Russian Students' Ideas About the Quality of Life: Transformation Under the COVID-19 Pandemic

Irina S. Morozova Kemerovo State University

Alexander Yu. Prosekov Kemerovo State University

Anna V. Mukhacheva Plekhanov Russian University of Economics

> Ksenia N. Belogai Kemerovo State University

> Julia V. Borisenko Kemerovo State University

The paper views change in Russian university students' ideas about the quality of life during the pandemic. This empirical longitudinal study involved 107 first-year students of Kemerovo State University. To identify their ideas about the quality of life, R. S. Eliot's Quality of Life Index was used in the Russian language adaptation by N. E. Vodopyanova. The students were surveyed at the beginning of the online learning mode (April 2020), after 8 months of online classes, and upon switching back from online learning (September 2021). The initial sampling demonstrated the students' average extent of satisfaction with their quality of life during the lockdown. Among the problems they reported a poor ability to organize their own time, to act in difficult and changing circumstances, to control emotions. The students' satisfaction with personal relations and studies, in general, remained high. In the autumn of 2020, a significant decrease in most indicators under study was found in the surveyed group. In September 2021, the students showed positive trends in the parameters in question.

Keywords: subjective quality of life, pandemic, students, long-term study, perception of quality of life, life satisfaction

INTRODUCTION

The relevance of this study is associated with the unprecedented case of continued lockdown and online learning of students introduced to prevent the epidemic of Coronavirus and extended in periods from March to September, or to December 2020 in individual cases, in all regions of Russia and many countries of the

world. Concerning this, the study of students' satisfaction with various aspects of their academic and personal life in the said period is of interest. The authors believe it essential to pay particular attention to examining the subjective quality of life in first-year students because these are the category of students whose adaptation to university experience is long-lasting in nature and influences the effectiveness of their daily activities considerably.

The quality of life is an integrated social and economic category representing material, social, and spiritual relations in society and acting as a prerequisite and result of state administration, as well as the primary indicator of its efficiency. The objective quality of life is identified using open data, facts, and statistics (largely covered by economists) while the subjective – uses people's internal satisfaction with various aspects of their life (which is the subject of psychological studies).

In the authors' opinion, the subjective quality of life is the subjective representation of satisfaction of a person's life-sustaining, social, and spiritual needs; it is determined both by the external objective circumstances and by internal factors of personal development (Morozova et al., 2021).

LITERATURE REVIEW

To some extent or another, the COVID-19 pandemic has affected the planet's population. Throughout the world, the spring of 2019 saw the system of education change in the shortest time possible. Suspended operation of all universities and educational establishments for curbing the outbreak of COVID-19 was followed suit by a boost to online learning (Kuzembayeva et al., 2022; Soltovets et al., 2021).

At the same time as education migrated to the online format, many countries launched studies of the impact the change taking place had on students' ideas about the quality of life.

So, the study by A. A. Alghamdi (2021) involved students of all universities in Saudi Arabia. To illustrate the impacts produced by the pandemic on the students and their life, the author used social impact theory (MCH). The survey returned 1360 answers. Its findings have shown a high or medium level of agreement concerning the students' perception of the positive and negative impacts of the COVID-19 pandemic on their life. Meanwhile, social aspects were affected more than educational ones, and there were no statistically significant gender differences (Alghamdi, 2021).

A separate line of research deals with indicators of the quality of life in students of medical specialties. E. G. Beisland et al. (2021) explored the association between the subjective experience of the fear of COVID-19, general health status, mental stress, and overall quality of life in a sample of Norwegian bachelor-degree students majoring in medicine and obtained the following conclusions. Medical students had a higher level of fear of COVID-19, particularly the first-year ones, young people aged under 25, as well as those mistrusting the government over a solution to the pandemic-associated problems. A similar level of fear was shown by medical students from Russia and Belarus (Reznik, 2020), as well as by Spanish students (Martínez-Lorca, 2020). Meanwhile, Philippine students demonstrated higher fear level indicators (De Los Santos, 2021). The above authors have found the reduced quality of life in Norwegian university students; however, the association between the quality of life and the fear of COVID-19 has turned out to be weak.

A much greater influence on the decrease in the quality of life was produced by such factors as having to stay at home, restrictions in social life, and the transition to e-learning.

Given the circumstances, it is quite explicable why it was the first-year students who landed in a more difficult situation. Some of them must have faced the cancellation of planned practical studies while others were actively involved in the professional activity owing to the practical training, working as volunteers in various spheres of production and services.

On the one hand, fear is an emotion helping one adapt to the situation; on the other hand, the permanent and unpredictable threat reduced young people's adaptation abilities markedly. Meanwhile, both knowledge and skills in infection control measures, a stable educational basis, and constant liaison with the university teachers via online learning help the students' adaptation (Savitsky, 2020).

In the last two years, matters of methodological and technical support in the emergency online format have been explored (Mishra et al., 2020), and the consequences of all-out compulsory digitization in

education have been studied by M. Kerres (2020). The problems of psychological disadaptation of students and their failed expectations have been discussed in the work of T. Ozkaral and R. Bozyigit (2020). Most works explore digital technologies of online learning and the social mobilization required for it (Hiep-Hung & Tien-Thi-Hanh, 2020; Chigisheva et al., 2021), integration of online and offline learning in the post-pandemic period (Osman, 2020). M. Murphy (2020) views the possibilities of organizing post-pandemic pedagogy and the assessment system to measure the readiness of an educational establishment for an emergency transition to the online format. Most foreign researchers share the opinion that the emergency online mode does not promote the learning experience (Jan, 2020). They note the negative psychological context of this transition and its negative impact on students' plans and behavior (Aucejo et al., 2020). Among other things, they highlight the necessity of providing multimodal methodological program support and forecast mixed learning for the post-pandemic period (Alenezi, 2020).

The greatest number of Russian research works among those rooted in the "pandemic reality" is made by projects dealing with the digitization of education and analyzing the accessibility of online education, in particular, for vulnerable groups of students (Radina, 2021). They pay attention to the analysis of individual aspects of the educational process during the pandemic, too: for example, to the way teaching practice is organized (Dikikh & Nikitina, 2020).

Russian authors examine the impact of the pandemic on students' health by analyzing the concepts of "environment – university" and "environment – home" (Sharova E. I. 2020). In their research, O. V. Sudakov et al. (2021) have found that the vast majority of students had changes in their eating, sleep, and wake schedules, which ultimately affected their well-being and resulted in several negative consequences, weight gain among them. Meanwhile, the students recognized the negative impact of the said changes on their health. Similar data have been obtained by T. A. Banku (2020) for a group of students majoring in physical education and sports.

Alongside the physical aspects of their well-being, students' psychoemotional state is examined. So, in their work, V. V. Pozdnyak et al. (2021) found that online learning had a controversial impact on the students' psychoemotional state. Most students were satisfied with the online learning mode and adapted to it well but many of them had concerns about the possible academic decline and lack of practical skills. When measuring their anxiety level using the integrative test for anxiety (ITA), the curious fact was that the situation of self-isolation and online learning turned out not so traumatizing for the students as it was expected to be. However, the said research was conducted in the first stage of the lockdown. The authors believe it important to trace trends in the students' general well-being and the transformation of their ideas about the quality of life during the period of the pandemic and online learning.

Thus, from the beginning of the pandemic period, many researchers around the world have started studying the impact of self-isolation and online learning on various aspects of students' quality of life. The majority of them point out the impact as negative and suggest several options for adaptation mechanisms.

MATERIALS AND METHODS

The objective of this research is to find out trends in university students' ideas about the quality of life during the pandemic. Research tasks included analyzing the students' ideas about the quality of their life at three points in time: at the beginning of online learning (end of the first year of training), at the intermediate stage (after student holidays – the second year start), and at its end (i.e., at the beginning of the new academic year as a stage of mastering the next year of training).

To examine the university students' ideas about the quality of their life during restrictions, the authors conducted a longitudinal survey of 107 first-year students of the Institute of Economics and Management of Kemerovo State University (majoring in Management and Economics, with 70% of them being young women and 30% – young men) in three-time samples:

- 1) After the first lockdown week at the beginning of the transition to the online learning mode (April 4-7, 2020);
- 2) In November 2020 (after 8 months of online classes);
- 3) In September 2021 (upon switching back from online learning).

Technical support of the study included Google Forms and MS Excel. As a methodological toolkit, the authors used R. S. Eliot's Quality of Life Index (as adapted by N. E. Vodopyanova, 2005) for studying satisfaction with the quality of life. It contains 36 items (scales) suggesting a 10-point score for various areas of students' academic and personal life within the set dichotomies. So, the Russian language version of the questionnaire contains the following items: studies; personal ambitions and achievements; health; changing circumstances; relationships with children (their own and someone else's); relations during studies; relationships with friends; spiritual or religious support; good spirits; ability to organize their time; environment; physical well-being; financial status; number and tension of life crises in the last two years; business (professional) career; exercise; sleep; physical fitness; self-control and self-possession; decisionmaking; commitment; sense of guilt and shame; change of the situation and plans; anger; self-respect; life values and principles; moral and emotional support of the close ones; sense of emotional brightness and cheerfulness; intimate life; understanding and respect in the academic or business sphere; fear and anxiety; professional support during studies; offence or anger with others; mood; feelings in difficult life situations; internal personal resources (Vodopyanova, 2005).

RESULTS AND DISCUSSION

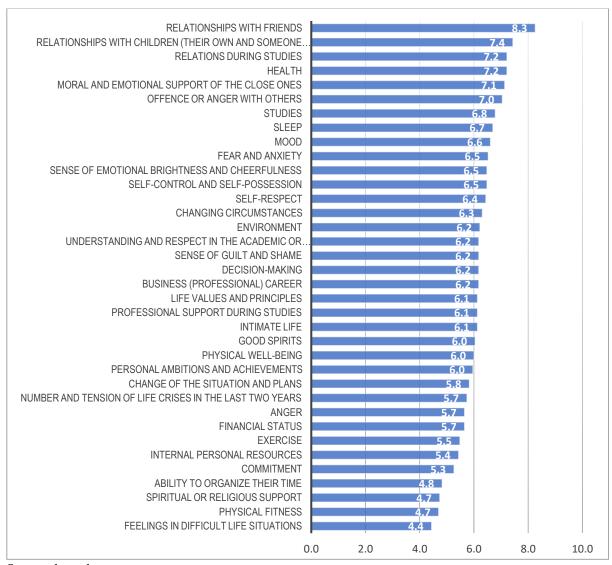
Within the initial sampling performed in April 2020, after the first week of the all-Russian lockdown, the average weighted scores for each of the 36 items were obtained (they are shown in Figure 1). According to its findings, most first-year students were satisfied with their relationships with friends (8,3 points), children (7,4 points), relations during studies, health (7,2 points), and moral and emotional support of the close ones (7,1 points) to the greatest extent. Similarly, they had no offense or anger with others (7 points, calculated as inverted questions). One could doubt the experience of including the attitude of children into the assessment of the subjective quality of life. Nevertheless, this indicator is frequently used in many questionnaires as one representing subjective well-being (alongside the attitude to the aged).

The smallest extent of satisfaction of the students can be found over difficult life situations (4,4 points), physical fitness (4,7 points), spiritual and religious support (4,7 points), ability to organize their time (4,8 points), commitment (5,3 points), internal personal resources (5,4 points), exercise (5,5 points), financial status, anger (5,7 points), the number of stressful life crises in the last two years (5,7 points), change of the situation and plans (5,8 points), personal ambitions and achievements, physical well-being, and good spirits (6 points).

As for their satisfaction with the remaining spheres, the students gave average scores (6 to 7 points) in the following items: intimate life, professional support during studies, life values and principles, business career, decision-making, sense of guilt and shame, understanding and respect in the academic sphere, environment, changing circumstances, self-respect, self-control and self-possession, fear and anxiety, mood, and sleep. Satisfaction with their studies was rated by the students high enough -6.8 points.

The greatest scatter of scores is observed in the indicators of satisfaction with personal ambitions and achievements (2 to 10 points), feelings in changing circumstances, spiritual and religious support, financial status, business career, exercise, decision-making, intimate life, understanding in the academic sphere, fear and anxiety control, anger with others, and feelings and behavior in difficult life situations (ranging from 1 to 10 points) (Figure 1).

FIGURE 1
AVERAGE WEIGHTED ESTIMATES OF THE RESULTS OF A SURVEY OF STUDENTS ON SATISFACTION WITH VARIOUS ASPECTS OF THEIR LIVES



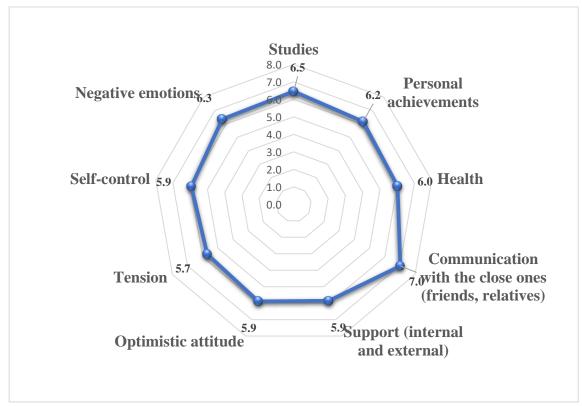
Source: the authors.

The use of R. S. Eliot's technique as adapted by N. E. Vodopyanova (2005) for studying satisfaction with the quality of life involves the option of deriving high-level integral indicators based on the said more specific items. So, by calculating results in these 9 subscales, the high-level profile of the student's satisfaction with the quality of their life during the lockdown was formed based on high-level indicators (Figure 2).

In particular, the students' greatest extent of satisfaction turned out to be with relationships with close ones (primarily, friends and relatives, 7 points) and studies (6,5 points). They evaluated the way they cope with negative emotions slightly less positively (6,3 points), as well as personal achievements (6,2 points) and health (6 points). Among indicators of the student's satisfaction, the lowest scores were observed in the level of tension (5,7 points), abilities of self-control, internal and external support, and optimistic attitude (5,9 points). Meanwhile, it can be seen from the data given in Figure 2, the student's satisfaction with various high-level spheres of life is distributed among them in a rather harmonious way: the scatter of scores

is minimum, and it ranges from 5.7 to 7 points. Young men's scores proved to be slightly higher than the young women's ones almost in all items, except emotional support, relationships with children, and some others.

FIGURE 2 INTEGRAL SCORES OF STUDENTS' SATISFACTION WITH HIGH-LEVEL ASPECTS OF THEIR LIFE



Source: the authors.

The above data enable the authors to conclude the first-year students' medium extent of satisfaction with their quality of life at the beginning of the lockdown and about indirect signals of disadaptation. The latter is confirmed by the significant number of the respondents evaluating their abilities to organize their own time, act in difficult life situations and changing circumstances, and control their anger, offense, and fear as low. Meanwhile, satisfaction with personal relationships and studies, in general, remains high.

The second time sample of the students' subjective quality of life was conducted in November 2020, 8 months after the introduction of the online learning format. The third sample was taken a year later, when the online learning format was dismissed, in September 2021 (online classes ended in July 2021).

The summed-up results of the longitudinal study (Table 1) demonstrate that almost all indicators of the students' subjective quality of life deteriorated long after the introduction of the online learning format.

Significant differences between the indicators for individual stages (0,5 and more) are shown by respective figures in separate columns. For example, "1-2" means there are significant differences between indicators at the first and intermediate stages while "2-3" refers to those of the intermediate and final samples.

AVERAGE WEIGHTED SCORES OF THE STUDENTS' SATISFACTION WITH VARIOUS ASPECTS OF THEIR LIFE: SURVEY RESULTS BROKEN DOWN ACCORDING TO THE THREE PERIODS OF TIME TABLE 1

Indicators	April 2020	November 2020	September 2021	Differences Indicators		April 2020	November 2020	September Differences 2021	Differences
Feelings in difficult life situations	4,4	3,2	4,2	1-2;2-3	Decision-making	6,2	5,4	9	1-2;2-3
Physical fitness	4,7	4,5	4,6	ı	Sense of guilt and shame	6,2	5,4	5,8	1-2
Spiritual or religious support	4,7	3	4,5	1-2;2-3	Understanding and respect in the academic or business sphere	6,2	5,1	6,5	1-2;2-3
Ability to organize their time	4,8	2,8	4,6	1-2;2-3	Environment	6,2	6,2	6,1	1
Commitment	5,3	5,3	5,4	ı	Changing circumstances	6,3	4,8	6,1	1-2;2-3
Internal personal resources	5,4	4,3	5,1	1-2;2-3	Self-respect	6,4	6,2	6,4	ı
Exercise	5,5	3,9	5,2	1-2;2-3	Self-control and self-possession	6,5	4,8	6,4	1-2;2-3
Financial status	5,7	4,9	5,5	1-2;2-3	Sense of emotional brightness and cheerfulness	6,4	9,9	6,3	1
Anger	5,7	6,7	5,3	1-2;2-3	Fear and anxiety	6,5	7	6,3	1-2;2-3
Number and tension of life crises in the last two years	5,7	4,4	5,4	1-2;2-3	Mood	9'9	6,5	6,4	1-2;2-3
Change of the situation and plans	5,8	3,8	5,4	1-2;2-3	Sleep	2'9	9,9	9,9	1
Personal ambitions and achievements	9	4,9	5,7	1-2;2-3	Studies	8,9	5,1	9,9	1-2;2-3
Physical well-being	9	4,2	5,8	1-2;2-3	Offence or anger with others	L	8,1	7,3	1-2;2-3
Good spirits	9	4,3	5,5	1-2;2-3	Moral and emotional support of the close ones	7,1	5,9	7	1-2;2-3
Intimate life	6,1	6,2	6,1	_	Health	7,2	5,5	5,9	1-2
Professional support during studies	6,1	5,3	6,5	1-2;2-3	Relations during studies	7,2	6,5	6'9	1-2
Life values and principles	6,1	5,2	5,6	1-2;2-3	Relationships with children (their own and someone else's)	7,4	6,5	<i>L</i>	1-2;2-3
Business (professional) career	6,5	4,7	5,9	1-2;2-3	Relationships with friends	8,3	7,1	8,2	1-2;2-3
Source: the authors.	Ī	,							Ì

During the pandemic, the student's ability to act in difficult life situations, under change of the situation and plans, in changing circumstances, and the ability to cope with life crises (t=2,45 at p<0,05) decreased significantly. This was due to the high uncertainty level and impossibility to influence the events. Similarly, the level of self-control and self-possession, exercise, mood, business (professional) career, and studies, in general, went significantly down. The students started to feel a clear lack of all kinds of support (moral and emotional support from the close ones; religious and spiritual one). As for relationships with friends, this level of satisfaction decreased significantly, too, this confirms that the students feel dissatisfied and get negative emotions when communicating via online services only.

The students recorded a decrease in items of internal resources, personal ambitions and achievements, life values and principles, and decision-making – that is, in basic aspects of the acmeological personality development potential. They started to feel guilt and shame, fear and anxiety, offense and anger with others more frequently, which was associated with a lower ability to control their own emotions. The situation was aggravated by financial difficulties many had to face. A slight reduction could be observed in professional support during studies and in the item of understanding and respect in the professional environment, too, due to the impossibility of direct contact with teachers and groupmates.

In September 2021, the student's evaluation of their quality of life upon the end of the online learning period showed a marked increase in almost all indicators (except commitment, intimate life, exercise, and some others). This is clearly illustrated by the diagram of high-level subscales (Table 2, Figure 3).

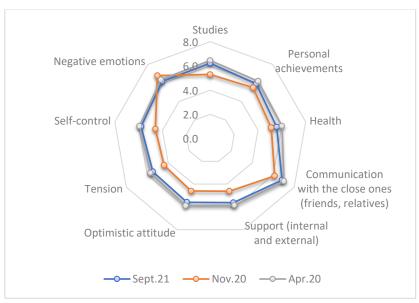
TABLE 2 INTEGRAL SCORES OF THE STUDENT'S SATISFACTION WITH HIGH-LEVEL ASPECTS OF THEIR LIFE BROKEN DOWN TO THE THREE PERIODS UNDER STUDY

Integral parameters	April 2020	November 2020	September 2021	Differences
Studies	6,5	5,3	6,2	1-2; 2-3
Personal achievements	6,2	5,5	5,9	1-2
Health	6	5,1	5,6	1-2; 2-3
Communication with the close ones (friends, relatives)	7	6,2	6,9	1-2; 2-3
Support (internal and external)	5,9	4,6	5,6	1-2; 2-3
Optimistic attitude	5,9	4,6	5,6	1-2; 2-3
Tension	5,7	4,4	5,5	1-2; 2-3
Self-control	5,9	4,6	5,8	1-2; 2-3
Negative emotions	6,3	6,8	6,2	1-2; 2-3

Source: the authors.

The post-pandemic indicators have failed to reach the values observed at the beginning of the transition to the online format. Significant differences in scores between individual stages (0,5 and more) are marked by respected figures in the separate column.

FIGURE 3
INTEGRAL SCORES OF THE STUDENTS' SATISFACTION WITH HIGH-LEVEL ASPECTS
OF THEIR LIFE BROKEN DOWN TO THE THREE SPANS UNDER STUDY



Source: the authors.

The data in Figure 3 confirm earlier conclusions: indicators of the students' subjective quality of life deteriorated significantly in the middle of the pandemic period (in November 2020) and recovered upon its end (in September 2021) but only partially. The indicators are likely to reach the initial high level long after the return to habitual intramural learning.

The Coronavirus pandemic and the resulting forced transition of university students to online learning have significantly affected their subjective quality of life almost in all aspects. The university system of education has turned out to be largely unprepared for switching to the online format: several teachers did not have the required digital literacy skills and skills of professionals working on the Internet. Moreover, the workload increased for every single teacher markedly because they had to prepare and check students' work in the digital form and they could only partially control class attendance and participation. Difficulties arose in filling out students' academic progress and attendance reports (credit books, records, etc.), too, because most Russian higher educational institutions had not rendered their document flow completely digital yet.

In their turn, students, especially the first-year ones, proved to be unprepared for long-lasting online learning as well – not only in terms of psychology but quite frequently and trivially in terms of technology (several students did not have reliable quality equipment with a stable Internet connection at home). This affected the students' self-awareness, mood, well-being, and academic motivation, too.

Concerning socialization as an integral component of education, the online format shrank its opportunities abruptly – students lost the possibility of direct contact with each other and teachers. This resulted in the lack of unity among first-year students who were in a group for too short a time at that. The same can be stated about exercise which saw a several-fold reduction, similarly. So, the condition of social deprivation and limited exercise could not but affect students' well-being and satisfaction with various aspects of their life, which is confirmed by the results of this survey of Kemerovo State University students.

CONCLUSION

Students' subjective quality of life suffered considerably in conditions of transition to the online learning format due to restrictions imposed to prevent the spread of the Coronavirus infection. This is

confirmed by the results of many studies, including the authors' scrutiny of ideas about the quality of life conducted with Kemerovo State University students. According to the authors' findings, the reversion of indicators to earlier values was found to be only partial in the post-pandemic period. On the one hand, this may be associated with habitual intramural studies failing to last long enough. On the other hand, some other unrecorded factors could be at play (during the longitudinal study, the first-year students went on to their third year; their priorities in professional and personal development, specific psychological perception features could change, etc.). Anyway, digitization of education is an objective and irreversible process that is bound to be urged by exogenic factors, like the Coronavirus pandemic, going forward. So, looking into the effect of online university learning on student's quality of life will remain an important and promising research topic in the future, too.

ACKNOWLEDGMENTS

The research was conducted on the equipment of the Research Equipment Sharing Center of Kemerovo State University, agreement No. 075-15-2021-694 dated August 5, 2021, between the Ministry of Science and Higher Education of the Russian Federation (Minobrnauka) and Kemerovo State University (KemSU) (contract identifier RF----2296.61321X0032).

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