PANDEMIC SITUATION AS A TOOL OF INFLUENCE ON QUALITY OF LIFE INDICATORS OF STUDENTS OF THE UNIVERSITY OF ECONOMICS IN BRATISLAVA

Kristína Korytinová¹, Michal Vávra²

Abstract: The area of research is the view of students of the University of Economics in Bratislava on the quality of life affected by a pandemic. The aim of the paper is to examine the change in students' perceptions of quality of life during and before the pandemic and to define the most affected indicators of quality of life with an impact on overall satisfaction with life via gender structure. Selected methods such as abstraction, comparison, analysis, synthesis were used in the paper. Mathematical and statistical methods were used to process the answers to the online questionnaire. The result will be the evaluation of four established hypotheses resulting from the questionnaire and their subsequent possible application for future research in the field.

Keywords: Quality of life, Generation Z, COVID 19

1 INTRODUCTION

The increasing interest in issues related to the quality of life creates opportunities for new knowledge to measure or identify factors influencing decision-making in specific situations. Despite the high interest of the scientific community in quality of life, there is no generally accepted classification of factors and a common opinion on the factors influencing the quality of life and their interrelationships. At the theoretical level, there is still a lack of a methodologically based model for measuring the quality of life, identifying, and systematizing the factors determining the quality of life (Pukeliene & Starkauskiene, 2011).

Due to the absence of a comprehensive measurement of quality of life and their identifiers, a barrier is created to a precise theoretical basis for defining theoretical directions of quality of life. Despite the lack of consensus of the scientific community on the theoretical basis of the issue of quality of life, the authors are characterized by similar features in creating the theoretical basis. Therefore, we can say that quality of life is a broadspectrum concept that includes general phenomena that affect the needs themselves. In general, we can characterize the quality of life based on an objective or subjective view. An objective view can be characterized as the penetration of social, cultural, environmental satisfaction of needs. An objective view can be characterized as the penetration of social, cultural, environmental satisfaction of needs. Objective quality of life is generally quality of life measured using objective criteria, social and economic indicators without the use of personal experience and individual perception of the environment.

The main subject of the study of objective quality of life is the external environment of quality

of life and the environment's habitability. It is evaluated using social and economic indicators, their systems, and composite indices. The subjective view evaluates a person's overall impression of satisfaction with the quality of life itself. It is expressed by personal feelings for overall satisfaction with life (Pukeliene & Starkauskiene, 2011).

It was adopted in 2009 to address the issue of quality of life in the European Union "*Stiglitz - Sen - Fitoussi Report*" (Kanbur et al., 2018). There were accepted statistically measurable indicators of the quality of life. The issue of quality of life has been divided into nine statistically measurable areas, which is a common context assume the quality of life of the population in the Member States of the European Union (Eurostat, 2015):

- 1. The material living conditions evaluation indicator defines statistical data aimed at meeting the needs in terms of the individual's financial security or meeting the needs in terms of housing quality.
- 2. The Productivity indicator collects statistical data on employment in the country.
- 3. Health indicator collects statistical data regarding the satisfaction of the citizen with his health condition.
- 4. Statistical data from the field of education define satisfaction with the securement of quality education throughout a whole life.
- 5. Collection of statistical data to evaluate the aspect of leisure and social relations.
- 6. Statistical data analyzing the field of Physical and economic security of the citizen.
- 7. The Governance and Human Rights indicator focuses on collecting statistical

data on citizens' trust in government institutions and justice.

- 8. The Natural and Living Conditions indicator assesses satisfaction with the state of the environment.
- 9. General life experience indicator, which assesses overall life satisfaction.

The advantage of the issue of quality of life is its constant development, whether for social, environmental, or technological reasons. We are currently seeing the beginning of a new economic generation. We refer to the next generation as Generation Z. Generation Z is a group of people born between 1994 and 2010 (Bassiouni & Hackley, 2014), and the time limit may vary due to a lack of agreement in the scientific society. This Generation Z is characterized by high connectivity to information and new technologies (Van den Bergh & Behrer, 2016), financial literacy, greater job opportunities (Addor, 2011), high virtual integration (Dauksevicuite, 2016), materialistic behavior (Singh & Dangmei, 2016), as well as an overall lower rate of brand loyalty (Schlossberg, 2016). In the given generation, we also notice a high rate of imagination and the will to achieve its personal aims. In the strong scope of information technology, the generation is strongly influenced by values demonstrating success. A significantly affecting factors in consumer behaviour in each cohort is Influence Marketing.

The most widely used marketing tool in communicating marketers with a selected target group is digital marketing using social networks (Duffett, 2020). The specificity of the generation is its adaptability for many trends and will create new mainly virtual relationships. In the correct choice of a communication channel within digital marketing, the marketer can greater successfully address the selected cohort of the generation. They create new trends in consumer behaviour and marketing challenges. By defining and satisfaction of the needs of this group of people, the necessary causality is created for closer examination.

2 METHODOLOGY

The aim of the paper is to examine the change in students' perceptions of quality of life during and before the pandemic and to define the most affected indicators of quality of life with an impact on overall satisfaction with life via gender structure. To achieve the aim of the paper, it was necessary to use various background materials consisting mainly of the study of appropriately selected scientific domestic and foreign literature. We summarized the acquired knowledge using the following methods and logically arranged it. The paper also used selected methods using the principles of logical thinking such as abstraction, comparison, analysis, synthesis. To process the knowledge base, which consists of domestic and foreign sources, we used the method of abstraction to single out the most important facts. of method synthesis revealed The the interrelationships between the individual areas of research. Using the method of comparison, individual data were evaluated together with the respective genders. Mathematical and statistical methods were used to process the results of the questionnaire. In this paper, the authors used the method of analysis and synthesis to obtain and process the necessary statistical data. For better understanding, these statistics were presented graphically in the form of tables and graphs. The paper contains 3 tables and 3 graphs.

An important part of the paper consists of primary data we have obtained based on the implementation of survey made by the research instrument - a standardized questionnaire. The questionnaire was divided into five separate parts. The questionnaire itself consisted of 51 questions, of which 18 scales, 15 dichotomic, 8 polynomial questions, 7 classification questions, 2 multiplechoice questions and 1 trichotomic question. The questionnaire was created and distributed in electronic form with Google Form for getting respondents in this pandemic time. The research was attended by 102 respondents during September and October 2021. The research was performed on students at the University of Economics in Bratislava. At the same time, we used cluster sampling method for these students, because they met the criterion of the age, which we include in the examined perception of consumer behaviour of people included in Generation Z. In the questionnaire were also used the classification questions under which we could determine the individual demographic characteristics of respondents. We have shown an overview of demographic variables in Table 1.

In the first part of the standardized questionnaire, respondents were asked using dichotomous, scale questions and multiple-choice question. In this section, we asked respondents about their perception of individual indicators of quality of life before a pandemic. At the same time, we asked the subjective opinion of the definition of the 3 most important factors influencing their overall satisfaction In the first part of the standardized questionnaire, respondents were asked using dichotomous, scale questions and multiple-choice question. In this section, we asked respondents about their perception of individual indicators of quality of life before a pandemic. At the same time, we asked the subjective opinion of the definition of the 3 most important factors influencing their overall satisfaction with life before the pandemic. In the second part, we asked respondents to change the perception of individual indicators of quality of life during a pandemic. We focused on the subjective

expression of change using scale and polytomy questions.

Gen	der:		Age:	Residen	ce:	Workin	g status:
Female	60.8%	19	4.9%	Bratislava Region	33.3%	student (no economical active person)	
Male	39.2%	20	21.6%	Intern Region	22.5%	student (ful time job)	1- 2%
	1	21	32.4%	Trencin. Region	3.9%	student (pæ time job)	^{rt-} 55.99
		22	11.8%	Nitra Region	14.7%	student (internship)	1%
		23	17.6%	Banskabyatrica Region	9.8%	student (ha time job)	f 10.89
		24	9.8%	Zilina Region	4.9%	student (sel employed)	5-3.9%
		25	2%	Prefox Region	6.9%		
				Kosice Region	3.9%		
Educational attainment:				t:	Average monthly income:		
secondary education with the graduation			74%	0 - 400, - I	Eur	52.9%	
secondar; graduatio	y education n	ı witho	ut	1%	401 - 800,	- Ew	38.2%
higher education i, degree			26.5%	801 - 1200), - Eur	7.9%	
				-	1201 - 160	0 . Evr	1%

Table 1 Demographic variables of respondents

Source: Own processing based on data from primary research (2021)

By expressing individual changes in individual indicators, we can record the necessary phenomena to meet our main goal. Scaling questions were used to measure the significance of factors. The scale consisted of selected indicators that respond to the respondent by agreement/disagreement, while the affecting intensity is distributed in a 5-point Likert scale. At the same time, respondents were queried to their mutual preferences of selected indicators that decide to a greater extent under the overall satisfaction with live.

In the final part, we asked respondents using classification questions on demographic variables for better analysis and data synthesis. The obtained data were processed and then graphically processed in a Microsoft Excel. We interpreted the results using several scientific methods. The methods used were mainly the method of analysis and subsequent comparison according to which we compared the situation in the Slovak republic. When processing secondary data, we used our own calculations based on mathematical and statistical methods.

The authors focused on answering the following research questions:

• Research question 1: What quality of life indicators prevailed among the

respondents based on the gender structure before the pandemic?

- Research question 2: What quality of life indicators prevailed among respondents based on gender structure during a pandemic?
- Research question 3: What quality of life indicators have seen the biggest changes in respondents' perceptions based on gender structure?
- Research question 4: Based on gender structure, how do respondents perceive their overall satisfaction with life before and during a pandemic?

The output of the paper are formulated answers to the results of selected research questions. In the end, we summarized the achieved results through a synthesis together with the expression of our attitude to the processed issues.

All the acquired knowledge encouraged the author to a deeper analysis of the measurement of quality of live using a comparative, systematic analysis of scientific literature and statistical data to determine the interrelationships of the researched issues.

3 RESULTS AND DISSCUSION

3.1. Evaluation of examined research questions

The author of the paper focused on answering four research questions that will help him meet the goal of the paper. Using the standardized questionnaire, the paper's authors evaluated the perception of the quality of life that prevailed for the examined generation from the perspective of demographic data. The standardized questionnaire participated in 115 respondents from the University of Economics in Bratislava. Based on these findings, the author focused on answering the research questions.

As part of the survey, we focused on quality of life indicators, which are used in the European Union to measure this phenomenon. In the standardized questionnaire, respondents had the opportunity to choose at least 3 of the most important indicators of quality of life. We then presented the selected indicators in graphical form in Fig. 1.



Figure 1 The most important areas of quality of life according to the respondents Source: Own processing based on data from primary research (2021)

The most important indicator for both genders was Leisure and social interactions. A total of 83 respondents mentioned it, which represents 81.37% of the total number. The next most important factor was Health. In this case, it was marked by 58 respondents, which represents 56.9% of all respondents. Education was also strongly represented, with 41 respondents, representing 40.2% of the total. Surprising is the Economic safety indicator, which marked 37 respondents, which represents 36.3% of the total number of respondents.

Research question 1: What quality of life indicators prevailed among the respondents based on the gender structure before the pandemic?

By conducting a survey using a standardized questionnaire, the authors examined the defined indicators of quality of life, which most significantly affect the overall satisfaction with the student's life. From the point of view of the results of the standardized questionnaire, we recorded the following phenomena in the participating respondents with the defined indicators. Only indicators that have received more than 50% support for both genders at the same time will be expressed:

- The most frequently marked indicator was the Health indicator - general health status. It was marked by up to 81 respondents, which is 79.41% of the total number of respondents. From the point of view of gender structure, this factor was marked in 74.6% of women and in 83% of men.
- The expected strong representation was the indicator Leisure social relations, which was marked by 68 respondents, which includes 66.67% of the total number of respondents. From the point of view of

gender structure, this factor was marked in 68.25% of women and in 70.73% of men.

- The Natural and Environment indicator was marked by 68 respondents, which makes up 66.67% of the total number of respondents. From the point of view of gender structure, this factor was marked in 66.67% of women and in 63.41% of men.
- Examined indicator Material living conditions the quality of housing was marked by 59 respondents, which includes 57.84% of the total number of respondents. In terms of gender structure, this factor was identified in 54% of women and 61% of men.

We recorded a significant difference in terms of gender structure for the indicator Health - overall health status, where a difference between the genders of 8.4% was recorded. We can assume that this phenomenon will more often affect the emerging male generation in the field of care for their overall health. We also recorded large differences in the Quality of Housing indicator, which dominated on average 7% more among male respondents. This phenomenon may indicate a stronger influence of the male respondent on individual factors and expectations in the decision-making process in the field of housing.

Research question 2: What quality of life indicators prevailed among respondents based on gender structure during a pandemic?

The impact of the worsened epidemiological situation was closely reflected in the human community itself, in economic phenomena or in economic areas. For this reason, it was desirable to ask respondents about their preferences or changes in individual quality of life indicators. From the point of view of the results of the standardized questionnaire, we recorded the following impact of changes in the defined indicators during the pandemic among the participating respondents. Only indicators that have received more than 50% support for both genders at the same time will be expressed:

• As expected, the most frequently marked indicator of change in perception was the Health indicator - overall health status. It was marked by up to 82 respondents, which is 80.4% of the total number of respondents. In terms of gender structure, this factor was identified in 77.42% of women and 92.86% of men. We noticed a significant difference between the genders at the level of 15.44%. When asking for a defined part of the Health indicator - perception of care and protection of health status, we recorded the response of respondents to the value of 70 respondents, which corresponds to 68.6% of the total number. According to the

gender structure, both genders were marked almost identically, with the value for female respondents at 71% and for men at 70%.

- The expected strong representation was the indicator Leisure social relations, which was marked by 89 respondents, which includes 87.3% of the total number of respondents. From the point of view of gender structure, this factor was marked in 80.65% of women and in 83% of men.
- The Education indicator activities related to education during a pandemic was marked by 84 respondents, which makes up 82.4% of the total number of respondents. In terms of gender structure, this factor was identified in 63% of women and 65.85% of men.
- The subjective opinion of the positive perception of quality of life before the pandemic was marked by 64 respondents, which includes 62.74% of the total number of respondents. In terms of gender structure, this factor was identified in 61.3% of women and 65.85% of men.

We recorded a significant difference in terms of gender structure for the indicator Health - overall health status, where a significant difference was recorded between the genders at the level of 15.44%. This phenomenon corresponds to the previous research of the issue, when before the pandemic they perceived health - the overall health status to a greater extent male respondent. The indicator Leisure - social relations recorded a strong response in 87.3% of respondents, who negatively recorded worsened conditions in this parameter. We also recorded a strong representation of the indicator Education, when up to 82.4% of respondents marked this parameter. We can assume that this phenomenon will more often affect the emerging male generation in the field of care for their overall health. In addition to the mentioned parameters, we recorded a strong negative impact of the Governance and Human Rights indicator, where up to 61.8% of respondents do not trust the government and the political system. From the point of view of gender structure, we noticed a big difference between male and female respondents. The difference between the genders was 10.84% for male respondents.

Research question 3: What quality of life indicators have seen the biggest changes in respondents' perceptions based on gender structure?

As part of the measurement of quality of life indicators in various areas before and during the pandemic, a scale was chosen consisting of the following parts: material living conditions, education, physical safety, economic safety, leisure and social interactions, governance and basic rights, natural and environment, productivity, health.

Indicators	Before a pandemic %	During a <u>pandemic</u> %	Difference %
Material living conditions	29,4	28,4	-1
Education	40,2	42,2	+2
Physical safety	25,5	15,7	-9,8
Economic safety	36,3	45,1	+8,8
Leisure and social interactions	81,4	63,7	-17,7
Governance and basic rights	8,8	14,7	-5,9
Natural and environment	16,7	17,6	+0,9
Productivity	17,6	31,4	+13,8
Health	56,9	63,7	+6,8

Table 2 Changes in quality of life indicators	by
perceiving students	

- The table shows that the biggest changes in perception occurred in the area of Leisure and social interactions. There was a decrease of up to 17.7%. As expected, during the pandemic, the students did not consider this area of life as important as before. This is also due to the facts that it was leisure activities and the establishment of social relations that were most affected by the pandemic by government regulations as well as epidemiologists. According to the gender structure, this factor was identified in 90.3 % of women and 87.8 % of men.
- The Productivity indicator represents a significant change, this time an increase of 13.8%. During the pandemic, students began to perceive productivity more intensively because it was very important to force oneself to perform all duties individually from the comfort of home. From a gender perspective, women 66.13% and 65.8% of men.
- The last significant change was identified within the Physical Safety indicator. There was a decrease of 9.8%. Students did not feel physically threatened mainly because they closed at home as well as other people. The facilities were often not open times, there were no opportunities to group people

Source: Own processing based on data from primary research (2021)

and therefore less crime was committed. From a gender perspective, 40.32 % of women and 34.14 % of men.

Research question 4: Based on gender structure, how do respondents perceive their overall satisfaction with life before and during a pandemic?



Figure 2 Overall life satisfaction in men

Source: Own processing based on data from primary research (2021)

As we can see in Graph 2, we can divide men into three groups. The first consists of those who rated on the scale 1 and 2, we identified an increase in dissatisfaction during the pandemic. Thus, those men who rated negative qualities of life before the pandemic rated them even worse during the pandemic. The second group is unclassified men, so they still perceive overall satisfaction with life as neutral. The last group consists of those who evaluated the most positive qualities of life before the pandemic, but during the pandemic there was an expected decline in perception.



Figure 3 Overall life satisfaction in women Source: Own processing based on data from primary research (2021)

Figure 3 shows the perception of women, while the development curve was not the same as for men. It was once again confirmed that women

dissatisfied with life before the pandemic were even less satisfied with the quality of life during the pandemic. On the rating scale number 3, it represents women who were satisfied at the level of "good" with life, but the pandemic worsened their satisfaction. The positive perception or women on the rating scale number 4 remains unchanged during the pandemic, they were not affected by the pandemic. The most positive evaluations changed in the same way as for men, as follows, women satisfied with life before the pandemic were less satisfied during the pandemic.

1 CONCLUSION

The aim of the article was to draw attention to the perception of the quality of life of full-time students at the University of Economics in Bratislava before and during the pandemic. We used various methods to meet the goal, especially it was a quantitative method using a standardized online questionnaire. We identified four research questions, which we described individually in the Results chapter.

Based on personal experience, we can say that the pandemic has affected the lives of us all. From the point of view of university students, several changes have taken place. Teaching has moved to the online environment, there has been a distance form of teaching. The dormitories closed and so the students were forced to look for alternative solutions, but most often they returned to live at home with their parents. As a result, their social life has remained emptier than ever before.

The findings show that without difference of the gender of the students, the pandemic was affected to some extent. All that remains is to hope that students' lives will return to normal, and they will once again feel the quality of life they can enjoy.

Acknowledgments: This work has been supported by the Scientific Grant Agency of the Ministry of Education of the Slovak Republic (Project KEGA 032EU-4/2020).

REFERENCES

- Almquist, E., Senior, J., & Bloch, N. (2016). The 30 elements of consumer value: A hierarchy. Harvard Business Review, 46-53.
- [2] Addor, M. L. (2011). Generation Z: What is the future of stakeholder engagement. Institute for Emerging Issues–NC State University. Retrieved January 17, 2011, from https://iei.ncsu.edu/wpcontent/uploads/2013/01/GenZStakeholders 2.pdf.
- [3] Bassiouni, Dina H.; Hackley, Ch. (2014). 'Generation Z' children's adaptation to digital consumer culture: A critical literature review. Journal of Customer Behaviour, 13(2), 113-133.

- [4] Dauksevicuite, I. (2016). Unlocking the full potential of digital native learners. Henley Business School: Mc Graw Hill Education
- [5] Duffett, R. (2020). The YouTube marketing communication effect on cognitive, affective, and behavioural attitudes among Generation Z consumers. Sustainability, 12(12), 5075.
- [6] Eurostat (2015). Quality of life indicators, Retrieved December 11, 2020, from https://eurlex.europa.eu/LexUriServ/LexUriServ.do?ur i=COM:2009:0433:FIN:EN:PDF.
- [7] Kanbur, Ravi; Patel, Ebrahim; Stiglitz, Joseph. (2018). Sustainable development goals and measurement of economic and social progress. For good measure: advancing research on well-being metrics beyond GDP. OECD Publishing, Paris.
- [8] Pukeliene, V., Starkauskiene, V. (2011). Quality of life: Factors determining its measurement complexity. Engineering Economics, 22.2: 147-156.
- [9] Schlossberg, M. (2016). Teen Generation Z is being called millennials on steroids,' and that could be terrifying for retailers. Retrieved February 9, 2016, from https://www.businessinsider.com/millennials -vs-gen-z-2016-2.
- [10] Singh, A. P., & Dangmei, J. (2016). Understanding the generation Z: the future workforce. South-Asian Journal of Multidisciplinary Studies, 3(3), 1-5.
- [11] Van den Bergh, J. & Behrer, M. (2016). How cool brands stay hot: Branding to Generations Y and Z. London: Kogan Page Publishers.

AUTHORS ADDRESSES

¹ Ing. Kristína Korytinová Department of marketing, University of Economics in Bratislava, Faculty of Commerce, Dolonozemská cesta 1, 852 35 Bratislava 5, Slovak Republic

E-mail: kristina.korytinova@euba.sk

² Ing. Michal Vávra

Department of marketing, University of Economics in Bratislava, Faculty of Commerce, Dolonozemská cesta 1, 852 35 Bratislava 5, Slovak Republic

E-mail: michal.vavra@euba.sk