# CHANGES IN STUDENTS' LIFE AT SELECTED UNIVERSITIES IN CENTRAL AND EASTERN EUROPE DURING THE FIRST STAGE OF THE PANDEMIC

Zofia Kawczyńska-Butrym <sup>1</sup>, Victoriya Pantyley <sup>2</sup>, Marek Butrym <sup>3</sup>, Ganna Kisla <sup>4</sup>, Liudmila Fakeyeva <sup>5</sup>

 <sup>1</sup> Institute of Sociology, Maria Curie-Skłodowska University, Lublin, Poland
 <sup>2</sup> Institute of Socio-Economic Geography and Spatial Management, Maria Curie-Skłodowska University, Lublin, Poland

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ABSTRACT: The COVID-19 pandemic affected not only global economy and society, but also particular institutions, including those of higher education. The aim of the paper is to determine changes in students' life at selected universities in Poland, Ukraine, and Belarus. An online survey was applied, addressed to students of four universities in Poland, Ukraine, and Belarus (n=380). As a result of the pandemic, more than 46% of students declared worsening of their material situation. In comparison to the period before the pandemic, the respondents observed appearance or intensification of various psychosomatic symptoms, and a 12 percent point decrease in the assessment of their own health. The comparative analysis showed similarities between students' life preferences, plans on university education, and differences in their material situation, health, and employment.

Keywords: student, COVID-19, employment, health, material situation

Corresponding author: Viktoriya Pantyley, Institute of Socio-Economic Geography and Spatial Management, Maria Curie-Skłodowska University in Lublin, ul. Kraśnicka 2d, 20-018 Lublin, Poland; e-mail: viktoriya.pantyley@mail.umcs.pl

### Introduction

The pandemic has changed several aspects of social life around the globe. It affected both the situation in higher education and the labour market, and students appeared to be one of the most vulnerable groups of the population, suffering in material, health and psychological aspects due to closing down or restriction in various sectors of the economy in the countries around the globe

with a different socio-economic development level. This led scientists to study changes in students' living situation and employment status resulting from the pandemic in many countries (Brammer, Clark 2020; Berezhna, Prokopenko 2020; Pravat 2020; Sokolovskaya 2020). Another aspect of the study was whether the COVID-19 pandemic changed students' plans concerning the continuation of university education, which is one of the crucial life decisions affecting their





<sup>&</sup>lt;sup>3</sup> Faculty of Social and Economic Sciences, Cardinal Stefan Wyszyński University in Warsaw, Poland

<sup>&</sup>lt;sup>4</sup> Faculty of Socio-Economic Education, National Pedagogical Dragomanov University, Kyiv, Ukraine <sup>5</sup> Business School, University of Edinburgh, United Kingdom

future. It can be assumed that the pandemic drew attention to the possibility of online studies offered by universities and the importance of students' employment, particularly in the context of unemployment causing difficulties in funding higher education. Even before the pandemic, in many countries (EUROSTUDENT VI, 2018), including Poland (Portfel studenta, 2020), an increase in the cost of living of studying youth could be noted. Many researchers has become interested in whether and to what extent students' material situation during the pandemic has been affected by the general situation in the labour market available to them and whether it has influenced their plans to continue or drop out of education.

The changes caused by the pandemic need to be considered through students' self-assessment of the material conditions and their main activities compared to the pre-COVID-19 reality. In the pre-pandemic period, students' situation was analysed in many studies, and the primary area of activity next to studying was employment, treated as a characteristic feature of modern higher education (Hauschildt et al. 2015). The cyclical survey programme EUROSTUDENT has been particularly important for determining the current material and employment status of students since 2000. The programme's objective is to show students' social and economic situation and funding sources considering the data that can be compared across countries. Although initially the programme targeted students from the countries of the European Union, in 2012–2015, it also included students from Ukraine, Belarus, Russia and Georgia (Hauschildt et al. 2015). The survey conducted within EUROSTUDENT showed that the majority of students on average came from well-off families. The countries with the highest percentage of families with poor and average material status are Croatia, Ireland, Romania and Turkey. The highest proportion of students indicating their parents' material status as very good is from Sweden and the Netherlands (Hauschildt et al. 2018: 47). Regarding their financial situation, >60% of students experience moderate financial difficulties. The worst situation in this aspect is observed in Albania, Georgia, Iceland, Ireland, Poland and Slovenia (Hauschildt et al. 2018: 146). The level of students' income was the highest in the Netherlands and Switzerland (>1,100

Purchasing Power Standard). Student groups particularly affected by financial difficulties are (1) those whose parents have a poor financial situation, (2) students with health problems and impairments, and (3) those who depend on national public student support. On average, 69% of the employed students work to cover their living costs (Combining studies and paid jobs... 2018). Half of them claim that they would not be able to afford to study without their jobs. Countries with the highest percentage (80-92%) of students working to fund their living are Finland, Norway, Ireland and Denmark, and those with the lowest percentage are Ukraine (29%), Bosnia and Herzegovina (34%), Serbia and Montenegro (Hauschildt et al. 2015). During the pandemic, surveys conducted on a sample of 17,116 respondents from 41 European countries showed that approximately 11.5% of students experienced severe and almost 23% moderate financial difficulties (Student Life... 2020) regarding the education costs. When it comes to employment, 28.9% of students lost their jobs temporarily during the pandemic, whereas 12.2% lost their jobs permanently. This represents a risk factor for those who need to work to cover the costs of their studies. However, it was pointed out already before the pandemic that in Poland (EUROSTUDENT VI, 2018; Portfel studenta, 2020) and in other countries (Hauschildt et al. 2018), costs incurred by the academic youth were increasing. It became even more interesting whether and to what degree students' material situation during the pandemic was affected by the general situation in the labour market and changes in the functioning of universities in many countries.

In 2020, one more study appeared, showing various aspects of students' life in the European Higher Education Area (EHEA) region during the COVID-19 pandemic (Student Life... 2020). The aforementioned analysis included students' material situation during the pandemic, changes in their well-being and health ailments most characteristic of the period in the EHEA region.

Apparently, the most important lines of research on the situation of students in the pre-pandemic period, discussed in the literature were (1) satisfaction with students' life, in combination with life goals, (2) life values and priorities, and (3) the quality of life and material conditions. On the other hand, the pandemic factor highlighted

the importance of examining students' health conditions (both in physical and mental terms) and the impact of online or hybrid studies on their future study plans, financial situation and life plans.

Our paper analysed, among other things, the material situation of students in Poland, Ukraine, and Belarus during the pandemic, as well as changes in their well-being and most characteristic health ailments of the period. The choice of the research subject was not accidental. The countries studied-Poland, Ukraine, and Belarushad a similar socio-economic situation in the early 1990s. However, the transition period in the countries considered went on in different ways and led to different development trajectories. Poland went through a relatively fast period of social, economic and institutional transformation and joined the EU in 2004. As a result, positive changes evolved in various spheres of socio-economic life, including students' life. On the other hand, in both Ukraine and Belarus the socio-economic and political transition has been protracted and characterised by a number of political, social, demographic and economic issues. These issues have had a destructive impact on the human and social capital of the younger generation. At the same time Belarus and Ukraine differ in political trajectories, economic development, and social policy, what is notable in various aspects of students' life discussed in this article.

In the period before the pandemic, the situation of students was analysed in many studies, but little attention was paid to the well-being and health problems of the students in the EHEA. The authors fill this gap by presenting the results of the research conducted at four universities: in Poland – at the Marie Curie-Skłodowska University in Lublin, in Ukraine – at the National Pedagogical Dragomanov University in Kyiv and in Belarus - Belarusian State University in Minsk, and Belarusian State University of Informatics and Radioelectronics in Minsk. Our research disclosed that students in Poland, Ukraine and Belarus were seriously affected by the COVID-19 pandemic in terms of losing employment, changing plans on university education and serious deterioration of the material situation and health status. The comparative analysis of the aforementioned aspects of students' life shows some similarities and differences among the analysed

countries, but the scale of the destructive influence of the pandemic on all the investigated aspects of students' life was considerably high in all countries, including Poland, Ukraine and Belarus that are considered in our research.

Preliminary results of the study have already been published in Geographia Polonica, vol. 94, issue 3 (pp. 429-440) (Kawczyńska-Butrym et al. 2021), and this manuscript contains an expanded version of the analysis (in terms of regions/cities and socio-demographic groups of respondents). It concerns such areas of students' life as employment, material situation, further education plans, life preferences, as well as health conditions. The article also contains an extended theoretical introduction about the distinctive features of the first wave of the pandemic, discussion threads and literature on the subject. It also gives a summary of the research results in the context of the duration of the first wave of the pandemic in the countries considered.

The authors are aware that the presented results cannot be directly compared with the results of the large representative studies mentioned above (e.g. EUROSTUDENT; Student Life... 2020). However, they demonstrate the current trends that affect different aspects of students' life situation during the first wave of the pandemic in the countries considered.

# Students in Poland, Ukraine and Belarus before the pandemic: Selected aspects of the analysis

In recent years, the number of working students has been increasing (Orr et al. 2011). Although there has been a long record of poorer students taking up employment (Lenart 2014), it is only recently that students' paid jobs have become a focus of research interest.

This interest is largely due to an increase in students' double engagement (studies and work). According to the EUROSTUDENT data, the growing number of students seek employment. It is one of their primary income sources and the basis of making a living while studying. Clearly, it is supplemented by the support of families, constituting 46% of students' income, and other sources: scholarships, rewards, subsidies – 11%, and student loans – 9% (Hauschildt et

al. 2018). In many countries, next to the family's support, a significant source of financing university education is loans taken out by students or their families (Pravat 2020). At the same time, it has been emphasised that employment considerably improves the general standard of students' life, secures fees required during studies, and therefore often makes it possible for the students to study themselves. Student employment, however, is considered not only a fundamental source of covering living and education costs but one of the modern student lifestyles increasing human capital. It has been also stressed that student employment plays an essential role in obtaining professional competencies and facilitates entering the labour market after graduation. The analysis of employment and life strategies of students in our survey would not be complete without considering their health condition, even though the question of their health has been entirely overlooked in the cyclical survey of the EUROSTUDENT programme mentioned above. It has only become a subject of research in the EHEA countries during the pandemic (Student Life... 2020).

Irrespective of EUROSTUDENT, students' socio-economic situation and employment are also the subject of research in the three countries of our interest: Poland, Ukraine and Belarus. The results of such research are presented, among others, by Godlevska and Grečaniuk (2008), Bącik et al. (2010), Rekowski and Zubrzycka (2015), Marozau and Apanasovich (2016), Ostoj (2016), Parchomiuk and Zubrzycka-Maciąg (2017), Ignatovitch et al. (2018), Zimolzak and Bodzon (2019), Sokolova (2019) and Lebedevich (2019).

#### **Poland**

Poland has also seen a recent increase in the number of students active in the labour market. Eurostat data from the end of 2007 highlight the considerably lower activity of Polish youth compared to their peers in western countries. Yet in 2013, two out of five full-time students have both studied and worked. The EUROSTUDENT IV survey additionally informed that only students from Portugal spent more time working than studying per week compared to Polish ones (Orr et al. 2011; Lenart 2014: 125). Surveys of the Polish Business Roundtable from 2017 showed

that almost 80% of the respondents did some form of work, emphasising that only 41% were in contract-based employment (SW Research, 2017). According to a survey from December 2019, 82% of students worked, although this appears to depend on their field of studies. One in five working students attended an economic or business major, 12% humanistic or artistic, and 11% environmental/mathematical/statistical or IT/ICT (SW Research, 2019). The comparison with data from 2007 shows a general increase in Polish students' employment in recent years.

#### Ukraine

Data from Ukraine lead to similar conclusions. According to researchers (Sokolova 2019), before the pandemic, Ukrainian students met the requirements of the domestic labour market because of an increasing demand for part-time employees with incomplete qualifications, which favoured student employment. Surveys of the International Labour Office (PL: MOP) within the programme for employment of young people confirm this observation. It turned out that 30% of young people combined studies with work (Libanova et al. 2014). According to another survey, 37% of students were employed (Kogut et al. 2016). The highest share of student employment was recorded in the survey by Sokolova (2019) conducted among students from the regional units of East Ukrainian V. Dahl National University (Luhansk, Severodonetsk, and Rubizhne). The scale of student employment increased with years spent at the university, with 61% of students working during the first year, 67.5% during the second year and 84.4% during the third year.

#### Belarus

Researchers from Belarus, in turn, revealed students' low activity in the labour market before the pandemic (Lebedevich 2019: 230–231). However, there has been a recent change to this situation. Increasingly fewer students are not employed during their university education. In 2009, 42.26% did not have jobs, and in 2016, only 30.3% (Vankevich, Korabava 2019: 122). The form of employment also varied. Among full-time students, 44.3% were employed full-time, 7.8% part-time,

and slightly over 8.5% worked only during summer holidays (Vankevich, Korabava 2019: 122). In 2017, the highest number found jobs in commerce (20.9%), car renovation (11.4%), in the field of information and communication (11.5%) and one in ten (10.2%) in arts, sports, tourism and recreation (Lebedevich 2019: 232). At the same time, Belarusian students were more engaged in entrepreneurship than their Polish and Ukrainian peers. Such an activity took place in many areas of the economy, e.g. in retail, computer renovation, car renovation and technical service, hair and beauty salons and in construction (Ignatovitch et al. 2018). Data from 2016 showed that more than one in five students (22.9%) in Belarus were engaged in entrepreneurship and 7% of students had their own businesses. This share was only slightly lower than the average values for such activities worldwide (8.8%) and placed Belarus in the 29th place in the global ranking of students' engagement in individual business activity (Marozau, Apanasovich 2016: 38).

Before the pandemic, the level of work activity also inspired researchers' interest in the students' motives. Surveys conducted by different authors revealed their complex character. On the one hand, these were financial reasons, including the will to relieve parents from the financial stress and, on the other hand, the will to obtain professional experience. Many Polish surveys pointed to the greater importance of financial motives than those related to professional development (Ostoj 2016; Parchomiuk, Zubrzycka-Maciąg 2017; PARP 2019). The surveys conducted in Ukraine show a different situation. Ukrainian students declared the motive of professional development more frequently than Polish students. They also paid more attention to the features and conditions of employment that allowed them to combine studies with work, such as flexible working hours (Kogut et al. 2016). However, the financial aspect was not neglected either. Students paid attention to the low purchasing power of scholarships and the need to pay for their studies (Godlevska, Grečaniuk 2008; Kogut et al. 2016; Sokolova 2019). Therefore, in the three analysed countries, the common factor leading to student employment proved to be their difficult material situation (Bacik et al. 2010; Szlendak, Lemska 2010; Portfel studenta, 2019), as confirmed by survey results in other countries (Orr et al. 2011).

The cited data emphasised that the material situation of many students was not at all satisfactory before the pandemic itself. This led to the question what changed in their situation when the pandemic and the resulting limitations to the activity of a number of economic sectors suddenly made the labour market function in a different/impossible way, and what changed in the social and life situation as well as health of students as a result of the pandemic (Education during pandemic... 2020).

In particular, the issue of their health was completely left out in the EUROSTUDENT cyclical study we cited earlier. It became the subject of scientific research in the EHEA countries only during the pandemic (Student Life... 2020).

# Study objective and problems

This paper does not formulate a research hypothesis but indicates the main aim and questions of the study. The research objective was to determine if and to what extent the material situation of students has changed, whether it co-occurred with loss of employment, worsening of health self-assessment, declaration of a change in life orientations and plans regarding the continuation of university education.

The study covered the following questions:

- Did the students' self-assessment of the material situation change during the pandemic?
   Did such a change co-occur with the loss or limitation of employment?
- Did the plans regarding the further course of studies change during the pandemic, and if yes, in what way?
- Was a change in declared life preferences of the respondents observed?
- Did the self-assessment of the health condition change (positively or negatively) during the pandemic?

# Study course, study method and characteristics of the study group

The COVID-19 pandemic sparked research into changes it caused among students from the countries considered in its first months. The survey was conducted among students of universities

representing four academic institutions: Maria Curie-Skłodowska University in Lublin (UMCS, Poland), National Dragomanov Pedagogical University in Kyiv (UD, Ukraine), Belarusian State University in Minsk (BSU, Belarus), and Belarusian State University of Informatics and Radioelectronics in Minsk (BSUIR, Belarus).

Owing to the pandemic-related restrictions on direct contact, an online survey was used. The original survey was built using the Computer Assisted Web Interview (CAWI) method and contained 20 questions (including the metric ones). The questionnaire was sent to the students of the four mentioned universities. In line with the formulated research questions, the survey included several question blocks that concerned plans for continuing education, livelihood during the studies, paid work, life preferences and a comparison of health and psychosomatic symptoms during the first period of the pandemic. Metric questions were put at the end of the survey. The study started in mid-June, at the end of the semester, which was partly online due to the pandemic. The survey was completed in mid-July, after the end of the academic year. The period was not optimal for conducting the survey, as it was the end of the term with the subsequent tests, exams and defences of theses – all held online. Still, we wanted to capture the changes in students' situation in the first period of the pandemic. At the time, we did not predict its further stages and longer duration.

The research conducted was only a pilot study and covered the first period of several months

Table 1. General characteristics of respondents in Lublin, Kyiv and Minsk, n = 380.

Variable	Value of variable	Total number	Share of respondents (%)
Gender	Females	280	73.7
	Males	100	26.3
Country of origin	Poland	182	47.9
	Ukraine	133	35.0
	Belarus	65	17.1
University	UMCS	221	58.2
	UD	114	30.0
	BSU and BSUIR	45	11.8

Source: results of own survey.

BSU – Belarusian State University in Minsk; BSUIR – Belarusian State University of Informatics and Radioelectronics in Minsk; UMCS – Maria Curie-Skłodowska University in Lublin; UD – National Dragomanov Pedagogical University in Kyiv.

(March-July 2020). It was aimed at identifying the preliminary trends in the pandemic-caused changes in the life situation of students in the three countries studied. A further objective was to set the scope of further research among the students in those countries and draw in-depth comparisons among them concerning the subsequent periods of the pandemic. The online nature of the survey did not permit controlled sample selection. Due to the lack of representativeness of the groups of respondents, the relatively low number of returned questionnaires (380), and the number of variables from the selected academic centres, statistical tests could not be applied and it was limited to a per cent analysis. The general characteristics of the respondents are provided in Table 1.

It should be added that the research also involved foreign students studying outside their country of origin at the universities considered. Hence the differences between the number of students studying in Minsk and the total number of students from Belarus, the number of students studying in Kyiv and the total number of students from Ukraine. These differences allowed establishing that 45 students were studying outside their country of origin. The surveys returned were too few to provide a basis for formulating a separate research problem. However, it was assumed that the pandemic is more emotionally burdensome for young people studying in a foreign country (foreign students) than for young people studying in their country of origin. It can be either the result or the cause of the change in the students' situation that we considered. The results obtained should be regarded as a signal and are not subject to generalisation. Likewise, our whole research, due to the limited participation, cannot be compared with the results of studies involving much larger groups of students.

## Study results

#### Material situation in the context of job loss

The survey showed that the participating students usually experienced worsening of their material situation during the pandemic (46.6%). They recognised it primarily as a partial deterioration (32.1%), and less frequently—considerable

Direction of change	UMCS	UD	BSU and BSUIR	Domestic students	Foreign students
Considerable deterioration	11.4	23.9	8.9	14.5	15.9
Partial deterioration	30.0	37.6	33.3	31.5	40.9
No change	44.5	29.4	46.7	41.5	9.3
Partial improvement	13.2	7.3	11.1	11.2	11.4
Considerable improvement	0.9	1.8	0.0	1.2	0.0

Table 2. Respondents' material situation in Lublin, Kyiv and Minsk, % (n = 380).

Source: own elaboration based on survey results.

BSU – Belarusian State University in Minsk; BSUIR – Belarusian State University of Informatics and Radioelectronics in Minsk; UD – National Dragomanov Pedagogical University in Kyiv; UMCS – Maria Curie-Skłodowska University in Lublin

deterioration (14.5%) (Table 2). More than one in ten students declared an improvement in their material situation (12.2%). It requires explanation if it was related to classes being held online and to limited expenditures on basic living costs and rent.

There was also a difference between the assessment of changes concerning respondents studying in their country of origin and those studying abroad. The majority of foreign students declared worsening of their material situation (in total, both considerable and partial, 56.8%) more frequently than students from the country of their origin (46.0%). Foreign students also more often declared lack of changes (39.7% and 9.3%, respectively).

At the first stage of the pandemic, when the survey was conducted, worsening of the material situation was caused, among others, by pandemic-related limitations on a number of financing sources widely used by students. The pandemic primarily limited student employment and their business activity, although the latter was inconsiderable. Support from parents and the use of bank loans and private loans increased (Fig. 1). The situation in this aspect was similar for students from Lublin and Minsk, while for students from Kyiv, the situation practically didn't change in terms of their source of income during the pandemic.

On the question of whether respondents worked before and during the pandemic, the difference was 26.3 pp (56.3% before, 30.0% during the pandemic). The highest share of students who lost their jobs during the pandemic was from Kyiv (difference: Kyiv 51.3 pp, Lublin 32.4 pp,

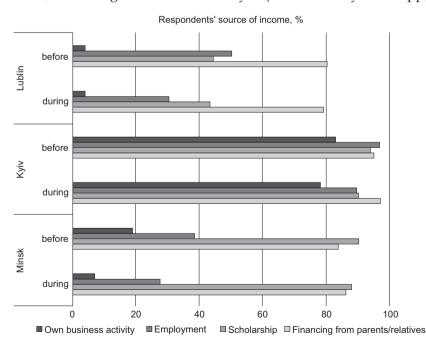


Fig. 1. Students' source of income and employment in Lublin, Kyiv and Minsk before and during the pandemic, % (n = 380).

Source: results of own survey.

Minsk 16.6 pp). A decrease in employment was generally manifested in such industry sectors as services (by 14.7 pp), catering (by 9.3 pp), commerce (by 8.7 pp) and exceptionally in tourism (by 4.2 pp). These sectors suffered the most during the pandemic, being subject to lockdown at least for a part of the period.

Differences were also observed between local and foreign students. In this case, loss of employment was more frequently declared by local (loss by 27.5 pp) than foreign students (loss by 17.7 pp). These results also require explanation through a more thorough survey.

# Plans concerning the continuation of university education

According to the respondents, students' material situation worsened during the pandemic, which naturally brought up the question about changes in plans for continuing university education. The majority of respondents declared not to change their plans (65.8%), and no considerable differences were observed between students from the universities subject to our sociological research. It was only a minor part of respondents that declared to leave university (4.8%). A considerable number of students planned temporary suspension of education (16.8%). In total, full or partial discontinuation of further studies was indicated by more than one in five surveyed students (21.6%). In the context of the analysed universities, the highest share of students planning temporary or permanent discontinuation of studies is observed among the surveyed students of UD (21.9% and 6.1%, respectively).

Changes in the plans of foreign students studying in Poland revealed another aspect of the issue. Out of 45 foreign students from Belarus (21) and Ukraine (24) studying in Lublin, six of them (three from each country), i.e. 13.3%, considered dropping out of education outside their country of origin.

### Life preferences

One of the research trends regarding the issue of life satisfaction is the analysis of what constitutes the meaning of life and a sense of happiness. Some find the meaning of life in pleasures (hedonists), and others in important, although difficult life goals (eudaemonists). According to the research, the level of satisfaction with life is different for different representatives of both life orientations (Drewnowski 2008). Eudaemonists feel happier than hedonists, and "the hedonistic approach to striving for happiness does not favour obtaining happiness and better quality of life" (Diagnoza społeczna, 2013: 191). It is also common knowledge that the sense of happiness and quality of life, as well as satisfaction with life, have an impact on human health. A question remains whether the pandemic contributed to a change in life orientations. Before the pandemic, declarations of respondents showed a prevalence of the eudaemonistic (53.9%) over hedonistic orientation (46.1%) by 7.8 pp. During the pandemic, the dominance of the orientation towards important life goals in the whole research sample increased by 13.4 pp. (from 43.2% to 56.6%) (Table 3).

This suggests that a change of life orientation during the pandemic concerns only a part of the students participating in the survey. The majority of them, however, declared no such changes. Perhaps "in conditions of a threat, people [...] focus on more important things, and appreciate what they disregarded before" (Długosz 2020a: 18). This statement is in line with the data showing

Table 3. Students' life preferences in Lublin, Kyiv and Minsk before and during the pandemic, % (n = 380).

Time/difference	Pleasures,	wealth and lack	of stress, %	Achieving important life goals despite difficulties, pain and sacrifice, %			
	BSU and BSUIR	UD	UMCS	BSU and BSUIR	UD	UMCS	
Before pandemic	55.6	53.5	40.3	44.4	46.5	59.7	
During pandemic	51.1	40.4	43.4	48.9	59.6	56.6	
Difference	-4.5	-13.1	+5.9	+4.6	+13.1	-3.1	

Source: own elaboration based on survey results.

BSU – Belarusian State University in Minsk; BSUIR – Belarusian State University of Informatics and Radioelectronics in Minsk; UD – National Dragomanov Pedagogical University in Kyiv; UMCS – Maria Curie-Skłodowska University in Lublin.

that while 88% of students from Krakow in a situation of threat attempt to ensure safety against COVID-19, in the same situation, 40% pray to God, i.e. appeal to a higher force (Długosz 2020a: 20).

The analysis of changes declared by students of the considered universities primarily showed a difference in life orientations for students from Kyiv. Most frequently they confirmed a change in their life orientation from hedonistic to important life goals (by 13.1 pp). Our research proved that general differences in the frequency of changes in life orientations of local and foreign students were inconsiderable.

#### Health condition of students

According to research from different parts of the world, the pandemic situation contributed to a considerable decrease in the health potential of young adults, including studying youth (Aucejo et al. 2020; Długosz 2020ab; Khan et al. 2020; Odriozola-González et al. 2020; Student Life... 2020; Isralowitz et al. 2021).

The analysis of factors affecting the level of health during the pandemic frequently mentions both the unfavourable effect of stress and different types of emotional stress and anxiety. The analysis of the situation of students during the time draws attention to two factors, among other things: stress related to the loss of employment and switching to distance studying, which so far proves more time-consuming than studying at the university (Bartosiewicz 2020).

Students were directly asked to do a general health self-assessment before and during the pandemic. They were also asked about ailments and health problems that had appeared or intensified. The pandemic proved to have a destructive effect on students' state of health. Respondents assessed the state of their health as very bad or bad twice more frequently than before the pandemic (currently at 6% and before the pandemic 2.9%). The share of students assessing their state of health as good and very good decreased by >12 pp (it is currently only 61.6%, while before the pandemic, it was 73.7% of respondents). Meanwhile, comprehensive results of surveys regarding the state of health of people in Poland, conducted by Statistics Poland in 2014, showed that the share of persons aged 15-29 assessing

the state of their health as bad or very bad was only 1.5%, and good and very good – >90% (Stan zdrowia ludności Polski... 2016).

In the context of the studied universities, the self-assessment of health before the pandemic was the most negative in the case of students from UD (4.4% of respondents declared that their state of health was bad and very bad), and the most positive—for students from UMCS (2.7%). At the same time, in the case of students from Belarusian universities, the share of respondents assessing their state of health as good and very good was the highest (75.6%), while the equivalent value among the surveyed students from UD was at a level of 65.0%. The assessment and the value distribution considerably changed during the pandemic for students from different universities. The self-assessment of the state of health became the most negative among the students from UMCS (9% of respondents in the categories of bad and very bad state of health), and the most positive for students from UD (approximately 2% of respondents declared their state of health to be within the categories of bad or very bad). At the same time, students from UMCS showed the lowest share of respondents assessing their state of health during the pandemic as good and very good (<60%), whereas the equivalent value among students from UD exceeded 65% (Fig. 2).

Among the pandemic health-related problems mentioned in the questionnaire, the respondents most frequently reported the occurrence or intensification of anxiety (a total of 45.3% of respondents), depression (44.5%), irritability (40.5%,), fatigue (36.6%), general indisposition (35.2%) and

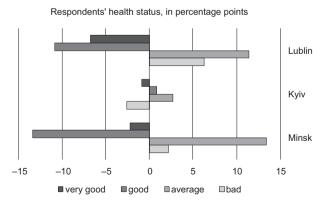


Fig. 2. Self-assessment of the respondents' state of health in Lublin, Kyiv and Minsk before and during the pandemic, percentage points (n = 380).

Source: own elaboration based on survey results.

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Students' health status	Domest	ic students, n = 33	5	Foreign students, n = 45			
	before pandemic	during pandemic	difference	before pandemic	during pandemic	difference	
Bad and very bad	3.0	6.0	+3.0	2.2	6.6	+4.4	
Average	22.7	32.5	+9.8	24.4	24.4	0.0	
Good and very good	73.7	60.6	-13.7	73.3	68.9	-4.4	

Table 4. Self-assessment of health by domestic and foreign students in Lublin, Kyiv and Minsk before and during the pandemic, % (n = 380).

Source: own elaboration based on survey results.

insomnia (25.2%). In the context of the universities investigated, students from UMCS found themselves in a substantially worse situation according to all the parameters analysed above. Other health issues included dry eye syndrome, atopic dermatitis, weight gain, limited physical fitness and breathing issues. Domestic students declared an increase in negative and average assessments of their own health, which was considerably higher (in total by 12.8 pp) than foreign students (by 4.4 pp) (Table 4).

Note that when we analysed all health symptoms, domestic students declared their occurrence more often than foreign students (except for insomnia).

Contrary to the expectations, young people proved to be the most sensitive age group in terms of the effects of the pandemic on the psychological health of the population. The broadscale sociological research of the Pew Research Center in the USA showed that in the age group of 18–29, a high and medium stress level was experienced by 61% of respondents (Pew Research Center, 2020). Research conducted by Długosz (2020a, b) in March 2020 on a sample of 3,500 students in Krakow and in June 2020 on a sample of 1,927 students showed considerable worsening of their physical condition during the pandemic (Długosz 2020b).

## Discussion and conclusions

As emphasised in the introduction, the global character of the COVID-19 pandemic has changed many aspects of life and functioning of higher education and has definitely affected the situation of students. Publications that analyse the situation related to the COVID-19 pandemic highlight a broad range of changes in higher education institutions, as the pandemic forced the abandonment of the previous form of study

(Pravat 2020). Online education was introduced at universities, which weakened national and international academic mobility (Pravat 2020: 80), and influenced both students and university employees in many ways. According to the author cited above, remote education will continue. There is a general opinion that the system of higher education will never be the same after the pandemic (Štychno et al. 2020). Due to the transition to online classes, students from Canada also expect a decrease in the value of the obtained diploma after graduation compared to its value in the years preceding the pandemic (Firang 2020).

On the other hand, attention has been paid to the possibility of intensification of financial problems of students and their families. Growing expenditures of an average student and increasing total costs of studying were revealed already before the pandemic (Hauschildt et al. 2018). They were recognised as a reason for the increasing incidence of taking up employment. The situation worsened because the COVID-19 pandemic affected students' finances (Portfel studenta, 2020: 23), reduced their savings (ibid. p. 27) and changed their employment situation. One of the groups of employees most affected by COVID-19 was students working before the pandemic (Bartosiewicz 2020). The increasing costs of studies and loss of income from employment have resulted in a worse material situation of students as compared to the pre-pandemic level (Rudke 2020). This unfavourable change can be considered a crisis. Thus, we can refer to earlier research, as the 2008 economic crisis similarly affected the life situation of students in Portugal (Cairns 2011). The debt crisis became an additional financial problem. It resulted from the loss of employment by some working students and caused difficulties in payment of the loans they or their families obtained for education (Pravat 2020: 80). Both situations, i.e. financial difficulties and the change in the functioning of universities, contribute to limiting the students' international and domestic mobility (Student Life... 2020), which has been confirmed by the results of our survey. Students declare changes of plans concerning the continuation of education (permanent or temporary suspension of studies or discontinuation of studying abroad). Moreover, students are disturbed by the universities' pricing policy (the same education fee irrespective of the form of classes). This factor additionally contributes to the decision about leaving university, as foreign students have difficulty in finding employment to finance their education abroad (Firang 2020).

The following conclusions summarise the results of our survey:

- 1. In three academic centres, before the pandemic, students participating in the survey assessed their material situation relatively negatively. During the pandemic, 46.6% declared its worsening. Foreign students declared the deterioration of their material situation more frequently than domestic students (56.8% and 46.0%, respectively). In many cases, this co-occurred with loss of employment: 26.3% out of the total of previously employed students lost their jobs. However, loss of employment was reported more frequently by domestic (27.7%) than foreign students (17.7%).
- 2. During the survey conducted in the first period of the pandemic, students declared a change of plans concerning the continuation of university education: 16.8% of respondents considered a temporary suspension, and 4.8%—a permanent discontinuation of education. Since the online survey did not ask about the causes, future surveys should address and explain this issue.
- 3. In the course of the first stage of the pandemic, no considerable changes were observed in the general life preferences of students. Only students from Kyiv (13.1 pp) declared more significant changes. Nonetheless, further analysis of the problem of changes in life preferences appears necessary. As determined in the cited literature, life preferences affect a sense of satisfaction with life.
- During the COVID-19 pandemic, a significant deterioration of students' health condition was recorded. The following ailments appeared or intensified: anxiety (a total of 45.3% respondents), depression (44.5%), irritability

- (40.5%), fatigue (36.6%), general indisposition (35.2%) and insomnia (25.2%). Domestic students declared an increase in negative and average assessments of their health much more frequently than foreign students. Also, in the case of all the analysed ailments, domestic students declared their occurrence or intensification more frequently than foreign students (except for insomnia). Therefore, the survey did not confirm the research hypothesis stating that foreign students declare worsening of self-assessment of health and a higher incidence or intensification of ailments and symptoms. Surveys among foreign students in Canada suggest similar conclusions (Firang 2020). It may result from a greater psychological and emotional stability of foreign students in the conditions of different critical situations, with simultaneous greater sensitivity to social and economic external influences, particularly financial.
- 5. From the signal analysis perspective, it can be added that foreign students declared the deterioration of their financial situation more often than local ones, although domestic students (27.7%) reported the loss of jobs more often than their foreign peers (17.7%). Moreover, domestic students indicated an increase in unfavourable and average assessments of their own health more often than foreign students.

The research requires continuation and extension (particularly in the context of health condition of studying youth, i.e. human and social potential directly determining socio-economic development and the future of the analysed countries). Moreover, it appears necessary to identify problems related to the later, intensified waves of COVID-19 infections. Owing to an increase in the differences between the first and the later waves of the pandemic, stricter limitations on mobility in all the analysed countries, as well as the intensification of the effect of other factors on the health and well-being of students and their life plans (political and migration crisis in Belarus, threat of war and annexation in Ukraine, transition to online education in all the analysed countries, signalled worsening of the emotional condition of students during the later stages of the pandemic in comparison to the first one), further research priority regards competitiveness of students in the labour market. In addition, it would be necessary to consider the migration activity of foreign students in the context of remote studying, the internationalisation of universities and the assessment of the socio-economic contribution of foreign students in their country of education.

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