difficulties in the first days of the quarantine in providing the sanitary means necessary to comply with the quarantine requirements? (Please answer in lines for each position)

Means	There were big difficul- ties	There were difficulties of average or minor degree	There were no diffi- culties	I did not need these means
1. Formation of a stock of the medicines necessary for treatment of a chronic disease	1	2	3	4
2. Formation of a stock of medicines in case of usual diseases	1	2	3	4

Means	There were big difficul- ties	There were difficulties of average or minor degree	There were no diffi- culties	I did not need these means
3. Formation of a stock of sanitary, disinfectants (including for spraying)	1	2	3	4
4. Formation of a stock of means of household sanitation (washing powder, soap, toothpaste)	1	2	3	4
5. Purchase of protective masks	1	2	3	4
6. Purchase of protective gloves	1	2	3	4
7. Formation of a stock of food products	1	2	3	4

17. Do you have difficulties today in providing the sanitary means necessary to comply with quarantine requirements? (Please reply in lines for each position)

Means	There were big difficul- ties	There were difficulties of average or minor degree	There were no difficul- ties	I did not need these means
1. Formation of a stock of the medicines necessary for treatment of a chronic disease				
2. Formation of a stock of medicines in case of usual diseases				
3. Formation of a stock of sanitary, disinfectants (including for spraying)				
4. Formation of a stock of means of household sanitation (washing powder, soap, toothpaste)				
5. Purchase of protective masks				
6. Purchase of protective gloves				
7. Formation of a stock of food products				

18. How many days in total are you in self-isolation? (Write)days
 19. Do you consider the length of time in isolation: 1 - Insignificant 2 - Overall acceptable 3 - Significant 4 - Excessive
 20. Does being in self-isolation create physical discomfort for you? 1 - Does not create, I do not like to move much 2 - Creates, but there are no conditions for active physical activity 3 - Partly creates, but I try to move, do exercises 4 - I am actively engaged in exercises, sports 5 - I am actively engaged in physical work
 21. How can you characterize the state of your health in general, what it was like before quarantine? 1 - Health is excellent, good 2 - Sometimes I get sick, but with common diseases 3 - Health is not very strong, often sick 4 - I have a chronic disease 5 - I have a disability
 22. What is the state of your health over the period of being in isolation? 1 - Generally has not changed 2 - Has slightly worsened physically 3 - Has slightly worsened mentally 4 - has worsened physically a lot 5 - Has worsened mentally a lot
 23. During the period of being in conditions of self-isolation, did you need help? 1 - Yes, once 2 - Yes, repeatedly 3 - No → → → Go to Question 26
24. If needed, what help did you need? (Please, write)

25. Who helped you? 1 - Family 2 - Relatives not living with me 3 - Neighbors 4 - Friends, acquaintances 5 - Volunteers 6 - Social Service 7 - Someone else (who?) 8 - No one
 26. To what extent do you think the quarantine measures taken against the spread of the epidemic are adequate to the risk of infection? 1 - Quite adequate to the threat of coronavirus infection 2 - Generally acceptable for the epidemic, although the risk of infection is low 3 - Somewhat exaggerated, quarantine in its current form was hardly required 4 - Excessive, the view of the danger of infection with coronavirus does not correspond to reality 5 - Another opinion (what?)
 27. How did quarantine affect your participation in the educational process as a whole?? 1 - Training conditions have worsened somewhat 2 - Training conditions have worsened significantly 3 - Training conditions generally have not changed 4 - Training conditions have improved slightly 5 - Training conditions have improved significantly 6 - Another opinion (what?)
 28. How do you organize classes with students? 1 - Via Internet connection, giving lectures 2 - Via Internet connection, I conduct seminars 3 - Via Internet connection, I conduct consultations 4 - Via Internet connection, I set tasks for independent work 5 - I do not conduct classes, I will catch up after quarantine 29. If you do not conduct classes, then for what reason? (Please, write)

- 30. What are the conditions at the place of your stay to conduct online classes with students?
- 1 There is a separate room in which I can retire during distance classes
- 2 There is no separate room, but there is a relatively autonomous place where I can conduct distance classes without interference
- 3 There is no permanent place, every time I have to adapt
- 4 The conditions for conducting remote classes are bad; there is absolutely no convenient place to work
- 31. Does extraneous interference occur during your distance classes with students?
- 1 No, no one bothers
- 2 Sometimes, but not very disturbing
- 3 Often, but not very disturbing
- 4 Sometimes, and very disturbing
- 5 Often, and very disturbing
- 6 Constantly, and very disturbing
- 32. In conditions of self-isolation, do you have difficulty accessing training materials?
- 1 There are no difficulties, all the materials necessary for conducting classes are available
- 2 There are difficulties, but they are minor
- 3 There are great difficulties for conducting classes due to the lack of necessary training materials
- 33. If there are difficulties, what is missing first of all?
- 1 Access to theoretical literature
- 2 Access to scientific periodicals
- 3 Access to visual aids
- 4 No (or not enough) interactive electronic textbooks
- 5 Other problems (what?) _

34. In general, how did the introduction of distance learning affect the quality of education, the acquisition of knowledge by students, in comparison with full-time study at the university? (Give an answer in each line)

	Knowledge	Knowledge	Knowledge
	acquisition	acquisition quality	acquisition
	quality has	as a whole has not	quality has
	improved	changed	deteriorated
1. Main specialization	1	2	3

	Knowledge acquisition quality has improved	Knowledge acquisition quality as a whole has not changed	Knowledge acquisition quality has deteriorated
2. Non-core subjects	1	2	3
3. Gaining practical skills in the specialty	1	2	3

- 35. If, with the introduction of distance training, the quality of education, the acquisition of knowledge, has improved in comparison with full-time study at the university, then what exactly has this affected? (Please, write)
- 36. If, with the introduction of distance training, the quality of education, the acquisition of knowledge, in comparison with full-time study at the university <u>has deteriorated</u>, then what exactly has this affected? (Please, write)
- 37. What is your technical equipment for conducting distance training with students?
- 1 I have a personal desktop computer
- 2 I have a personal laptop
- 3 I have a personal iPod
- 4 I don't have personal equipment, but my family has one, and I can use it
- 5 I don't have any personal equipment, but I took for a while for use from friends, relatives, friends (girlfriends) to use, from other people
- 6 I don't have personal equipment, but rented
- 7 Another situation (what?)
- 38. To what extent do you possess the skills of work on a computer?
- 1 To a good degree
- 2 Intermediate
- 3 Poor
- 39. Are there any problems using the equipment during the educational process?
- 1 No, the equipment runs smoothly
- 2 There are, because the technique is not new and sometimes or often "freezes up"
- 3 There are, the equipment is not mine and it is not always possible to use it for all the necessary time

 4 - There are, as there are failures (sometimes or often) with the Internet 5 - Another situation (what?)
40. Please write the main advantages of distance training in the conditions of self-isolation:
41. Please write the main disadvantages of distance training in terms of self-isolation:
42. According to your current experience, what would you be able to offer to improve the quality of distance education in similar situations?
 43. Are you concerned that distance education may result in a reduction of university staff? 1 - I'm not concerned at all 2 - In general, I'm not concerned, but I don't exclude the possibility of this 3 - I'm concerned 4 - Another opinion (what?)
IN CONCLUSION A FEW WORDS ABOUT YOURSELF:
44. What's your gender: 1 - Male 2 - Female
45. Your age: years
46. Please indicate the average income (approximately) per member of your family per month: hryvnia
 47 What life opportunities does the budget of your family (or yours personally if there is no family) provide? 1 - We can afford any purchase, even the most expensive 2 - There is enough money for food, clothes, purchase of durable goods and rest 3 - We live from salary to salary, there is only enough money for food and necessary clothes

4 - We barely make ends meet, there is not always enough money even for food

48. Where do you currently reside (upon location)? 1 - In Uzhgorod, Mukachevo 2 - In another regional town 3 - In the village, the settlement
 49. Do you have a farm or vehicle? (You can choose any number of answers) 1 - A garden 2 - A kitchen garden 3 - Cattle 4 - An automobile 5 - Property to let 6 - Own business 7 - None of this
 50. How has the financial situation of your family (or your personal, if there is no family) changed during your time in isolation? 1 - Has improved (by how much%, approximately
51. Did you have some savings in order to ensure acceptable level of life for the family (or for yourself personally if there is no family)? $\begin{array}{c} 1-Yes\\ 2-No \end{array}$
52. If you had, for how long will there be enough reserves so that the family (or you personally, if there is no family) under quarantine could live normally? For months
 53. If you have financial difficulties, how do you solve them or intend to solve them? 1 - I will take a loan from the bank 2 - I will borrow funds from relatives, acquaintances 3 - I'll sell something from my property 4 - I will sell some products, cattle 5 - Do some kind of side job (for example, taxi-driving) 6 - I have no idea how to solve this problem
THANKS FOR HELP IN RESEARCH!

Appendix 2

Tables of indicators' conjugation based on the results of the students study

Table 1 The feelings of students of different years of study in the period when they first learned that the country has the epidemic of coronavirus, %

			Ye	ar of stu	ıdy	
Feelings	1 year	2 year	3 year	4 year	5 year	Graduate de- partment (master's degree pro- grams)
Indifference	9.1	6.0	11.8	8.9	4.8	4.1
Curiosity	14.7	10.1	7.1	11.0	20.2	8.2
Anxiety	43.3	48.2	45.5	42.4	44.2	53.1
Annoyance	2.6	1.8	1.9	0.0	2.9	2.0
Apprehension	20.3	22.0	20.4	20.0	17.3	20.4
Fright	3.5	7.7	9.0	12.6	3.8	0.0
Fear	3.0	3.6	2.4	4.7	3.8	6.1
Sustained Neurosis	0.4	0.0	0.0	0.5	0.0	0.0
Stress (reaching a nervous break- down)	0.0	0.0	0.0	0.0	1.9	2.0

Table 2
The feelings of students of different years of study, during the period when they learned that in the country, including for students, self-isolation was introduced (mid-March), %

			Ye	ar of stud	dy	
Feelings	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Indifference	4.3	0.6	3.3	10.5	8.7	10.2
Curiosity	20.3	10.7	8.5	1.6	9.6	14.3

			Yea	ar of stud	dy	
Feelings	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Anxiety	36.8	47.0	39.3	51.8	51.0	34.7
Annoyance	12.6	7.1	15.2	6.3	9.6	8.2
Apprehension	16.0	21.4	20.9	22.5	18.3	20.4
Fright	3.0	6.0	3.8	4.2	1.0	0.0
Fear	1.3	5.4	0.9	2.1	1.0	4.1
Sustained Neurosis	0.4	0.6	1.9	0.0	0.0	2.0
Stress (reaching a nervous break- down)	0.4	0.6	3.8	0.5	0.0	0.0

Table 3 The feelings of students of different years of study during the survey (mid-May), %

			Yea	r of stud	y	
Feelings	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Indifference	16.5	17.9	15.6	7.3	7.7	20.4
Curiosity	10.0	8.9	10.0	11.0	10.6	6.1
Anxiety	23.4	33.9	27.5	49.2	29.8	28.6
Annoyance	14.7	12.5	15.6	18.8	28.8	16.3
Apprehension	13.4	12.5	16.1	5.8	11.5	10.2
Fright	3.0	7.7	0.9	1.0	2.9	4.1
Fear	7.8	2.4	6.2	3.1	4.8	0.0
Sustained Neurosis	1.7	2.4	2.8	2.1	1.0	2.0
Stress (reaching a nervous break- down)	3.9	0.6	3.3	0.0	1.0	6.1

Table 4 The feelings of students of different sexes during the period when they first learned that there is the epidemic of coronavirus in the country, %

Feelings	Gende	r
reenings	Male	Female
Indifference	19.8	6.8
Curiosity	33.6	8.7
Anxiety	27.6	47.5
Annoyance	1.7	1.8
Apprehension	11.2	21.5
Fright	3.4	7.6
Fear	1.7	3.8
Sustained Neurosis	0.9	0.1
Stress (reaching a nervous breakdown)	0.0	0.4

Table 5 The feelings of students of different sexes during the period when they learned that in the country, including for students, self-isolation was introduced (mid-March), %

Faslings	Gend	er
Feelings	Male	Female
Indifference	21.6	3.2
Curiosity	14.7	10.3
Anxiety	27.6	45.8
Annoyance	6.0	11.0
Apprehension	23.3	19.3
Fright	3.4	3.6
Fear	1.7	2.3
Sustained Neurosis	0.0	0.8
Stress (reaching a nervous breakdown)	0.9	1.2

Table 6 The feelings of students of different sexes during the survey (mid-May), %

Feelings	Ger	nder
reenings	Male	Female
Indifference	12.9	14.1
Curiosity	10.3	9.8
Anxiety	28.4	32.8
Annoyance	25.0	15.9
Apprehension	6.9	12.6
Fright	10.3	2.0
Fear	2.6	5.1
Sustained Neurosis	0.9	2.3
Stress (reaching a nervous breakdown)	1.7	2.3

 $Table\ 7$ The feelings of students living in different types of settlements during the period when they first learned that the epidemic of coronavirus arose in the country, %

		Type of settlemen	ıt
Feelings	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment
Indifference	11.8	11.3	6.1
Curiosity	11.4	20.2	9.3
Anxiety	41.2	39.3	48.4
Annoyance	1.8	1.8	1.8
Apprehension	22.4	17.9	20.1
Fright	4.8	8.3	7.7
Fear	4.8	0.6	3.9
Sustained Neurosis	0.4	0.0	0.2
Stress (reaching a nervous breakdown)	0.4	0.0	0.4

Table 8 The feelings of students living in various types of settlements during the period when they learned that in the country, including and for students, self-isolation was introduced (mid-March), %

		Type of settlemen	t
Feelings	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment
Indifference	10.5	8.3	2.5
Curiosity	14.5	9.5	9.7
Anxiety	40.4	36.9	47.0
Annoyance	6.6	13.1	11.1
Apprehension	22.8	23.8	17.4
Fright	1.8	3.6	4.3
Fear	0.9	0.0	3.4
Sustained Neurosis	0.4	2.4	0.4
Stress (reaching a nervous breakdown)	0.4	1.2	1.4

Table 9 The feelings of students of different sexes during the survey (mid-May), %

		Type of settlement	
Feelings	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment
Indifference	17.5	14.9	12.2
Curiosity	13.6	13.1	7.3
Anxiety	25.9	24.4	37.3
Annoyance	19.3	20.2	15.1
Apprehension	7.0	13.7	13.4
Fright	3.5	2.4	3.0
Fear	7.9	4.8	3.6
Sustained Neurosis	2.6	1.8	2.0
Stress (reaching a nervous breakdown)	0.4	4.2	2.3

Table 10 Share indicators of students transition from a psychological state in the period when they first learned about the epidemic in the country, to a psychological state at the time when they learned that the country declared self-isolation (mid-March), %

	The psyc	The psychological state of students when they first learned that the coronavirus epidemic arose in the country	se of student demi	ts when t	dents when they first lear demic arose in the country	learned t ntry	hat the co	oronavir	ıs epi-
Feelings	Indiffer- ence	Curiosity	Anxiety	An- noy- ance	Appre- hen- sion	Fright	Fear	Sus- tained Neuro- sis	Stress
Indifference	30,0	8,6	3,7	0,0	0,5	0,0	0,0	0,0	0,0
Curiosity	12,5	17,9	11,6	17,6	8,3	2,9	5,9	0,0	0,0
Anxiety	31,3	40,5	44,7	17,6	61,1	33,8	29,4	0,0	0,0
Annoyance	15,0	11,6	11,4	35,3	5,2	2,9	14,7	0,0	2,99
Apprehension	5,0	16,1	21,9	23,5	13,0	47,1	32,4	50,0	0,0
Fright	0,0	0,0	4,0	0,0	5,2	7,4	2,9	0,0	0,0
Fear	0,0	1,8	1,6	0,0	3,1	4,4	8,8	0,0	0,0
Sustained Neurosis	0,0	0,0	0,5	0,0	1,0	1,5	2,9	0,0	33,3
Stress (reaching a nervous breakdown)	5,0	0,0	0,0	5,9	2,1	0,0	2,9	50,0	0,0

Table 11 Share indicators of students transition from psychological state to the period when they learned that the country had declared self-isolation (mid-March), in a psychological state at the time of the survey (mid-May), %

Hoolings		The ps	The psychological state of students when they learned that the country was quarantined	cal state of students when the the country was quarantined	tudents wh vas quaran	nen they	learned t	hat	
r.cciiiiga	Indiffer- ence	Curiosity	Anxiety	Annoy- ance	Appre- hension	Fright	Fear	Sustained Neurosis	Stress
Indifference	30.8	24.3	10.3	23.2	9.5	2.9	0.0	14.3	36.4
Curiosity	13.5	23.3	10.8	1.0	5.3	11.8	14.3	0.0	0.0
Anxiety	3.8	23.3	40.6	26.3	37.0	23.5	23.8	0.0	36.4
Annoyance	42.3	13.6	17.5	22.2	12.2	14.7	0.0	42.9	0.0
Apprehension	1.9	13.6	12.5	13.1	11.6	14.7	23.8	14.3	0.0
Fright	0.0	0.0	3.4	0.0	4.8	17.6	0.0	0.0	0.0
Fear	0.0	0.0	1.7	2.0	15.3	2.9	28.6	0.0	9.1
Sustained Neurosis	0.0	0.0	1.2	8.1	2.6	5.9	0.0	0.0	0.0
Stress (reaching a nervous break- down)	7.7	1.0	1.2	4.0	0.0	5.9	4.8	28.6	18.2

 $Table\ 12$ The share of students of different sexes who were in the period of self-isolation at a permanent place of residence, %

The place of permanent	Gene	der
stay of students during self-isolation	Male	Female
At home, with parents	69.0	79.0
At home, with other relatives	2.6	2.4
At friends', acquaintances' places	0.9	0.4
In a rented apartment	5.2	2.0
Away, in another region	1.7	1.0
Total were at a permanent place of residence	79.4	84.8

Table 13 The share of students in settlements of different types, who were in a permanent place of residence the whole period of self-isolation, %

The place of permanent stay	Type of settlement				
of students during self- isolation	Uzhhorod, Mukachevo	Another regional town	Village. settlement		
At home. with parents	71.9	78.0	80.1		
At home, with other relatives	1.3	2.4	2.9		
At friends', acquaintances' places	1.3	0.0	0.2		
In a rented apartment	8.3	0.6	0.5		
Away, in another region	0.4	4.2	0.4		
Total were at a permanent place of residence	83.2	85.2	84.1		

Table 14 The attitude of students of different years of study to the fact that during the period of self-isolation they lost direct contact with group mates, %

			Yea	ar of stu	dy	
Attitude	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Are indifferent to this	10.8	6.5	12.8	7.9	4.8	20.4
There are not enough direct con- tacts, but they take it easy	48.1	45.2	59.7	51.8	66.3	46.9
Lack of direct contact is worrying. but treat it with understanding	39.0	43.5	20.4	37.7	27.9	28.6
The lack of direct contacts with group mates is very wor- rying, they feel not comfortable	0.4	4.8	5.2	2.6	1.0	4.1
Another opinion	1.7	0.0	1.9	0.0	0.0	0.0
Total lack of direct contacts	87.5	93.5	85.3	92.1	95.2	79.6

Table 15 The attitude of students of different faculties to the fact that in the period of self-isolation they lost direct contact with group mates, %

	Faculty					
Attitude	Peda- gogical faculty	Humani- ties fac- ulty	Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business		
Are indifferent to this	6.5	11.6	6.8	25.3		
There are not enough direct con- tacts, but they take it easy	42.3	60.1	63.9	45.6		

	Faculty					
Attitude	Peda- gogical faculty	Humani- ties fac- ulty	Faculty of Eco- nomics, Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business		
Lack of direct contact is worrying, but treat it with understanding	47.2	24.9	24.4	27.8		
The lack of direct contacts with group mates is very wor- rying, they feel not comfortable	2.7	3.0	3.9	1.3		
Another opinion	1.4	0.3	1.0	0.0		
Total lack of direct contacts	92.2	88	92.2	74.7		

Table 16 The attitude of students of different sexes to the fact that during the period of self-isolation they lost direct contact with group mates, %

Attitude	Ger	nder	
Attitude	Male	Female	
Are indifferent to this	12.1	9.4	
There are not enough direct contacts, but they take it easy	58.6	52.0	
Lack of direct contact is worrying, but treat it with understanding	26.7	34.6	
The lack of direct contacts with group mates is very wor- rying, they feel not comfortable	2.6	3.0	
Another opinion	0.0	1.0	
Total lack of direct contacts	87.9	89.6	

 $Table\ 17$ The attitude of students living in settlements of different types to the fact that during the period of self-isolation they lost direct contact with group mates, %

	Type of settlement					
Attitude	Uzhhorod, Mu- kachevo	Another regional town	Village. settlement			
Are indifferent to this	14.5	13.7	6.6			
There are not enough direct contacts, but they take it easy	56.1	47.6	53.0			
Lack of direct contact is worrying, but treat it with understanding	27.6	30.4	37.1			
The lack of direct contacts with group mates is very worrying, they feel not comfortable	1.3	6.5	2.5			
Another opinion	0.4	1.8	0.7			
Total lack of direct contacts	85.0	84.5	92.6			

Table 18 The share of students of different years of study who maintain contacts with group mates through various means of communication, %

	Year of study					
Contact Form	1 year	2 year	3 year	4 year	5 year	Graduate de- partment (master's de- gree programs)
Via the Internet	87.4	92.9	92.9	97.9	96.2	98.0
By telephone	48.5	42.3	33.6	55.0	55.8	46.9
Meet	1.3	4.8	0.0	0.5	6.7	0.0
Do not contact	3.5	1.8	7.1	0.0	1.0	0.0

Table 19 The share of students from different faculties who maintain contact with students through various means of communication, %

		Faculty					
Contact Form	Pedagogi- cal fac- ulty	Humani- ties fac- ulty	Faculty of Eco- nomics. Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business			
Via the Internet	93.5	94.7	88.8	97.5			
By telephone	57.2	41.5	39.5	29.1			
Meet	1.6	2.3	2.9	0.0			
Do not contact	1.1	4.0	4.4	2.5			

Table 20 The share of students of different sexes who are in contact with fellow students through various means of communication, %

Contact Form	Gender			
Contact Form	Male	Female		
Via the Internet	85.3	94.3		
By telephone	47.4	45.9		
Meet	5.2	1.6		
Do not contact	6.9	2.3		

 $Table\ 21$ The share of students in various types of settlements that maintain contact with fellow students through various means of communication, %

		Type of settlement				
Contact Form Uzhhorod. Mu-kachevo		Another regional town	Village. settlement			
Via the Internet	90.4	96.4	93.4			
By telephone	41.2	39.3	50.2			
Meet	4.4	0.0	1.6			
Do not contact	4.8	3.0	2.0			

 ${\it Table~22} \\ {\it Evaluation~of~duration~of~stay~in~the~conditions~of~self-isolation}\\ {\it by~students~of~different~years~of~study,~\%}$

	Year of study					
Estimation of duration	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Insignificant	3.9	7.7	8.5	2.1	1.0	4.1
Overall acceptable	43.3	44.6	42.2	52.9	51.0	38.8
Significant	33.3	29.2	30.3	27.2	18.3	38.8
Excessive	19.5	18.5	19.0	17.8	29.8	18.4
Total – evaluated negatively	52.8	47.7	49.3	45.0	48.1	57.2

 $Table\ 23$ Evaluation of the length of stay in conditions of self-isolation by students of different faculties, %

	Faculty					
Estimation of duration	Pedagogi- cal faculty	Hu- manities faculty	Faculty of Economics, Management and Engineer- ing	Faculty of Tourism and Hotel-Restau- rant Business		
Insignificant	5.4	3.0	6.8	5.1		
Overall acceptable	46.6	47.5	39.5	51.9		
Significant	28.2	27.6	36.1	24.1		
Excessive	19.8	21.9	17.6	19.0		
Total – evaluated negatively	48.0	49.5	53.7	43.1		

Estimation	Ger	ıder
of duration	Male	Female
Insignificant	6.9	4.7
Overall acceptable	46.6	45.7
Significant	20.7	30.5

Estimation	Gender				
of duration	Male	Female			
Excessive	25.9	19.1			
Total – evaluated negatively	46.6	49.6			

 $Table\ 25$ Evaluation of length of stay in conditions of self-isolation by students living in settlements of various types, %

Estimation	Type of settlement					
of duration	Uzhhorod. Mukachevo	Another regional town	Village. settle- ment			
Insignificant	2.2	7.7	5.2			
Overall acceptable	45.6	42.9	46.8			
Significant	25.4	25.6	32.1			
Excessive	26.8	23.8	15.9			
Total – evaluated negatively	52.2	49.4	48.0			

 $Table\ 26$ The opinion of students of different years of study on how quarantine influenced participation in the educational process as a whole, %

		Year of study					
Opinion	1 year	2 year	3 year	4 year	5 year	Graduate de- partment (master's de- gree programs)	
Training conditions have worsened some- what	35.1	36.3	33.6	27.2	26.9	14.3	
Training conditions have worsened sig- nificantly	8.2	5.4	4.3	8.9	4.8	2.0	
Training conditions generally have not changed	46.3	55.4	50.7	50.8	61.5	59.2	
Training conditions have improved	6.9	2.4	9.0	12.6	5.8	14.3	
Training conditions have improved significantly	3.4	0.6	2.4	0.5	1.0	10.2	
Total worsened	43.3	41.7	37.9	36.1	31.7	16.3	

 $Table\ 27$ Opinion of students from different faculties about how quarantine influenced participation in the educational process as a whole, %

	Faculty					
Opinion	Peda- gogical faculty	Human- ities faculty	Faculty of Eco- nomics. Man- agement and Engineering	Faculty of Tourism and Hotel-Restau- rant Business		
Training conditions have worsened some- what	29.8	27.9	35.6	41.8		
Training conditions have worsened sig- nificantly	4.1	6.0	12.2	2.5		
Training conditions generally have not changed	57.5	57.8	39.5	38.0		
Training conditions have improved	6.2	6.6	12.2	10.1		
Training conditions have improved significantly	2.5	1.7	0.5	7.6		
Total worsened						

 $Table\ 28$ Opinion of students of different sexes about how quarantine influenced participation in the educational process as a whole, %

Ominian	Gender			
Opinion	Male	Female		
Training conditions have worsened somewhat	38.8	30.4		
Training conditions have worsened significantly	7.8	6.1		
Training conditions generally have not changed	48.3	52.6		
Training conditions have improved	3.4	8.6		
Training conditions have improved significantly	1.8	2.3		
Total worsened	46,6	36,5		

 $Table\ 29$ The opinion of students in different types of settlements about how quarantine influenced participation in the educational process as a whole, %

	Type of settlement				
Opinion	Uzhhorod. Mukachevo	Another regional town	Village. settlement		
Training conditions have worsened somewhat	37.7	35.7	27.6		
Training conditions have worsened significantly	9.6	4.8	5.4		
Training conditions generally have not changed	45.2	46.4	56.6		
Training conditions have improved	5.7	9.5	8.4		
Training conditions have improved significantly	1.8	3.6	2.0		
Total worsened	47,3	40,5	33,0		

Table 30 The share of students of different years of study performing various types of activities, without taking into account the time spent on sleep, %

			Yea	r of stud	ly	
Activities	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Studies (all types in total)	90.0	93.5	89.6	97.9	97.1	83.7
Watching movies, TV, video	88.7	89.9	88.2	98.4	97.1	85.7
Reading literature, press	84.4	83.3	83.9	89.5	94.2	79.6
Listening to music	81.0	81.0	78.7	83.2	89.4	69.4
Meeting friends, acquaintances	59.3	64.9	52.6	71.7	58.7	51.0
Hiking, riding a car, motorcycle, bike	73.6	70.8	68.2	72.8	80.8	69.4
Hobbies (embroider, craft smth etc.)	59.7	55.4	51.7	71.7	59.6	57.1

			Yea	r of stud	ly	
Activities	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Computer games, other games	36.4	44.0	37.4	32.5	33.7	24.5
Communication, correspondence via the Internet, including social networks	86.6	85.7	82.0	91.6	92.3	77.6
Sports, gymnastics	80.1	75.0	81.5	80.1	82.7	75.5
Various household chores: housekeep- ing, work in the gar- den, kitchengarden, with animals, in the house (including cleaning)	90.9	88.7	88.6	99.0	93.3	85.7

Table 31 The share of students from various faculties performing various types of activities, without taking into account the time spent on sleep, %

	Faculty					
Activities	Pedagogi- cal fac- ulty	Humani- ties fac- ulty	Faculty of Economics. Management and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business		
Studies (all types in total)	91.6	91.7	93.7	97.5		
Watching movies, TV, video	90.2	91.4	91.2	98.7		
Reading literature, press	83.7	89.4	83.9	88.6		
Listening to music	78.9	84.7	75.1	94.9		
Meeting friends, acquaintances	62.1	57.1	65.4	57.0		
Hiking, riding a car, motorcycle, bike	76.4	73.8	62.0	74.7		
Hobbies (embroider, craft smth, etc.)	64.0	58.8	49.3	67.1		

	Faculty					
Activities	Pedagogi- cal fac- ulty	Humani- ties fac- ulty	Faculty of Economics. Management and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business		
Computer games, other games	32.2	43.5	26.8	51.9		
Communication, correspondence via the Internet, including social networks	87.0	88.0	84.4	84.8		
Sports, gymnastics	80.2	82.4	74.1	79.7		
Various household chores: housekeep- ing, work in the gar- den, kitchengarden, with animals, in the house (including cleaning)	92.1	91.7	90.2	92.4		

Table 32 The share of students of different sexes performing various types of activities, excluding time spent on sleep, %

Activities	Gender	
Activities	Male	Female
Studies (all types in total)	91.4	92.7
Watching movies, TV, video	89.7	91.8
Reading literature, press	81.0	86.6
Listening to music	71.6	82.6
Meeting friends, acquaintances	66.4	60.0
Hiking, riding a car, motorcycle, bike	62.1	73.7
Hobbies (embroider, craft smth, etc.)	45.7	61.3
Computer games, other games	58.6	33.2
Communication, correspondence via the Internet, including social networks	77.6	87.8

Activities	Gender	
Activities	Male	Female
Sports, gymnastics	69.8	80.9
Various household chores: housekeeping, work in the garden, kitchengarden, with animals, in the house (including cleaning)	86.2	92.4

Table~33 The share of students in different types of settlements performing various types of activities. excluding the time spent on sleep, %

	Type of settlement			
Activities	Uzhhorod, Mu- kachevo	Another re- gional town	Village, settle- ment	
Studies (all types in total)	94.7	85.7	93.7	
Watching movies, TV, video	93.0	84.5	93.0	
Reading literature, press	88.6	81.0	86.4	
Listening to music	79.8	76.8	83.2	
Meeting friends, acquaintances	55.7	49.4	66.3	
Hiking, riding a car, motorcycle, bike	66.2	64.3	77.2	
Hobbies (embroider, craft smth, etc.)	60.5	47.0	62.7	
Computer games, other games	39.0	38.7	34.4	
Communication, correspondence via the Internet, including social networks	89.0	77.4	88.4	
Sports, gymnastics	81.6	75.0	80.1	
Various household chores: housekeeping, work in the garden, kitchengarden, with animals, in the house (including cleaning)	91.7	83.3	94.1	

Table 34 The opinion of students of different sexes about whether staying in conditions of self-isolation creates physical inconvenience, %

Opinion	Gender		
Opinion	Male	Female	
Does not create, do not like to move a lot	8.6	6.8	
Creates, because there are no conditions for active physical activity	14.7	14.6	
Partially creates, but try to move, do exercises	41.4	44.2	
Actively engaged in exercise, sports	18.1	19.6	
Actively engaged in physical work,	21.6	31.9	

Table 35 The opinion of students in different types of settlements about whether staying in conditions of self-isolation creates physical inconvenience. %

	Type of settlement			
Opinion	Uzhhorod, Mukachevo	Another regional town	Village, set- tlement	
Does not create, do not like to move a lot	7.5	10.1	5.9	
Creates, because there are no conditions for active physical activity	21.9	13.1	12.0	
Partially creates, but try to move, do exercises	42.1	44.6	44.3	
Actively engaged in exercise, sports	27.6	20.2	15.8	
Actively engaged in physical work,	17.5	19.0	39.4	

Table 36 The opinion of students of different sexes about the state of their health, %

II alah Assassa	Gender		
Health Assessment	Male	Female	
Health is excellent, good	66.4	64.4	
Sometimes sick, but with common diseases	31.0	30.4	
Health is not very good, often sick	0.0	1.1	
Have a chronic disease	0.9	3.0	
Have a disability	1.7	1.1	

Table 37 The opinion of students in different types of settlements about their state of health, %

	Type of settlement			
Health Assessment	Uzhhorod, Mukachevo	Another regional town	Village, settlement	
Health is excellent, good	67.5	57.1	65.8	
Sometimes sick, but with common diseases	29.4	34.5	29.7	
Health is not very good, often sick	1.3	0.6	0.9	
Have a chronic disease	0.9	7.7	2.0	
Have a disability	0.9	0.0	1.6	

Table~38 How the state of health of students of different sexes has changed over the period being in conditions of self-isolation, %

III	Gender		
How the state of health develops	Male	Female	
In general. it has not changed	81.9	77.8	
Has slightly deteriorated physically	10.3	6.1	
Has slightly deteriorated mentally	6.9	14.3	
Has severely deteriorated physically	0.0	0.6	
Has severely deteriorated mentally	0.9	1.2	

 $Table\ 39$ How the state of health of students in settlements of different types has changed for the period of stay in the conditions of self-isolation, %

	Type of settlement		
How the state of health develops	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment
In general. it has not changed	75.9	74.4	80.5
Has slightly deteriorated physically	9.2	8.9	4.8
Has slightly deteriorated mentally	12.7	11.9	14.2
Has severely deteriorated physically	1.3	1.2	0.0
Has severely deteriorated mentally	0.9	3.6	0.5

 $Table\ 40$ How has the state of health of students changed during the period of stay in conditions of self-isolation, depending on the state of their health before, in normal conditions. %

	How t	How they assess the state of health in general			
What is the state of health during the pe- riod of stay in condi- tions of self-isolation	Health is excel- lent, good	Sometimes they get sick, but with common diseases	Health is not very strong, they of- ten get sick	Have chronic diseases	Have a disabil- ity
In general. it has not changed	86.5	66.7	44.4	23.1	81.8
Has slightly deteriorated physically	4.2	10.7	44.4	7.7	0.0
Has slightly deteriorated mentally	8.1	20.6	11.1	57.7	18.2
Has severely deteriorated physically	0.3	0.3	0.0	7.7	0.0
Has severely deteriorated mentally	0.8	1.7	0.0	3.8	0.0

Table 41 Opinion of students of different sexes to what extent quarantine measures, taken against the spread of the epidemic are adequate to the risk of infection. %

Ominian	Gender	
Opinion	Male	Female
Quite adequate to the threat of coronavirus infection	48.3	58.1
They are generally acceptable for an epidemic, although the risk of infection is low	19.0	28.5
Somewhat exagger- ated, quarantine was hardly needed in the current situation	12.1	6.7
Excessive, the idea of the danger of coronavi- rus infection is not true	13.8	5.4
Another opinion	6.9	1.3

Table 42

The opinion of students in different types of settlements about the extent to which quarantine measures taken against the spread of the epidemic are adequate to the risk of infection, %

	Type of settlement		
Opinion	Uzhhorod, Mukachevo	Another regional town	Village, set- tlement
Quite adequate to the threat of coronavirus infection	56.6	63.1	55.2
They are generally acceptable for an epidemic, although the risk of infection is low	20.2	26.2	30.6
Somewhat exaggerated, quarantine was hardly needed in the current situation	6.6	8.3	7.3
Excessive, the idea of the danger of coronavi- rus infection is not true	14.5	0.6	4.8
Another opinion	2.2	1.8	2.0

 $\begin{array}{c} {\it Table~43}\\ {\it Average~duration~of~self\mbox{-}isolation~of~students'~of~different~years,}\\ {\it days} \end{array}$

Year of study	How many days are in isolation
1 year of study	54
2 year of study	54
3 year of study	54
4 year of study	44
5 year of study	53
Graduate department (master's degree programs)	52

 $\begin{array}{c} {\it Table~44}\\ {\it The~average~duration~of~compliance~with~self-isolation~by}\\ {\it students~of~different~sexes,~days} \end{array}$

Gender	How many days are in isolation
Male	48
Female	52

Type of settlement	How many days are in isolation
Uzhhorod. Mukachevo	52
Another regional town	51
Village. settlement	52

 $Table\ 46$ The opinion of students of different faculties about the conditions for classes in the place of their stay during self-isolation, %

	Faculty				
What are the conditions for classes at the place of residence	Peda- gogical faculty	Hu- mani- ties faculty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business	
There is a separate room in which one can retire while participating in distance learning	66.7	67.1	72.2	62.0	
There is no separate room, but there is a relatively autonomous place where one can participate in distance learning without interference	22.2	18.3	12.7	22.8	
There is no permanent place for classes, each time one needs to adapt to participate in distance classes	9.5	12.3	12.7	10.1	
The conditions are bad, there is absolutely no convenient place to participate in distance learning	1.6	2.3	2.4	5.1	

Table 47 The opinion of students in different types of settlements about the conditions for classes at the place of their stay during self-isolation. %

What are the conditions	Type of settlement			
for classes at the place of residence Uzhhorod, Mukachevo		Another regional town	Village, settle- ment	
There is a separate room in which one can retire while participating in distance learning	74.6	67.9	64.7	

What are the conditions	Type of settlement				
for classes at the place of residence	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment		
There is no separate room, but there is a rela- tively autonomous place where one can participate in distance learning with- out interference	15.4	21.4	19.7		
There is no permanent place for classes, each time one needs to adapt to participate in distance classes	5.7	7.7	14.3		
The conditions are bad, there is absolutely no con- venient place to partici- pate in distance learning	4.4	3.0	1.3		

 $Table\ 48$ The nature of interference for students of different faculties during participation in distance learning, %

	Faculty					
Extraneous interference occurs while participating in distance learning	Peda- gogical faculty	Hu- manities faculty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tourism and Hotel– Restaurant Business		
No, nothing interferes	42.8	40.5	63.4	44.3		
Sometimes they occur, but are not disturbing much	36.6	34.6	17.1	35.4		
Often occur, but are not disturbing much	11.1	11.6	6.3	8.9		
Sometimes they occur, and are very disturbing	6.8	8.3	5.9	3.8		
Often occur, and are very disturbing	2.2	2.3	4.4	7.6		
Constantly occur and very disturbing	0.5	2.7	2.9	0.0		

 ${\it Table~49} \\ {\it The~nature~of~interference~for~students~in~settlements~of~different} \\ {\it types~during~participation~in~distance~learning,~\%} \\$

Extraneous interference oc-	Type of settlement				
curs while participating in distance learning	Uzhhorod, Mukachevo	Another regional town	Village, set- tlement		
No, nothing interferes	51.3	46.4	44.8		
Sometimes they occur, but are not disturbing much	24.6	38.1	32.6		
Often occur, but are not disturbing much	10.5	7.1	10.8		
Sometimes they occur, and are very disturbing	3.5	6.0	8.4		
Often occur, and are very disturbing	7.5	1.2	2.0		
Constantly occur and very disturbing	2.6	1.2	1.4		

 $Table\ 50$ The opinion of students of different years of study on the difficulties to access to the required basic educational literature on professional training, %

	Year of study					
Opinion	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
There are no difficul- ties, all the necessary educational litera- ture is available	61.0	63.1	66.4	77.0	57.7	69.4
There are difficulties in accessing educa- tional literature, but insignificant	30.7	25.6	21.8	19.9	26.0	24.5
Difficulties in accessing textbooks are great	5.2	7.1	4.3	3.1	5.8	4.1

 $Table\ 51$ The opinion of students of different years of study on the difficulties to access the required educational literature in non-core disciplines, %

	Year of study							
Opinion	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)		
There are no dif- ficulties, all the necessary educa- tional literature is available	51.5	48.8	55.5	44.0	56.7	51.0		
There are difficulties in accessing educational literature, but insignificant	36.8	35.1	30.8	35.6	22.1	30.6		
Difficulties in accessing textbooks are great	2.2	6.6	2.8	13.6	4.8	8.2		

 $Table\ 52$ The opinion of students of different years of study on the difficulties to access the required practical aids, %

	Year of study							
Opinion	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)		
There are no difficulties, all the necessary educational literature is available	42.4	46.4	47.4	40.8	29.8	46.9		
There are difficulties in accessing educational literature, but insignificant	35.9	26.2	29.9	39.3	45.2	30.6		
Difficulties in accessing textbooks are great	13.9	17.9	10.0	8.4	9.6	10.2		

 $Table\ 53$ The opinion of students of different faculties about the difficulties of access to the required basic educational literature on vocational training, %

	Faculty						
Opinion	Pedagogi- cal faculty	Humani- ties fac- ulty	Faculty of Economics, Management and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business			
There are no difficul- ties, all the neces- sary educational lit- erature is available	60.2	67.4	71.2	72.2			
There are difficulties in accessing educa- tional literature, but insignificant	28.2	25.2	20.5	19.0			
Difficulties in accessing textbooks are great	6.5	4.0	3.9	3.8			

 $Table\ 54$ The opinion of students of different faculties about the difficulties in accessing the required educational literature in non-core disciplines, %

	Faculty						
Opinion	Pedagogi- cal fac- ulty	Humani- ties fac- ulty	Faculty of Economics. Management and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business			
There are no difficul- ties, all the necessary educational litera- ture is available	43.6	60.8	48.3	54.4			
There are difficulties in accessing educa- tional literature, but insignificant	33.9	30.2	40.5	20.3			
Difficulties in accessing textbooks are great	11.1	3.0	1.5	5.1			

 $Table\ 55$ The opinion of students of different faculties about the difficulties in accessing the required practical aids, %

		Faculty							
Opinion	Pedagogi- cal fac- ulty	Humani- ties fac- ulty	Faculty of Economics. Manage- ment and Engineer- ing	Faculty of Tourism and Hotel- Restaurant Business					
There are no difficulties, all the necessary educational literature is available	35.8	50.8	44.9	39.2					
There are difficulties in accessing educa- tional literature, but insignificant	36.0	31.9	35.1	32.9					
Difficulties in accessing textbooks are great	18.4	8.3	6.8	8.9					

 $Table\ 56$ The opinion of students in different types of settlements about the difficulties in accessing the required core training literature, %

	Type of settlement						
Opinion Uzhhorod, Mu kachevo		Another regional town	Village, settle- ment				
There are no difficulties, all the necessary educational literature is available	63.6	67.3	66.3				
There are difficulties in accessing educa- tional literature, but insignificant	57.0	48.2	49.3				
Difficulties in accessing textbooks are great	46.1	38.7	42.7				

 $Table\ 57$ The opinion of students of different types of settlements about the difficulties of access to the required educational literature in non-core disciplines, %

	Type of settlement						
Opinion Uzhhorod. Mu- kachevo		Another regional town	Village. settle- ment				
There are no difficulties, all the necessary educational literature is available	57.0	48.2	49.3				
There are diffi- culties in access- ing educational literature, but insignificant	29.8	34.5	33.9				
Difficulties in accessing text-books are great	4.8	2.4	7.5				

Table 58 The opinion of students in different types of settlements about the difficulties in accessing the required practical aids (manuals), %

	Type of settlement						
Opinion	Uzhhorod, Mu- kachevo	Another regional town	Village, settle- ment				
There are no difficulties, all the necessary educational literature is available	6.6	6.5	3.8				
There are difficulties in accessing educational literature, but insignificant	4.8	2.4	7.5				
Difficulties in accessing textbooks are great	8.8	9.5	14.0				

Table 59 The share of students of different years of study who believe that in conditions of self-isolation the quality of knowledge in subjects has improved, %

	Year of study							
Academic subjects	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)		
The main qualification	46.1	38.7	42.7	46.1	38.7	42.7		
Non-core disci- plines	36.4	36.3	32.8	36.4	36.3	32.8		
Getting practical skills in the spe- cialty	8.8	9.5	14.0	8.8	9.5	14.0		

Table 60 The share of students of different years of study who consider that in conditions of self-isolation the quality of knowledge acquisition in subjects as a whole has not changed, %

	Year of study							
Academic subjects	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)		
The main qualification	55.4	62.5	64.9	53.9	71.2	53.1		
Non-core disci- plines	65.8	64.9	73.0	70.2	78.8	63.3		
Getting practical skills in the spe- cialty	40.3	42.3	49.8	31.9	56.7	51.0		

Table 61 The share of students of different years of study who consider that in conditions of self-isolation the overall quality of knowledge in subjects has deteriorated, %

	Year of study						
Academic subjects	1 year	2 year	3 year	4 year	5 year	Graduate de- partment (master's de- gree programs)	
The main qualification	15.2	19.6	9.5	14.1	9.6	8.2	
Non-core disciplines	12.1	19.0	14.2	11.5	10.6	10.2	
Getting practical skills in the specialty	40.3	41.7	39.8	47.1	36.5	32.7	

Table 62 The share of students from different faculties who believe that in conditions of self-isolation the quality of subject knowledge has improved, %

	Faculty						
Academic subjects	Peda- gogical faculty	Humani- ties fac- ulty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tour- ism and Hotel-Res- taurant Business			
The main qualification	26.8	15.9	18.0	25.3			
Non-core disciplines	7.0	9.3	13.2	2.5			
Getting practical skills in the specialty	5.7	6.0	14.1	5.1			

Table 63 The share of students from different faculties who believe that in conditions of self-isolation the quality of knowledge in subjects as a whole has not changed, %

	Faculty					
Academic subjects	Peda- gogical faculty	Hu- mani- ties faculty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel-Restau- rant Business		
The main qualification	57.5	68.4	53.7	57.0		
Non-core disciplines	72.1	71.8	60.0	72.2		
Getting practical skills in the specialty	36.0	54.2	42.4	39.2		

 $Table\ 64$ The share of students from different faculties who believe that in conditions of self-isolation the overall quality of knowledge in subjects has deteriorated, %

	Faculty					
Academic subjects	Pedagogi- cal faculty	Humani- ties fac- ulty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tourism and Hotel-Restau- rant Business		
The main qualification	10.0	11.3	24.4	10.1		
Non-core disciplines	8.4	13.6	22.0	13.9		
Getting practical skills in the spe- cialty	48.5	35.2	35.6	41.8		

 $Table\ 65$ The share of students in different types of settlements who consider that in self-isolation the quality of knowledge in subjects has improved, %

	Type of settlement					
Academic subjects	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment			
The main qualification	13.2	21.4	24.7			
Non-core disciplines	11.4	5.4	8.6			
Getting practical skills in the specialty	6.1	6.0	8.6			

 $Table\,66$ The share of students in different types of settlements who believe that in conditions of self-isolation the quality of knowledge in subjects as a whole has not changed, %

	Type of settlement				
Academic subjects	Uzhhorod, Mukachevo	Another regional town	Village, settle- ment		
The main qualification	58.3	60.7	60.6		
Non-core disciplines	60.1	70.2	72.9		
Getting practical skills in the specialty	41.7	43.5	44.1		

 $Table\ 67$ The share of students in different types of settlements who believe that in conditions of self-isolation the quality of knowledge in subjects has generally worsened, %

	Type of settlement					
Academic subjects	Uzhhorod, Mu- kachevo	Another regional town	Village, settle- ment			
The main qualification	25.4	14.3	8.4			
Non-core disciplines	21.5	15.5	9.5			
Getting practical skills in the specialty	42.5	41.1	40.3			

 $Table\ 68$ Equipment of students of different years of study for participation in distance learning, %

			Y	ear of st	udy	
Technical equip- ment	1 year	2 year	3 year	4 year	5 year	Graduate de- partment (master's de- gree programs)
Have a personal desktop computer	18.6	18.5	25.6	21.5	22.1	26.5
Have a personal laptop	59.3	54.2	53.1	64.4	67.3	65.3
Have a personal mobile phone or tablet	68.4	67.3	75.4	65.4	74.0	61.2
Do not have personal equipment, but it is in the family and can be used	8.2	9.5	9.0	2.6	3.8	4.1
They do not have personal equipment, but have taken it for temporary use from acquaintances, relatives, friends	0.9	0.6	0.5	0.0	0.0	0.0
They do not have personal equipment, but rented it	0.0	0.0	0.0	0.5	0.0	0.0

 $\begin{array}{c} \it Table~69 \\ \rm Equipment~of~students~of~different~faculties~for~participation\\ in~distance~learning,~\% \end{array}$

	Faculty			
Technical equipment	Peda- gogical faculty	Hu- mani- ties fac- ulty	Faculty of Economics. Management and Engi- neering	Faculty of Tourism and Hotel- Restaurant Business
Have a personal desktop computer	19.0	22.9	28.8	8.9
Have a personal laptop	60.7	62.5	52.7	57.0
Have a personal mobile phone or tablet	69.6	75.4	57.6	75.9
Do not have personal equipment, but it is in the family and can be used	8.1	2.7	5.9	19.0
They do not have personal equipment, but have taken it for temporary use from acquaintances, relatives, friends	0.5	0.3	0.5	0.0
They do not have personal equipment, but rented it	0.0	0.0	0.5	0.0

 $Table\ 70$ Equipment of students in various types of settlements for participation in distance learning, %

	Type of settlement				
Technical equipment	Uzhhorod, Mukachevo	Another regional town	Village, set- tlement		
Have a personal desktop computer	26.3	21.4	19.5		
Have a personal laptop	61.8	58.9	58.2		
Have a personal mobile phone or tablet	65.8	66.1	71.9		
Do not have personal equipment, but it is in the family and can be used	4.8	10.1	6.6		
They do not have personal equipment, but have taken it for temporary use from acquaintances, relatives, friends	0.4	0.0	0.5		
They do not have personal equipment, but rented it	0.4	0.0	0.0		

Table 71 The presence of problems of students of various years of training in the course of use technique while participating in distance learning, %

			Year	of study	y	
Problems	1 year	2 year	3 year	4 year	5 year	Graduate depart- ment (master's degree pro- grams)
There are no prob- lems, the equip- ment runs smoothly	38.1	42.9	37.0	54.5	54.8	51.0
There are problems, the technique is not new and sometimes (or often) "freezes up"	25.1	23.2	23.7	16.8	19.2	18.4
There are problems, the technique is not own and it is not always possible to use it for all the necessary period of time	2.2	3.0	4.7	2.1	3.8	0.0
There are prob- lems because there are interruptions (sometimes or often) with the In- ternet	45.9	39.3	52.1	28.8	35.6	40.8

Table 72 The presence of problems in the process of using technique while participating in distance learning by students of different faculties, %

	Faculty					
Problems	Pedagogi- cal faculty	Humani- ties fac- ulty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel- Restaurant Business		
There are no prob- lems, the equipment runs smoothly	40.4	44.5	46.8	57.0		

	Faculty				
Problems	Pedagogi- cal faculty	Humani- ties fac- ulty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel- Restaurant Business	
There are problems, the technique is not new and sometimes (or often) "freezes up"	25.5	16.3	22.9	22.8	
There are problems, the technique is not own and it is not always possible to use it for all the necessary period of time	2.2	3.3	2.9	5.1	
There are prob- lems because there are interruptions (sometimes or often) with the In- ternet	44.4	46.2	33.7	27.8	

Table 73 The presence of problems in the process of using technique while participating in distance learning by students of different settlements, %

	Type of settlement				
Problems	Uzhhorod, Mukachevo	Another regional town	Village, settlement		
There are no problems, the equipment runs smoothly	51.3	53.0	39.1		
There are problems, the technique is not new and sometimes (or often) "freezes up"	16.2	14.9	26.2		
There are problems, the technique is not own and it is not always possible to use it for all the necessary period of time	3.9	5.4	1.8		
There are problems because there are interruptions (sometimes or often) with the Internet	35.1	38.1	44.8		

Table 74 The presence of problems of training content perception by students of different years of study during distance learning, %

	Year of study					
Problems	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
There are no prob- lems, I managed to fully adapt to the distance learning	48.5	39.9	55.0	57.6	75.0	79.6
There are prob- lems due to the unusual percep- tion of the lecture (classes)	42.9	50.0	35.1	29.8	17.3	14.3
Problems are due to poor teaching	4.8	5.4	6.2	5.8	0.0	2.0
Problems are due to technical failures during teaching due to the fault of the teacher	1.7	1.8	1.4	3.1	0.0	2.0
Problems are due to technical failures during teaching due to the fault of the university technical service	5.6	6.5	7.1	4.7	4.8	0.0
The training content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text, does not have an interactive form)	8.2	7.1	6.6	5.8	1.0	2.0

Table~75 The presence of problems of training content perception by students of different faculties during distance learning, %

	Faculty				
Problems	Peda- gogical faculty	Hu- mani- ties faculty	Faculty of Economics, Management and Engi- neering	Faculty of Tourism and Hotel- Restaurant Business	
There are no problems, I managed to fully adapt to the distance learning	53.4	62.5	44.4	58.2	
There are problems due to the unusual perception of the lecture (classes)	38.2	29.9	43.4	24.1	
Problems are due to poor teaching	5.4	3.0	6.3	3.8	
Problems are due to technical failures during teaching due to the fault of the teacher	2.2	2.0	1.5	0.0	
Problems are due to technical failures during teaching due to the fault of the university techni- cal service	0.8	9.3	6.8	10.1	
The training content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text, does not have an interactive form)	8.1	3.7	5.9	6.3	

Table 76 The presence of problems of training content perception by students of different types of settlements during distance learning, %

	Type of settlement				
Problems	Uzhhorod. Mukachevo	Another regional town	Village. settlement		
There are no problems. I managed to fully adapt to the distance learning	42.5	57.1	59.0		

	Type of settlement					
Problems	Uzhhorod. Mukachevo	Another regional town	Village. settlement			
There are problems due to the unusual perception of the lecture (classes)	43.4	28.6	34.4			
Problems are due to poor teaching	5.7	3.0	4.8			
Problems are due to technical failures during teaching due to the fault of the teacher	0.4	2.4	2.2			
Problems are due to technical failures during teaching due to the fault of the university technical service	9.2	4.8	4.3			
The training content is poorly adapted for its broadcast in electronic form (insufficient visual material, bulky text. does not have an interactive form	7.5	6.0	5.6			

Table 77 Students of different years of study have concerns that as a result of distance education they will not receive the necessary quality education in the specialty, %

	Year of study					
Concerns	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Not at all concerned	18.2	22.6	17.5	28.8	27.9	49.0
In general, they are not concerned, but the probability of this is not excluded,	32.0	22.0	39.8	25.7	33.7	18.4
To some extent they are concerned, although much depends on them- selves	38.1	44.6	32.2	40.3	35.6	24.5

	Year of study					
Concerns	1 year	2 year	3 year	4 year	5 year	Graduate department (master's degree pro- grams)
Very concerned, but will do some- thing to avoid this	7.8	8.9	6.6	4.7	1.9	0.0
The quality of education in the specialty will defi- nitely be poor	3.9	1.9	3.9	0.5	0.9	8.1
Total concerned	49.8	55.4	42.7	45.5	38.4	32.6

 $Table\ 78$ Students of different faculties have concerns that as a result of distance education they will not receive the necessary high-quality education in their specialty, %

	Faculty						
Concerns	Pedagogi- cal faculty	Hu- manities faculty	Faculty of Economics, Manage- ment and Engineer- ing	Faculty of Tourism and Hotel-Restau- rant Business			
Not at all concerned	17.6 29.2		19.0	41.8			
In general, they are not concerned, but the probability of this is not excluded,	28.2	27.6	41.0	21.5			
To some extent they are concerned, although much de- pends on themselves	43.4	36.2	31.7	29.1			
Very concerned, but will do something to avoid this	7.9	5.3	4.4	5.1			
The quality of educa- tion in the specialty will definitely be poor	2.9	1.7	3.9	2.5			
Total concerned	54.2	43.2	40.0	36.7			

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