Perception of housing quality and the current situation on real estate market by Generation Z

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Abstract. The next generation will socially and economically create the image of Slovakia. Understanding the consumer behaviour of this generation is therefore becoming increasingly desirable. The article focuses perception of the housing quality and current situation on real estate market by next generation in Slovakia. Within this article was used standardized questionnaire via Google Form. A total of 115 respondents took part in the research. The respondents were from the Faculty of Commerce at the University of Economics in Bratislava and studied in the final year of the master's degree. The obtained answers of the respondents were subsequently processed using ANOVA one-way-test. From the overall point of view the 81.74% of respondents from the total number, perceive their housing quality positively. The results explain a strong agreement with the perception of the house quality among respondents. Nevertheless, we can record negative perception of the current situation on real estate market by 50.4% of the respondents. We also note the negative perception of current housing legislation by 71.3% of respondents. At the end of the article is the formulated responses of the results by the Generation Z in solving questions of housing from the demographic perspective of gender structures and residence of respondents.

Keywords: Quality of housing, Real estate market, Consumer behavior

JEL classification: *R 21, R 30, M 31*

1. Introduction

Satisfying the need for housing has become a society-wide desirable task for the company's future growth. Housing is a basic human need and a social right, the aspects of quality and affordability of which are among the evaluation attributes of the living standards of a given country's population. The development of socio-economic characteristics creates good opportunities for population development and, thus, housing opportunities. The creation of favourable conditions for the population ensures the necessary result of the community itself. Although housing is one of the social rights and basic human needs, its availability and quality may not be adequate. The changing society and market are creating new challenges to meet housing needs.

However, due to the specificity of the individual, we cannot cover the entire cohort or the entire generation. Shuman and Scott's 1989 research confirmed previous expectations that within a generation, if a significant historical event occurs, it will most affect a particular group of most affected people. From this point of view, the cohort is closely linked to the event, which creates a natural target group for marketers (Schewe & Meredith, 2004). The reason for a closer scientific examination of the issue of generations, the authors do not know precisely how to classify and time-limit individual generations (Karashchuk et. Al., 2020). According to the general definition by Strauss & Howe (1991), the generation alternates over time after 20-year cycles. However, other authors classify generations in 10-year cycles, and only at the end of the 20th century do they characterize generations in 20-year cycles or reverse order. It all depends on the cultural and regional differences in the specified areas.

For this reason, there is no comprehensive uniform time and classification line of the studied cohorts and generations in the scientific community. At the same time, some studies deny some characteristics and characteristics of generations based on historical events. These studies define cohorts and generations based on technical progress (Watcom Group, 2018). There is also criticism of the definition and use of coherent cohorts within generations in theory and practice (Rudolph et al., 2018). At present, people from the cohort, called Generation Z, are coming to the fore regarding socio-economic perception. Agreement in the scientific community. A vital attribute of the cohort studied is their propensity for success and the factors that ensure this. At the same time, housing and its quality is an essential aspect of their future development.

Rapoport (1969) perceives housing from the point of view of a cultural phenomenon. This view includes the architectural construction of the house itself, which belongs to a comprehensive cultural whole of the environment and community. This creates a whole that, in addition to the primary passive function of protection, also includes a positive function that creates an internal environment that suits its inhabitants and an external environment that forms a neighbourhood or community (Rapoport, 1969). We can also perceive housing itself as an economic commodity with market value and tradable. Housing reflects a person's economic status and availability to achieve a certain quality of life. The economic perception of real estate must be closely related to housing quality. Based on the median affordability (median price-to-income ratio), it was found that cities in less developed countries are significantly less accessible (by 28%) than cities in more developed countries (Lincoln Institute of Land Policy, 2018). The deepening differences between the strata of people are causing the increasing unavailability of quality housing. This is confirmed by McKinsey's research (2014), which estimates that up to 330 million urban households' lived-in poor-quality conditions or financial distress from paying housing fees. The research also assumes an increase in such households to 440 million—1.6 billion people by 2025. By 2050, people living in such conditions should increase to 2.5 billion people (Woetzel, 2014). Satisfaction with housing is perceived by the author Oreský (2019) as: "*as a subjective assessment based on the overall perception of what a person considers to be an essential element of living in the environment in which he lives*" (Oreský, 2019).

A closely linked relationship with housing has the health of the population. Many studies have examined population health and housing conditions, with several findings strongly linking poor health to poor housing (Carnemolla & Bridge, 2016). Some

findings suggest that population health interactions are also influenced by housing type, density, and street layout. These factors also affect trust, social cohesion and the team, and the overall sense of community, whose functions have a significant impact on mental health (Pearson et al., 2014).

Quality housing is the focal point of a productive, healthy, and meaningful life. Author Baker (2016) perceives housing as having a fundamental impact on material living standards. It influences people's basic requirements, such as protection and shelter from the volatile local climate, creating a sense of privacy, security, and enclosed space. The social determinants of health and well-being are also influenced by housing conditions (Baker et al., 2016).

The perception of the value of housing by the new generation has become an important part of the development of society, and therefore it is necessary to have more attention to this research.

2   Methodology

The aim of the article is to express the perception of housing quality and the perception of the current situation in real estate market by Generation Z. We will achieve the chosen goal using several scientific methods. It is necessary to use secondary research, which the author's primary research will supplement. The knowledge of professional, scientific literature will be used within the secondary research. We will then process the knowledge we need to be based on the general basis of scientific methods - abstraction, selection, analysis, synthesis, induction, deduction, and comparison. The acquired knowledge will then be processed based on logic and mathematical-statistical methods. We will also use primary research to cover the chosen goal. The primary research took place in March and April in 2021. It was attended by 115 respondents working in the final year at the Faculty of Commerce at the University of Economics in Bratislava. Respondents were selected based on a variable - age to include the cohort of people we selected. The primary research was conducted using an electronic questionnaire using the Google Form platform. The questionnaire was divided into five separate parts. The questionnaire itself consisted of 44 questions, of which 20 scales, 7 polynomial questions, 6 dichotomic, 6 classification questions, 2 selective questions, 2 dialogue questions and 1 multiple-choice question. The obtained data were processed using the general basis of scientific methods and mathematical-statistical methods, using the ANOVA one-way-test. ANOVA one-way-test was processed in Microsoft Excel. For better understanding, these statistics were presented graphically in tables and graphs. The article contains seven tables. The results are graphically described in Table 2.

To better define this group of respondents, we characterized them in more detail according to demographic variables in Table 1.

Tab. 1 Definition of respondents to the survey according to the demographic variable

Gender:		Working status:		Residence:	
Female	64.3%	student (non-economically active person)	25.2%	Bratislava Region	35.7%
Male	35.7%	student (full-time job)	7%	Trnava Region	13%
		student (part-time job)	37.4%	Trenčín Region	4.3%
		student (internship)	10.4%	Nitra Region	11.3%
		student (half time job)	3.5%	Bánskabystrica Region	11.3%
		student (self-employed)	20.9%	Žilina Region	11.3%
		graduated (employment)	13%	Prešov Region	10.4%
		graduated (non-economically active person)	3.5%	Košice Region	2.6%

Source: Author´s own processing based on data from primary research (2021)

The ambition of this article is to answer the author's hypothesis (H) and research question (RQ), which will be examined using the ANOVA one-way-test:

H: There is a relationship between housing quality assessment and perception on current situation on real estate market in Slovakia.

RQ: How do respondents based on gender structure perceive their quality of the housing and current situation of real estate market in Slovakia?

In the final part of the article, the answers obtained will be used to achieve the main goal of the article and to evaluate the quality of the housing and current situation of real estate market from the demographic variables of gender and residence structure of Generation Z.

3   Results and discussions

3.1   Evaluation of examined hypothesis and research question

Using the standardized questionnaire, the article´s author evaluated the perception of the housing quality that prevailed for the examined generation via perspective of demographic variables – gender and residence. In a standardized questionnaire, the

author focused on finding out the perception of the quality of previous housing, housing issues, possible ownership conditions and the method of acquiring real estate. In the next part, the author focused on the evaluation and perception of the current development of the real estate market, its attributes, and its activities. Subsequently, this information's were process within the following hypothesis and research question. The hypothesis was tested by ANOVA one-way-test and was graphically described in Table 2. In Table 2 are recorded P-Value, Alpha, F-Value, F-critical, as well as differentials of measured values. These presented values are the main values of ANOVA one-way-test analysis.

Tab. 2 Result of chosen author´s hypothesis using ANOVA one-way test

	F- Value	F-Critical	F> F-Critical	Alpha	P- Value	Alpha > P-Value
H1	120,3374	3,035617	F> F-Critical	0.05	2,35E-36	Alpha > P-Value

Source: Author´s own processing based on data from primary research (2021)

The data presented in Table 2 represent an essential part of answering the author's hypothesis and research question in the study of consumer behaviour of the selected cohort Z in housing quality and the current real estate market.

H: There is a relationship between housing quality assessment and perception of the current situation on real estate market in Slovakia.

The results presented in Table 2, which define the key values of the ANOVA one-way-test analysis (F> F-Critical and Alpha> P-value), confirm the author's hypothesis. We can thus reject a possible random phenomenon and confirm the author's hypothesis.

RQ: How do respondents based on gender structure perceive their housing quality and the current situation of the real estate market in Slovakia?

In the primary survey, respondents were asked selective, multiple-choice, polynomial questions and a 5-point Likert scale to assess their perception of housing quality. Using a 5-point Likert scale, we can determine their perception in the area of housing quality based on a variable - gender in Table 3.

Tab. 3 Perception of the parameter housing quality according to the respondents based on the demographic variable - gender

Factors / Gender	Female∑74 respondents	Male ∑41 respondents
Strongly positive	55.41%	34.19%
Positive	25.68%	48.8%
Neutral	13.51%	17.01%

Negative	4.05%	
Strongly negative	1.35%	

Source: Author´s own processing based on data from primary research (2021)

From survey results, we note a positive perception of the quality of housing in all respondents. From the overall point of view, up to 94 respondents, representing up to 81.74% of respondents from the total number, perceive their housing quality positively. From the point of view of female respondents, it is up to 60 respondents, representing 81.09% of the total number of female respondents. For male respondents, up to 34 respondents perceived their housing quality positively, representing 82.99% of the total number. The fact is that only 4 respondents perceived their quality of housing negatively among female respondents, which represented a level of 5.4%. From the second point of view, we did not observe the studied phenomenon in men. To further characterize the examined metrics, we decided to divide the respondents according to another demographic criterion residence of respondents' housing and the permanent criterion - gender of the respondent.

Using the 5-point Likert scale, we were able to determine the intensity of the impact, where we can quantify the investigated intensity based on the strength of the perceived parameter of housing quality. In simplicity, it can be stated that a higher score indicates a higher intensity of housing quality. The key values of this analysis - Cronbach's alpha, standard deviations and average measured values were analysed for each gender and their place of residence separately, and we recorded them in Tables 4, 5. The performed analysis was processed in Microsoft Excel.

Tab. 4 Quality of housing of female respondents from specific regions

	Average measured value	Standard deviation	Cronbach´s alpha**
Bratislava Region	4.231	1.225	0.711
Trnava Region	4.7	0.233	0.950
Trenčín Region	4.5	0.333	0.926
Nitra Region	4.2	0.7	0.833
Bánskabystrica Region	4.286	0.571	0.867
Žilina Region	3.667	1.75	0.523
Prešov Region	4.636	0.255	0.945
Košice Region	4	2	0.5

Legend: * Used 5-point Likert scale (5 = strongly agree, 1 = strongly disagree)

**Total Cronbach´s alpha = 0.11

Source: Author´s own processing based on data from primary research (2021)

Tab. 5 Quality of housing of male respondents from specific regions

	Average measured value	Standard deviation	Cronbach´s alpha**
Bratislava Region	4.429	0.418	0,906
Trnava Region	4.2	0.2	0,952
Trenčín Region	3.5	0.5	0,857
Nitra Region	4.286	0.571	0,867
Bánskabystrica Region	3.833	0.567	0,852
Žilina Region	4.333	0.333	0,923
Prešov Region	4	2	0,5
Košice Region	3.5	0.5	0,857

Legend: * Used 5-point Likert scale (5 = strongly agree, 1 = strongly disagree

**Total Cronbach´s alpha = 0.06

Source: Author´s own processing based on data from primary research (2021)

The data expressed in Table 4 explain a strong agreement with the perception of the quality of housing among female respondents. The average measured value of all female respondents represents 4.2775, which strongly confirms agreement with housing quality. We also notice this phenomenon among male respondents, where we also have a strong agreement with the perception of housing quality. The average measured value of all male respondents represents 4.010, which strongly confirms agreement with housing quality. From a comprehensive point of view, we recorded a strong positive perception of the current housing quality by respondents in the survey. However, we must emphasize that only 18 respondents, represent 15.65% of respondents of the total own property. Of these, only 12 respondents acquired the property by direct purchase and not by donation or inheritance. From a statistical point of view, the average measured value of the housing quality attribute for all property owners is around 4.444. We noted a strong positive perception of the quality of housing among respondents, including those who live with their parents or rented those who already own real estate.

Tab. 6 Assessment of the real estate market by respondents via gender

Factors / Gender	Female ∑74 respondents	Male ∑41 respondents
Strongly positive	2.71%	-
Positive	6.76%	7.31%
Neutral	44.59%	34.15%
Negative	33.78%	34.15%
Strongly negative	12.16%	24.39%

Source: Author´s own processing based on data from primary research (2021)

Tab. 7 Assessment of the real estate market by all respondents from specific regions

	Average measured value	Standard deviation	Cronbach´s alpha**
Bratislava Region	2.61	0.844	0.323
Trnava Region	2.334	0.524	0.224
Trenčín Region	2.31	0.897	0.389
Nitra Region	1.6	0.8	0.5
Bánskabystrica Region	2.385	0.923	0.387
Žilina Region	2.231	0.526	0.236
Prešov Region	2.583	1.174	0.455
Košice Region	3	1	0.334

Legend: * Used 5-point Likert scale (5 = strongly agree, 1 = strongly disagree)

**Total Cronbach´s alpha = 0.36

Source: Author´s own processing based on data from primary research (2021)

Part of the primary research was to measure the intensity of the impact of the current real estate market on the cohort under study. From the point of view of what we can characterize, the current generation perceives negative the current development of the real estate market. We observe the data in Table 6 for female respondents. Only 9.47% of female respondents have a positive perception of the current real estate market. It negatively perceives up to 45.94% of women's respondents. We also asked respondents about regular monitoring of the real estate market. The results showed that up to 48 female respondents regularly monitor the real estate market development, representing 64.86% of the total number of female respondents. Interestingly, 27 female respondents, representing 36.49% of the total number of female respondents who regularly monitor the development of the real estate market, perceive the real estate market in Slovakia as a whole. When characterizing data for male respondents, we note a strong negative reaction to the current state of the real estate market. Negative perception of the current real estate market up to 58.54% of male respondents. The real estate market development is regularly monitored by 27 male respondents, representing 65.85% of the total number of male respondents. Of these, up to 21 male respondents, representing 51.22% of the total number of male respondents, perceive the overall state of the real estate market negatively. Respondents who own real estate regularly monitor the development of the real estate market while perceiving it negatively and the currently set legislation of the housing policy of the Slovak Republic. The average measured value of all respondents represents 2.381, which negative confirms agreement with situation on real estate market in Slovak republic.

This phenomenon was also confirmed in the following aspect focused on the perception of housing legislation by respondents. For both genders, we noted a negative perception of satisfactory legislation in the area of housing policy. Within female respondents, we recorded up to 70.27% negative perceptions of compliant legislation, and among male respondents, we recorded up to 73.17% negative perceptions of compliant legislation in the area of housing policy. Overall, we see a negative perception of the real estate market by the upcoming generation.

Conclusion

Despite the ongoing pandemic in the world and in our country, when socio-economic activities have been limited, we see a positive perception of the quality of housing in the surveyed respondents. From the overall point of view, up to 94 respondents, representing up to 81.74% of respondents from the total number, perceive their housing quality positively. From the point of view of female respondents, it is up to 60 respondents, representing 81.09% of the total number of female respondents. For male respondents, up to 34 respondents perceived their housing quality positively, representing 82.99% of the total number. The fact is that only 4 respondents perceived their quality of housing negatively among female respondents, which represented a level of 5.4%. On the other hand, with the ongoing pandemic , the real estate market trend in terms of price growth has not slowed down significantly in Slovakia. This creates a strong paradigm when the recorded deteriorating socio-economic conditions did not slow down this growth and deepened the problem of housing in Slovakia. This fact was also confirmed by the results of the perception of the current set legislation in the field of housing. Within female respondents, we recorded up to 70.27% negative perceptions of compliant legislation, and among male respondents, we recorded up to 73.17% negative perceptions of compliant legislation in the area of housing policy. We found that, only 9.47% of female respondents positively perceive the current real estate market. It negatively perceives up to 45.94% of women's respondents. On another side, the 58.54% of male respondents negatively perceive the current real estate market. The development of the real estate market depends on many factors (ECB policy, country housing policy, housing legislation, construction incentives, state social policy, current and planned real estate construction, current prices of materials and workers, etc.). Overall, these factors form the picture of the current real estate market. To improve the conditions of the real estate market and the overall development, it is necessary to improve the mentioned factors and to support programs aimed at supporting young people and their first housing. Due to insufficient support, low construction, low interest rates of financial institutions, high demand from people, or inflexible legislation, this phenomenon will continue to deepen, and real estate prices will rise. Housing is generally one of the European Union's most important players. The increasing pressure from the European Union creates the necessary attributes, which after the subsequent application, can speed up the mentioned process.

Due to a better understanding of research needs in the perception of housing quality and the current situation on the real estate market, we included the selected sample in cohort of Generation Z. However, based on this, we cannot generalize these results for the whole cohort of Generation Z living in the Slovak republic. Nevertheless, we can take the results of the survey as a point for a closer examination of the issue of housing in Slovak republic by the next generation.

The housing quality has recently gained a high level of interest in several scientific, private, but mainly in public institutions. The reason for this popularity is its broad-spectrum concept and use in several scientific and professional fields. Its scope can be used in both the human, natural and technical sciences. There is an intersection between several directions because understanding this issue from only one direction

creates an imaginary bubble, the essential characteristics of which can be described but not its essence. For this reason, it is necessary to penetrate several scientific methods and several subjects across the entire spectrum. As this issue directly concerns the person himself. The need for housing or protection is the basic choice of every person, and therefore their quality is directly linked to the very quality of life of that person. Securing a home has naturally become a duty that one strives to achieve in the highest possible quality throughout one's life. The current growth of the cohort representing Generation Z creates broad-spectrum opportunities for us to understand this issue from the point of view of housing. Therefore, the best possible understanding of the interests, influencing factors, expectations, the intensity of decision-making, and the decision-making process of this cohort as a future bearer of socio-economic, technological, political, and demographic phenomena is needed.

Acknowledgement

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