

A STUDY ON THE PERCEPTION OF QUALITY OF LIFE BY STUDENTS OF THE SILESIAN UNIVERSITY OF TECHNOLOGY DURING THE PANDEMIC

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Purpose: The aim of this study is to collect information on students' perception of their life quality during a pandemic. It aimed at gaining information on how quality of life changed before and during the pandemic.

Design/methodology/approach: The research method used was a questionnaire survey. For this purpose, Google Form was used. The survey contained 22 multiple choice questions.

Findings: The pandemic had a negative impact on the perception of life quality. Using a categorization into 8 areas in the hierarchy of values in the students' lives, the most important were found to be family, mental and physical health and friends.

Research limitations/implications The major limitation was the number of votes collected in the survey. The next research should be extended to include the issue of hierarchy of values in relation to the perception of life quality and a larger research group, for example, students from different universities in different provinces.

Social implications: This study will provide insight into the issues and changes in the perception of life quality that affect students during a global pandemic. The article presented here is a voice in the discussion of students' perception of life quality during a pandemic.

Originality/value: The research presents changes in the perception of life quality by students of the Silesian University of Technology during a global pandemic.

Keywords: quality of life, pandemic, students, questionnaire.

Category of the paper: Research paper.

1. Introduction

Man is a social being, and in order to exist in the world and develop properly, they need the society. A fact in favour of this statement is the impossibility of living alone in the first years of life - a child requires the active participation and help of other human beings. People have a number of basic needs that they wish to satisfy, and the society is needed to satisfy basic needs such as safety, sense of belonging, respect, self-fulfillment and development. In shaped societies, where every human being has a role and has his or her duties and priorities, there appear such concepts as well-being, standard of living or quality of life.

In literature, the term quality of life was first introduced after World War II in the United States, but then the quality of life was understood only as material well-being (de Walden Gałuszko, 1997, p. 77-82). However, Kolman stated that it is not a new concept, he compared it with such terms as living conditions, living arrangements, way of life or lifestyle (Kolman, 2002). He acknowledges that relevant information on quality of life was already appearing in the 1870s but in different forms. Rebenda-Bajkowska differentiated two approaches to quality of life: objective and subjective (Rabenda-Bajkowska, 1979, pp. 135-149). Other authors who wrote about two different views of quality of life were Browne, McGee and O'Boyle. They distinguished a theoretical approach in which the quality of life is understood as the degree to which universal needs are satisfied – this approach refers to objectivity, which means that we should focus on the group itself (nomothetic approach). The second approach is the so-called processual approach. It turns to subjective perception. The focus should be on the interviewees and information should be collected from them (idiographic approach) (Dziurawicz-Kozłowska, 2002, pp. 77-99). The popularization of research on the quality of life took place after the research project initiated in 1971 by Cambell (Kowalik, 1995, pp. 75-85). The summary of its results is a statement appearing in the article by Wnuk, M. and Marcinkowski, J.T., and it reads as follows: "The relationship between objective living conditions and life satisfaction proved to be ambiguous, confirming that as objective living conditions increase, subjective feelings of satisfaction or happiness do not always follow" (Wnuk and Marcinkowski, 2012, pp. 21-26).

The concept of quality of life is an interdisciplinary one, involving not only sociology, but also such sciences as medicine, philosophy, economics and psychology. It is a debatable concept, its definition depends on the scientific discipline in which it is considered, e.g. "by economists it is treated as a simultaneous term for welfare and well-being" (Adamiec and Popiołek, 1993). The concept of quality of life is multi-layered, emotionally laden, impossible to clearly define, and additionally often linked to politics and culture. One of the researchers of this concept (Krystyna Jaracz) claims that the confusion about the standards of quality of life has its basis in the impossibility of creating a precise definition, and in the different aims of different scientific disciplines that try to deal with this issue.

In medical science, the term quality of life has emerged with the very quick progress of the field. The main objective of medicine used to be to keep the patient alive at all costs – no attention was paid to the decline in the patient's quality of life (Wnuk and Marcinkowski, 2012). Interest in the notion of quality of life in medicine not only led to the analysis of therapeutic methods, but also showed how the improvement of this aspect of life had a positive impact on patient outcomes. In the 1980s a special concept of quality of life was introduced into medicine, which consisted of two components: behavioral and survival (Walker and Rosser, 2012). The QALY index was also introduced, describing the years of life gained through medical intervention in relation to the quality of that life (Stańczak-Mrozek, Biłant and Mućka, 2019). In psychology, the term quality of life was derived from the ancient philosopher Socrates. One of the latest trends in psychology is positive psychology, i.e. the search for positive sources of happiness and satisfaction. New research on quality of life places particular focus on the subjective feelings of the research subject to the conditions in which they find themselves. In sociology, quality of life appeared as a specific value system to compete with the concept of standard of living used in economics. If we consider the concept of quality of life in sociological terms in the present day, there are many variations of this concept, but they have a common pillar: they reflect the ways and levels of satisfaction of different human needs (Kaleta, 1998).

Nowadays we have many definitions of quality of life, touching on different areas of our lives. One of the many definitions has identified the following elements of quality of life: the state of the natural environment, the material state, the spiritual state, the sense of security, health, and the sense of belonging (interpersonal relations). The elements that are extracted when attempting to define quality of life can be grouped into the three basic and most common spheres of quality of life found in the literature, which are: "to have", "to be" and "to love" (Włodarczyk, 2015, pp. 3-16).

The above-mentioned spheres start to gain importance in a person's life when they become adult. This means that the spheres become clear in young people, who, from a national point of view, are one of the most important social groups that finish a stage in education – we are talking about students. In the various research on quality of life, the focus has usually been on adults, however, the interest in young people should be obvious in view of the future roles and responsibilities they will assume in the society. It is the young people, especially university students, who will shape the future world, therefore they should be more often the research target as far as perception of life quality is concerned. The evidence supporting the thesis that scientists should take more interest in this research group is the fact that "Students are forced, according to sociologists, to break the barrier of environmental and generational separation with every subsequent year of studies, to become more and more involved in the circle of issues of "adult life". The time of studies is for them a kind of transition stage between the "carefree" youth" (Strózik, 2009, p. 64). This makes university students even more attractive for various types of research.

In December 2019, the SARS-CoV-2 pandemic broke out and shocked the world. It affected many aspects of life and affected practically each person individually. Many restrictions concerning meeting people, remote teaching and lockdown have been imposed. Not being able to meet other people as usual has taken a big toll on the value system and the whole perception of life (Leong Bin Abdullah, Mansor and Mohamad, 2021). It has also had a very strong impact particularly on the life quality of university students, who have suddenly been deprived of the opportunity to freely enjoy the benefits of student life. Moreover, these are the last years before adulthood in which young people still have the opportunity to live a carefree life, as far as their private situation allows, of course.

The main aim of this study is to collect information on students' perceptions of life quality during a pandemic. The achievement of the goal was preceded by theoretical considerations concerning the term "quality of life", which were extended by the author's own survey on students' perception of life quality during a global pandemic.

2. Method

Being a part of the PBL project at the Research University of Silesian University of Technology, a group of students conducted a study on student perception of life quality during a global pandemic. The project was implemented under the Excellence Initiative – Research University program. The main scientific supervisors was Mariusz Ligarski, Ph.D., a professor of Silesian University of Technology, and Krzysztof Michalski, Ph.D.

The research was planned to be conducted on a sample group of one thousand students from the following faculties of the Silesian University of Technology: Faculty of Organization and Management, Faculty of Applied Mathematics, Faculty of Automatic Control, Electronics and Computer Sciences. One of the implemented research methods was a survey. A research tool used for this purpose was a Google forms questionnaire. It included 22 questions from the following areas: physical and mental health, family and friends, physical activity, hobbies and passions, sense of security and stability, quality of education and leisure time. These questions were in closed-ended form, primarily answered on a five-point scale described next to each question. There were also two yes or no questions. Several questions consisted of selecting one of the given answers. The survey also included a metric that included questions about gender, place of residence, and department. The questions in the metric were also closed-ended i.e. they required choosing one of the given answers. Before creating the questionnaire, the research group brainstormed on the notion of life quality and the aspects which influence it. From the discussion emerged the areas of life, with more questions to add. The next stage was to optimize the questionnaire so that it would not be too long, which was supposed to promote feedback. The questionnaire was distributed electronically among students and also QR codes were posted in the area of selected departments. The problem faced by the research group included

collecting the target number of responses. Due to various methods along with the support of the research supervisors, 196 correctly completed questionnaires were collected.

3. Results

The object of this study was to determine students' perceptions of their life quality during the global pandemic. The results presented here are a summary, expressed as a percentage distribution of responses to the individual questions that were included in the survey. The survey included a metric with several questions. The final respondents to the questionnaire were 103 men i.e. 53% and 93 women i.e. 47%. Then, referring to their situation both before and during the pandemic, six different types of residence were identified (Table 1 and Table 2). This was to illustrate the basic changes associated with the pandemic such as the place and type of residence.

Table 1

The place of residence during the pandemic

Answers	The place of residence during the pandemic
Single-family house	51%
Flat	39%
Flat shared with a partner	6%
Dormitory	3%
Flat shared with friends	1%
Flat shared with roommates	0,5%

Note: own study.

Table 2

The place of residence before the pandemic

Answers	The place of residence before the pandemic
Single-family house	38%
Flat	41%
Flat shared with a partner	4%
Dormitory	9%
Flat shared with friends	3%
Flat shared with roommates	7%

Note: own study.

Table 3

The place of residence

Answers	The place of residence
Village	18%
City with population below 50,000	17%
City with population between 50,000 and 150,000	27%
City with population between 150,000 and 500,000	33%
City with population over 500,000	5%

Note: own study.

Summarizing tables no. 1 and no. 2, among the respondents there was a noticeable increase in living in a single-family house during the pandemic. This has resulted in a decrease in the number of people living in other places such as dormitories and flats. Table no. 3 shows that the largest number of students live in large and medium-sized cities. The next 35% live in small towns and in the countryside. Only 5% of the respondents live in cities of over 500,000 inhabitants.

Most of the questions were created in the form of a five-point scale, where the scale is described in each question. The first question using this scale related to the quality of life. In Figure 1, it can be seen, according to the respondents, what impact the pandemic had on their perception of the quality of life.

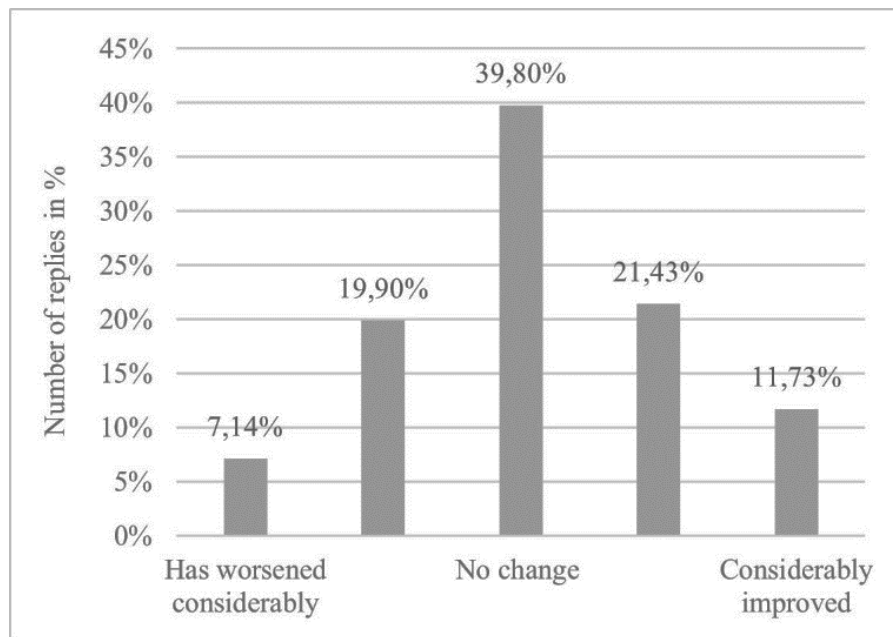


Figure 1. Change in the quality of life during the pandemic. Own study.

Figure 1 shows that the largest percentage of people believe that the pandemic has not affected their current quality of life. The remaining respondents felt that the pandemic had had an impact on their perception of their life quality. Among them, 33% felt that despite the pandemic and many other changes, it had improved their perception of life. 27% of respondents felt that the pandemic had worsened their perception of their quality of life. Despite the many difficult changes that have occurred in society, the pandemic has had a positive impact on one in three students.

In the survey, 8 factors affecting the quality of life were analyzed. These were: family, friends, mental and physical health, hobbies/passions, sense of security and stability, physical activity, leisure time and quality of education. An eight-point scale was used to formulate this question. The respondents had to select the values that seemed more important to them than others, numbering them from 1 to 8. To calculate the hierarchy of values (Table 4), an analysis was done using linear regression. For each option, a straight line was drawn showing the relationship between the number of responses and their position in the hierarchy. The final

position results from the value of the slope coefficient of the straight line. The smaller the coefficient, the higher in the final hierarchy. The results are presented in table 4 in descending order according to the answers of the students surveyed.

Table 4

Hierarchy of values before and during the pandemic

Hierarchy of values before the pandemic		Hierarchy of values during the pandemic	
1	Family	1	Family
2	Friends	2	Physical and mental health
3	Physical and mental health	3	Friends
4	Hobbies/passions	4	Sense of security/stability
5	Sense of security/stability	5	Hobbies/passions
6	Physical activities	6	Physical activities
7	Leisure time	7	Leisure time
8	Quality of education	8	Quality of education

Note: own study.

The results of the hierarchy distribution (Table 4) allowed us to establish that the pandemic situation had changed the hierarchy of values among the students surveyed. The most important value both before and during the pandemic was the family. The effect of the pandemic was an increase in the value of a sense of security/stability and physical and mental health, which influenced a decrease in the importance of friends and passions. However, the last three positions: physical activity, leisure time and quality of education did not change their place in the hierarchy.

Furthermore, the questionnaire contained detailed questions related to the different areas of life, created on the basis of the hierarchy of values. The analysis of the answers from the area concerning the family shows that the pandemic had a positive impact on both the amount of time spent with the family and the relationship with the immediate family (Table 5).

Table 5

Questions related to the relationship with the family

Questions	Answers	1 Has worsened considerably	2	3 Nothing has changed	4	5 Considerably improved
	1. How has the pandemic affected the amount of time you spend with your family?		2%	9%	33%	33%
		1 Nothing has changed	2	3	4	5 A lot has changed
2. How has your relationship with your immediate family changed during the pandemic?		3%	11%	47%	27%	13%

Note: own study.

It can be deduced from the table that for more than half of the respondents, the time spent with family increased during the pandemic. The responses also showed that for a small number of people the time spent with relatives decreased, which means that more time spent at home had a positive impact on family life. This fact not only affected the amount of time with family, but their relationship as well. Although almost half of the respondents (47%) believed that their relationship with their immediate family did not change during the pandemic, for a significant proportion (40%) the relationship improved. Only 13% believed that the relationship with their relatives has deteriorated. It can therefore be concluded that the pandemic had a positive impact on better family relationships.

The next questions dealt with the field of mental and physical health. These showed that for a significant proportion of respondents the pandemic had a negative impact on their mental health (Table 6).

Table 6

Questions about mental and physical health during a pandemic

Answers	1	2	3	4	5
Questions	Nothing has changed				A lot has changed
1. How has the pandemic affected your mental health?	18%	28%	28%	16%	10%
	1 Worsened considerably	2	3 Changed nothing	4	5 Considerably improved
2. How has the pandemic affected your physical health (e.g. Chronic illness, bad habits, etc.?)	10%	29%	36%	15%	10%

Note: own study.

Over 80% of the respondents agreed that the pandemic had affected their mental and physical health, with as many as 10% admitting that the pandemic had had a very large impact on their mental health (Table 6). The remaining students stated that the pandemic had not impacted their health. However, the pandemic has negatively affected the mental health of the students. From the responses given, it can be inferred that the pandemic also had a slight negative impact on their physical health. More than 30% of the respondents felt that nothing had changed and 25% felt that their physical health had improved. In contrast, as many as 39% believed that during the pandemic, their physical health deteriorated. In both cases, the pandemic had an adverse effect on health.

Another scope of analysis were the relationships with friends (Table 7). The majority of students admitted that the time of the pandemic had adversely affected their relationships with their friends. In this case, the scale was divided into 5. However, 3 meant no change, 1 deterioration and 5 improvement (Table 7).

Table 7*Questions related to the relationship with friends*

Answers	1 worsened considerably	2	3 changed nothing	4	5 Considerably improved
1.How did the number of friends you were in contact with change during the pandemic?	16%	27%	41%	9%	7%
2.How did your relationship with your friends change during the pandemic?	10%	28%	34%	19%	9%

Note: own study.

In the first question in Table 7, as many as 43% of respondents admitted that they had fewer friends they were in touch with during the pandemic. Contact with friends changed because of the pandemic and the lockdown that occurred at that time. It was probably also influenced by the change of place of residence, as many people returned to their family homes for the duration of the remote studying. A similar number of the surveyed students admitted that their group of friends had not changed. Only 16% responded that their number of friends had increased. The situation with the relationship with friends during the pandemic was similar. The majority of people answered that their relationship deteriorated. The rest of the respondents claimed that their relationship with their friends had not changed (34%), but 28% of the respondents answered that their relationship had improved to some extent. This shows that the pandemic has been unfavorable for both contact and relationships with friends.

The next important factor in the hierarchy is the feeling of security, which played an important role during the pandemic. From a given point in the hierarchy, several factors were separated that could influence safety. Three spheres were selected: financial conditions, sense of freedom and support from administrative units (Table 8).

Table 8*Questions related to the feeling of security/stability*

Answers	1 Has worsened	2	3 Has not changed anything	4	5 Has improved
1.How did the pandemic affect financial conditions in your life?	9%	15%	43%	16%	17%
	1 No support	2	3	4	5 Strong support
2.Did you feel that the pandemic/lockdown deprived you of your freedom?	17%	14%	11%	24%	35%
3.Did you feel supported by public administration units (hospitals, dispensaries, health services (protection), etc.)?	34%	30%	27%	7%	2%

Note: own study.

Most respondents answered the first question (Table 8), related to finances, that their financial situation had not changed. Despite many changes, the situation improved for more students, while it worsened for only 24%. However, this fact did not have a large impact, as the largest percentage of respondents noticed no change whatsoever. A lockdown was

introduced during the pandemic, which may have created a sense of incapacitation. Among the respondents more than half admitted that the lockdown limited their freedom, as many as 35% admitted that it limited their freedom considerably. Only 17% did not feel deprived of their freedom. Another factor which influenced the feeling of security was the perception of support from public administration units. In response to this question, most respondents answered that they did not feel supported. Only a dozen respondents answered that they felt a lot of support (9%), which means that the pandemic did not only come as a surprise for citizens, but also for the services and administrative units that failed to deal with it adequately.

Next, the impact on the possibility of pursuing hobbies/passions, which may have been significantly limited for many students due to the pandemic and isolation, was examined (Figures 2 and 3).

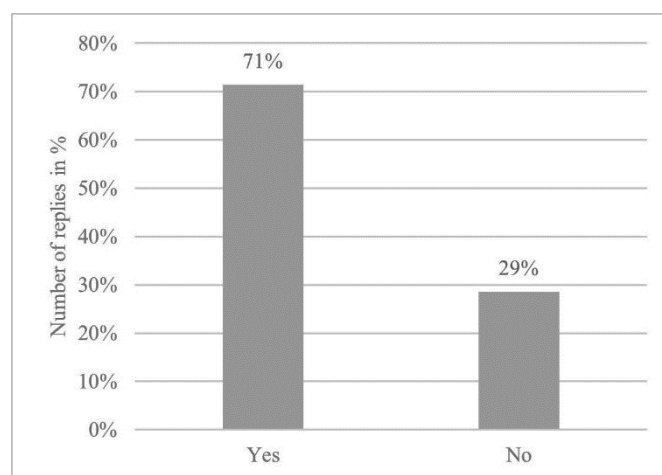


Figure 2. New passions/interests. Own study.

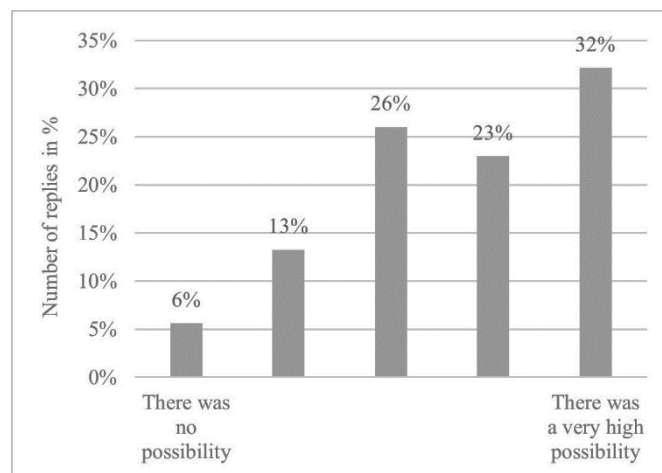


Figure 3. Possibility of pursuing their current passions/interests. Own study.

More time during the pandemic had a positive impact on the pursuit of their passions, with as many as 71% of those surveyed admitting that they had pursued new passions (Figure 2). Only 29% admitted that they did not try new passions. On the other hand, as many as 94% of the respondents stated that there was a possibility of pursuing their current passions and interests, 32% of whom believe that they had a lot of opportunities. This meant that despite

numerous restrictions, students tried to make the most of their time and developed their existing passions as well as new ones.

The lockdown also had a significant impact on the question of physical activity and the opportunity to participate in sports. The questionnaire included a question about the frequency of practising sports before the pandemic and the changes that occurred during the pandemic period (Table 9).

Table 9

Questions related to physical activity and its frequency

Frequency of sporting activities	No, never	Several times every six months	Several times a month	1-3 times a week	More than 3 times a week
1. How often did you play sports (gym, team games, jogging, etc.) before the pandemic?	33%	25%	17%	11%	14%
	1 worsened	2	3 changed nothing	4	5 improved
2. How has the pandemic affected the issue of physical activity in your life?	16%	26%	32%	16%	11%

Note: own study.

The table shows that one third of the pre-pandemic respondents did not play sport at all. The remaining group of respondents played sports with varying frequency, but the largest number of people played sports several times in six months. Therefore, more than 50% of the students did not regularly play sports before the pandemic. During the pandemic there was a downward trend which means that a large proportion of people reduced the amount of time they spent on physical activities. For 32% the lockdown had no effect, only for 27% it had a positive effect on this issue. This data shows that students do not do sport and only a few do it regularly.

Due to the pandemic and temporary isolation, leisure time increased significantly, due to the need to stay at home. Therefore, questions relating to leisure time were included (Figure 4).

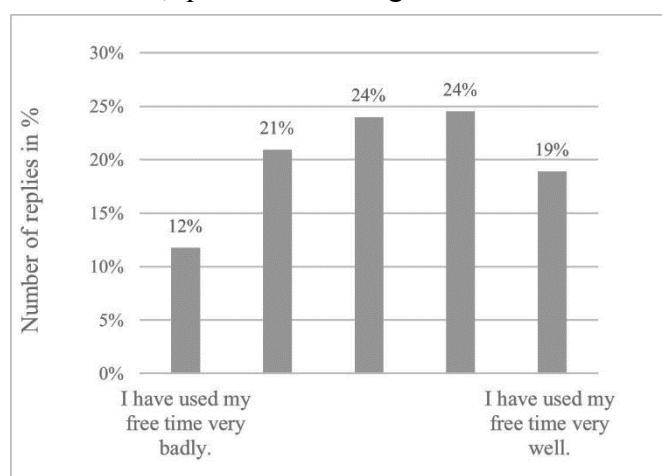


Figure 4. Assessment of quality of leisure time spent during the pandemic. Own study.

The vast majority of students made positive use of their leisure time during the pandemic, meaning that students were satisfied with their leisure arrangements. As many as 19% used it very well and only 12% think they used it very badly.

Another big change during the pandemic was the shift to distance learning. The last factor that was examined in the questionnaire was the impact of the pandemic on the quality of education and the effect of remote teaching on students' efficiency and their approach to learning (Table 10).

Table 10

Question related to quality of education

Answers	1 Negatively	2	3 changed nothing	4	5 Positively
1. How do you assess the quality of education during the pandemic?	31%	21%	20%	17%	11%
2. How has remote learning changed your approach to learning?	27%	18%	24%	17%	14%
	1 I felt nothing	2	3	4	5 I felt a lot
3. Have you felt frustration about remote learning?	34%	20%	15%	12%	18%

Note: own study.

In question one of table no.10, an increasing trend can be seen for answers denoting a deteriorating quality of education during the pandemic. As many as 31% indicated that the quality of education during the coronavirus pandemic significantly deteriorated, only 11% indicated a significant improvement in teaching during this time. Among those surveyed, only 20% of students believed that the quality of education during the pandemic compared to before the pandemic did not change. Learning remotely during the pandemic also negatively affected the respondents' approach to learning. Only some people admitted that online classes improved their view of learning (31%). The remainder of them felt that it had not affected their approach (24%). The survey included a question about feelings of frustration towards remote learning. The vast majority of students stated that they felt more or less frustrated about remote learning. Only 18% felt considerable frustration about it and 20% felt little frustration about remote learning.

The analysis presented here shows how important these spheres were for the respondents before and during the pandemic. All these factors influenced the students' perception of their quality of life.

4. Discussion

From the analysis of the survey results, it can be seen that many students believe that the pandemic has negatively affected their lives to some extent. Over the past few months, some articles have been written presenting a similar hierarchy of values. These documents display different results of perceived quality of life during the pandemic. Some show a positive impact of social isolation on quality of life, while others indicate a negative impact.

In one of T. Strózik's articles on value system vs. life evaluation of students of Poznan universities, the most valued values are: family, friends and health (Strózik, 2014, pp. 5-23). Students of the Technical University of Silesia adhere to the same hierarchy of values during the pandemic. This approach was influenced by the forced lockdown, during which people reevaluated their lives realizing how important these aspects of life are and the impact they make on them.

During the time of social isolation, the state authorities recommended staying at home. People were encouraged to leave their homes only for necessities such as going to work, grocery shopping, etc. As a result, outdoor physical activity decreased. Among the students of the Silesian University of Technology only 25% declared that before the pandemic they did sport at least once a week, however, in response to the question of change in physical activity 42% declared a decrease in the frequency of sport. In the article "Quality of life under the COVID-19 quarantine", when asked about how they spent their time during the pandemic, only 11.7% of study participants responded that they did sports outside (Ferreira, Pereira, da Fé Brás, and Ilchuk, 2021, pp. 1389-1405). Among those who do sports regularly, the vast majority of them run or attend gyms or other organized activities such as fitness, Zumba, etc. Before the pandemic, a healthy lifestyle which included regular physical activity was very popular and was receiving increasing attention especially among university students. However, due to the pandemic, the percentage of people participating in sports that required getting out of the house decreased significantly.

The pandemic has caused anxiety and fear in society. Because of this, there appeared new tasks for the services of public administration units, such as providing support and security in the current situation. The students of the Silesian University of Technology believe that the administrative units did not fulfil this task, and for the most part they did not feel supported by authorities. Surveys among students in Krakow described in the research report "Krakow students in a coronavirus pandemic emergency" that nearly half of the respondents claim that the services of administrative units are fulfilling their task well (Długosz, 2020). It can be deduced that each city dealt with the changes caused by the pandemic in a different way. The results show that each city fulfilled its responsibilities to a different extent.

The pandemic has had both positive and negative effects on many areas of our lives. The mentioned examples allowed us to compare the selected results, with different outcome data. This helped to observe differences and similarities among other subjects on the topic of quality of life during the pandemic.

5. Summary

The pandemic has had a big impact on the quality of life of every person, including university students. The time of study is the last time in which students have the opportunity to live a carefree life, of course, if their private situation allows it. They want to use this time to the most, often spending it on various types of activities not related to study or work. Therefore, their perception of quality of life during a pandemic is an interesting topic of research. For this reason, it was decided to investigate this topic among students of the Silesian University of Technology from three faculties: the Faculty of Applied Mathematics, the Faculty of Organization and Management, the Faculty of Automatic Control, Electronics and Computer Science. For this purpose, a survey was conducted with a number of questions concerning the following areas: physical and mental health, family and friends, physical activity, hobbies and passions, sense of security and stability, quality of education and free time.

The research allowed to bring closer the perception of the quality of life of students in the times of the coronavirus.

Results of responses

1. In the analysis of the hierarchy of values, according to the respondents, the most important values during a pandemic are family, mental and physical health and friends.
2. 39% of the respondents confirmed no change in the quality of life during a pandemic. However, as many as 33% found an improvement in the quality of life and only 28% a deterioration.
3. According to the students, the lockdown had a positive impact on the following areas of life:
 - Family (relationship with loved ones).
 - Hobbies/passions (pursuing new and existing ones).
 - Free time (spending free time).
4. Other answers indicate a negative impact of the pandemic on the quality of life.

Despite a negative impact on individual factors, the overall perception of life quality is positive. Looking at other studies on the quality of life of academic youth, it can be noticed that the perception of the quality of life by students are diverse, e.g. depending on the city in which the students live. This is due to, among other things, differences in the structures of power and

administration. These differences have a large impact on how a given city or province functions during a pandemic, which affects the lives of all inhabitants of this area.

The perception of the quality of life depends on many external factors and personal experiences. The research makes it possible to understand what impact the pandemic had on the lives of university students. Changes in their lives occur every day, so it is worth doing more research on this subject.

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