

# SHOPPING BEHAVIOR OF THE SILVER GENERATION IN SLOVAKIA: A CASE STUDY NITRA

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**Abstract:** *The Slovak population, like the population in other European countries, is aging. The population in the older age groups is growing by increasing the average age of life. Even in old age, people are still active, they like to actively participate in social and economic activities, and they carry out various hobby activities, which preserve but also increase the quality of their personal lives. Seniors over the age of 50+, referred to as the silver generation, are important consumers of a wide range of services, including the growing retail services. These are the reasons why an increased attention needs to be paid to them. The aim of the paper is to know the shopping behavior of the silver generation in relation to the specificity of the spatial structure of retail facilities. The research was carried out in the Slovak city of Nitra. This West Slovak city is known for its history, university education facilities and currently especially the automotive industry, which has significantly contributed to improving the economic conditions of its inhabitants. The shopping types of senior respondents were obtained by questionnaires and evaluated by a comparative analysis based on a description. The results of the research show that the behavior of the current silver generation is changing in comparison to the previous one. The closest relationship between the seniors' traditional way of shopping and the traditional mixed retail facilities in the central part of the city has not been confirmed. The statistically closest relationship between the shopping types of seniors was confirmed in the residential districts where the retail facilities consist of large shopping centers, supermarkets and hypermarkets with a concentrated offer. Senior shopping is changing significantly and is in line with modern trends. New forms of retail supply change the usual patterns of senior shopping behavior.*

**Keywords:** *Silver generation, senior community, shopping behavior, retail network, Slovakian consumers.*

**JEL Classification:** *R21, R23.*

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## Introduction

Since 2012, the EU has been working on the issue of active aging and intergenerational solidarity. The Eras project (2012) aimed to draw European society's attention to the key factors associated with the forthcoming demographic changes, which make it necessary to reposition the position of older people in society (Gabrižová, 2017).

In the Slovak Republic, in order to create better conditions for seniors, National Programs for active aging were created for the years 2014–2020, aimed at a target group of 50 years and older. The share of older age cohorts in the total population is growing. According to the scenario of average population development of the largest cities in Slovakia (Šprocha et al., 2017) in the city of Nitra, which is the subject of this study, more than 46% of the population over 50 should live by 2035, out of which up to 30% will reach more than 60 years.

The object of the research is the silver generation of 50 years olds and older in Nitra. The aim of the paper is to know the shopping behavior of the silver generation in relation to the specificity of the spatial structure of retail facilities. We evaluated consumer formulas of 50+ according to the Typology Media Behavior methodology of Incoma Research and GfK Prague (Stárová, 2003). The importance of the study is essential for the needs of the emerging 'silver' retail market, the significance of which will grow in the future.

To obtain it, we set three hypotheses:

*H1: There is a statistically significant relationship between the shopping behavior of seniors and the type of retail facilities in a given spatial unit.*

*H2: With regard to the achieved research results (Trembošová et al., 2016a, b, c), we assume the closest connection for traditional shopping and a loyal type of seniors within it.*

*H3: Younger seniors aged 50–59 will show a wider range of shopping types due to higher incomes than older seniors in retirement age have.*

## 1. Study Area

The study area – city of Nitra (Fig. 1), with an area of 100.4 km<sup>2</sup> and a population of 76,553 in 2019, is currently the 6th largest in Slovakia (after Bratislava, Košice, Prešov, Žilina, and Banská Bystrica). Its formation and development was made possible by a propitious location at the border of the lowlands and the mountains, as well as at the crossroads of ancient trade routes (Trembošová et al., 2020). As in Western Europe, there have been changes in the demography, specifically an ageing population. The index of the Nitra residents as the share of persons in post-productive age (65+) to persons in pre-productive (0–14) age was 134.4% in 2019 (Tab. 1). The average age of residents of Nitra was 42.94 and pensioners' share in the post-productive age is 19.33%. The data in Tab. 1 indicate a regressive type of population and elderly than republic population. The Nitra residents are getting older faster than the Slovak average.

In 2019, 748 retail units were found in Nitra, out of which 19 were large department stores, supermarkets and hypermarkets (Tab. 2). The saturation of the retail network reached 2,041 m<sup>2</sup> of sales area per 1,000 inhabitants (Tab. 2).

In 2019, the Nitra population of 50+ accounted for 39.46% (30,197 inhabitants). Women, who were most numerous in the age group 65 to 69 (3,166), predominated in 57.47%. Most male seniors were in the group of 60–64 year old (www.statistics.sk) women. In the monitored age structure of younger seniors (50 to 59 years), 9,844 lived in the city of Nitra, which represents 12.86% of Nitra, and up to 20,353 older seniors (60 and older), i.e., 26.59% of the population of Nitra.

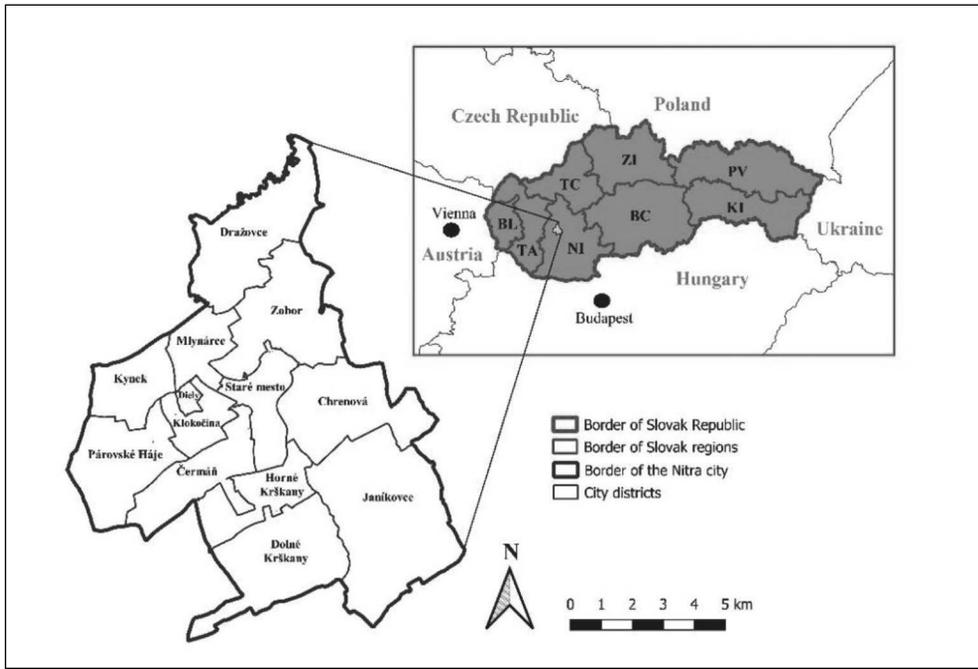
Data obtained from a field survey in 2019 were used for the purposes of the analysis. The research sample consisted of 497 respondents while the ratio of both categories of seniors – the younger (50–59 years) and the older ones (over 60 years) – was almost balanced (249:248). Women are generally not

**Tab. 1: Selected characteristics of the inhabitants of the city Nitra and Slovakia in 2019**

Area	Ageing index (%)	Average age	Pensioners share 65+ (%)	Pensioners 50+ (%)
Nitra	134.4	42.94	19.33	39.46
Slovakia	104.8	41.06	16.58	35.92

Source: Statistical Office of the SR (2019)

Fig. 1: Study area



Source: own

Tab. 2: Basic indicators of the retail network of the Nitra city districts in 2019

City district	Population	Number of stores	Sales area in m <sup>2</sup>	Sales area in m <sup>2</sup> /1,000 inhabitants
Čermáň	5,551	58	7,415	1,335
Diely	8,092	5	580	71
Dolné Krškany	2,092	45	7,071	3,380
Dražovce	1,954	4	1,178	602
Horné Krškany	1,070	24	3,228	3,016
Chrenová	15,202	111	18,199	1,197
Janíkovce	2,046	5	1,296	633
Klokočina	18,519	50	7,903	426
Kynek	942	16	21,572	22,900
Mlynárce	562	17	36,157	64,336
Párovské Háje	895	1	80	89
Staré Mesto	12,188	403	49,383	4,051
Zobor	7,420	9	418	56
Nitra	76,533	748	154,480	2,018

Source: own

only more likely to shop than men, but they are also more willing to take part in surveys. Therefore, they had a higher share of 57.67% in the structure of respondents. The regional city is a traditional center of education, which was reflected in the structure of seniors according to their education. The majority of respondents (77.80%) completed secondary education. Higher education is represented by 8.24% of respondents and basic education by 13.96%. The silver generation is also specific by a significant involvement in the work process. Younger seniors are in the process of preparing for retirement. Some of them are already in early retirement (4.9%). On the other hand, the group of respondents aged 61 and over consisted mainly of pensioners (91.55%), out of whom 9.29% stated an employment relationship.

## 2. Theoretical Background

Seniors as consumers have often been considered a homogeneous group that is similar to each other but significantly different from younger age groups (Karani & Fraccastoro, 2010; Kohijoki & Marjanen, 2013; Lesáková, 2016a; Najdený et al., 2019; Kovács, 2019a). This picture is gradually changing under the influence of lively activities and lifestyles of older people. Nielsen (2014), Pesonen et al. (2015), and Ahmad (2002) report that the older consumer market has become more heterogeneous in terms of preferences, motives and spending. Lesáková (2016b) explains that seniors were perceived in the past as an unattractive market segment due to the limited purchasing power. According to Najdený et al. (2019), seniors represent an important group of consumers, not only because of their specific consumer behavior but also because of their growth. The trend of population aging is pointed out by Kulcsár and Brown (2017), Ondáčková et al. (2018), Matušovičová (2019), Sikos and Kovács (2019a), and Korenková et al. (2020). Karani and Fraccastoro (2010), Koubaa et al. (2017), Krivošíková et al. (2020), and Olejniczak (2021) consider the senior market to be the fastest growing segment, which is receiving increasing attention (Eusébio et al., 2015).

The silver generation enters the literature as a 'rejuvenating population' that displaces the common stereotype of the older generation as lonely and poor people. It consists mainly of the generation of baby boomers (generation born in 1946–1964), which is described by Bava

(2015), Chapman and Ciment (2015), Feeney (2015), Russell (2015), Križan et al. (2020), or quite similar 'The Boomers' (generation born in 1946–1960) noted by Bejtkovsky (2016). It acts as a generation that redefines the concept of older age and changes consumer behavior patterns. Kim (2017) adds that the silver generation represents people who live a consumer and leisure life based on economic strength after retirement and at the same time live an active social life in order to differentiate themselves from the older generation with a passive lifestyle. Zalega (2015) and also Kovács (2019a) pointed to their position in the market as a new major consumer.

The current silver generation is characterized by an increase in the share of people with a complete secondary and tertiary education, but also by a higher employment of women in the labor market than their parents. Higher education is reflected not only in the higher incomes of seniors, but also in their higher purchasing power than the previous generation. With the development of technologies, but also with their interest, today's younger seniors belong to the Internet generation (Lian & Yen, 2014; Kim, 2017; Svatosova, 2020). They are aware of their desires and needs, they compare and consider all possible factors in order to achieve them. They are used to making decisions and consuming (Pauhofová & Páleník, 2012). Economic factors are not always essential for them. An example is the older generation in Western Europe which considers not only the economic aspects of their consumption but, on the contrary, the price is becoming just one of several factors. This approach is mainly a reflection of a more stable and relatively higher level of seniors' income in the old EU states, but it is already being formed in the post-socialist EU states.

The situation is quite different in Slovakia. This generation often has obligations to their children with whom they live in the same household (37%), but also obligations to their living parents, which is why it is also called the 'sandwich generation' (Páleník et al., 2012). Many low-income Slovak seniors are often dependent on economically active children, who have to make a significant contribution to their parents' care, especially in old age. According to Nagyová et al. (2013), the purchasing power of many Slovak households does not make it possible to satisfy the needs of

food items or other basic products. Kasčaková and Kubisová (2016) point out that the income and expenditure situation of Slovak seniors is characterized by a low level of income (average old-age pensions in the Slovak Republic according to EU-SILC 2019 is €422.39) and high expenditures on food, medicine, medical devices, drugstore and sometimes consumer goods, which nowadays reach high finances, about 90% of seniors' incomes.

In the longer term, it is possible to point out an interesting picture of the behavior of senior consumers according to the period when the research was conducted:

- seniors are interested in new products, but not to meet specific personal needs (biophysical and psycho-social) in old age (Leventhal, 1997), when choosing a business operation, they prefer a number of attributes to satisfy personal motives (Dawson et al., 1990; Megicks et al., 2008);
- seniors are more loyal to traditional retail stores (Miller & Soyung, 1999) and brands (Smith, 1991; Karani & Fraccastoro, 2010; Lesáková, 2013; Celik, 2019);
- older people are more sensitive to product prices (Pettigrew et al., 2005; Jackson et al., 2011; Lesáková, 2014);
- seniors, as they are growing older, have a limited ability to use new information and more often rely on memory experiences (Smith, 1991; Nasco & Hale, 2009);
- seniors use shopping centers to satisfy the need for social contacts (Spilková, 2012; Kovács, 2019b);
- seniors prefer products that minimize their problems to products that maximize their benefits (Ho & Shirahada, 2019);
- seniors are generally more utilitarian (this approach concerns more objective and rational consumption) than hedonistic (emotional) consumers (Križan et al., 2018, 2020).

The aging of society and thus the increase in the number of older people is reflected in the ever-increasing consumption, which increases their impact not only on production but also on the structure of consumption. Williams and Drolet (2005) emphasize motivational changes in decision making. According to them, older people perceive the remaining time as limited and from this point of view they prefer more social goals that are emotional and meaningful to those that are related to knowledge and

rationality. Often their routine consumer behavior is driven by habits; they tend to favor long-term habits (Lambert-Pandraud et al., 2005). According to them, older people are more loyal to the brands they buy than younger consumers. As well, there exists an important role of nostalgia tendency (Gorek & Ayar, 2020). The long-used stereotypes of older people are relatively difficult to change (Cuddy et al., 2005). According to McCloskey (2006), the seniors segment represents a lucrative market, older people have lower debts, higher disposable income and additional leisure time. Dvorský et al. (2020) also recommend to significantly consider this group of audience in field of strategic management in the service sector. Sikos and Kovács (2019) state that the 'silver generation' provides significant potential purchasing power for the retail sector, recommending exploring which products and services may be of interest to the 'silver generation', as meeting these needs may be a key factor.

### 3. Data and Research Methodology

The level of retail facilities can be assessed by evaluating its key characteristics, such as the number of stores and the size of the sales area. These, together with the population, represent the inputs of the cluster analysis. Based on the assessed properties of the retail network of the Nitra city districts, 4 clusters were created through cluster analysis: The 1st: mixed; the 2nd: with a predominance of large stores; the 3rd: with a predominance of large specialized stores; and the 4th one: with a predominance of separate small-area units. The Euclidean distance was used as a measure of the distance between individual objects (city districts):

$$d_{ij} = \sqrt{\sum_{k=1}^p (x_{ik} - x_{jk})^2} \quad (1)$$

where  $p$  is a number of indicators measured on objects and  $x_{ik}$ , respectively  $x_{jk}$  is a value of  $k$ -th indicator of  $i$ -th, respectively  $j$ -th object (Faisal et al., 2020).

The city districts were divided into the clusters using three agglomerative hierarchical clustering methods: the nearest neighbor method, the outermost neighbor method, and the Ward method. The process of connecting individual city districts into clusters is graphically represented by a dendrogram. The calculations were performed in the Statistica 13 program.

The questionnaire, as a tool of perception, was divided into several parts. The first part consisted of classification questions – gender, age, education, employment and permanent residence. According to the most frequent answers, the profile of a typical respondent of this study was presented by a woman (57.67%), 60 years of age and older (31.54% of interviewed male seniors and 64.78% of interviewed female seniors), the retired seniors of secondary education (77.8% of all respondents and 59.3% women), without any perk (73.55% of all respondents, 79.53% of which were women).

From the number of typologies adequate for the purposes of this paper, there was used the method of self-assessment of purchases into 7 purchasing types according to the methodology of the Typology Media Behavior of Incoma Research and GfK Prague from 2003 (Stárová, 2003). The methodology is focused on the types of shopping behaviour and their characteristics, which are based on the forms, motivation and method of shopping. It consists of two basic types and several subtypes of shopping orientation: (1) traditional (careful or conservative, economical, loyal,

and unpretentious); or (2) modern (influential, demanding and mobile, or pragmatist). The questions were focused only on shopping in brick-and-mortar stores. Respondents were personally approached by researchers outside shopping malls so as not to be directly affected by the atmosphere in the malls. The results of the survey were evaluated by classical methods, such as comparative analysis based on description, statistical, graphical and cartographic methods, and then interpreted.

Using the chi-squared goodness of fit test, we verified the representativeness of the sample in terms of gender. From the achieved results it can be stated that the sample of respondents is representative. We accept  $H_0$ , as the table value of 3.84 reaches a higher value than the test characteristic 0.03 (Tab. 3).

We assessed the intensity of statistical dependence using Pearson's contingency coefficient (Markechová et al., 2011), which allowed us to identify two studied domains: i) the degree of dependence between the shopping types of seniors and their age in a certain cluster of retail facilities; and ii) degree of dependence between the shopping types of seniors and key characteristics of retail facility

**Tab. 3: Basic indicators of the retail network of the Nitra city districts in 2019**

	Data of the Statistical Office of the Slovak Republic (year 2020)	Questionnaire replies	Empirical abundances	Theoretical abundances	(E-T) <sup>2</sup> /T
	Nitra	Questionnaire			
<b>Women</b>	17,844	288	286.061	288	0.013
<b>Men</b>	13,158	209	210.938	209	0.017
<b>Altogether</b>	31,002	497	497		0.031
<b>H0</b>	The sample is representative in terms of gender, there are no statistically significant differences between the sample and the base sample.				
<b>H1</b>	The sample is not representative in terms of gender, there are statistically significant differences between the sample and the base sample.				
<b>Alfa</b>	0.05				
<b>Degrees of margin</b>	$2 - 1 = 1$				
<b>Table value</b>	3.841				
<b>Test characteristic</b>	0.031				

Test characteristic < table value

Source: Simonek (2020)

in a certain cluster, number of stores and the size of sales area:

$$C = \sqrt{\frac{\chi^2}{n + \chi^2}} \quad (2)$$

who:

$$\chi^2 = \sum_{i=1}^k \sum_{j=1}^m \frac{(f_{ij} - \frac{f_i^A f_j^B}{n})^2}{\frac{f_i^A f_j^B}{n}} \quad (3)$$

$C$  – the contingency coefficient acquires values from the interval  $<0, 1>$  (if  $C = 0$ , then the characters  $A, B$  are independent, values close to zero means weak dependence and vice versa, values close to 1 strong dependence);

$\chi^2$  – test criterion, resp. test of good agreement;

$f$  – expected numbers, provide information on the results obtained empirically;

$n$  – total number of responses;

$k$  – frequency classes;

$A$  – the first monitored character (senior shopping type);

$B$  – the second monitored trait (age of the senior, number of stores and sales area of the cluster).

#### 4. Research Results

Retail stores of various nature, structures with different localization marketing rules are built in the city districts of Nitra. Large-format stores on the outskirts of the city and along the thoroughfares with a focus on the mobile customer are in strong competition with traditional small shops concentrated especially in the Old Town district. This diversity of retail offer is complemented by the non-Slovak phenomenon of hypermarkets of foreign chains. They used the proximity factor and cheaper land when choosing a business location and operate in housing estates. The four clusters identified have a similar structure in the retail network in terms of number of stores, sales area and population (Fig. A1 in Appendix).

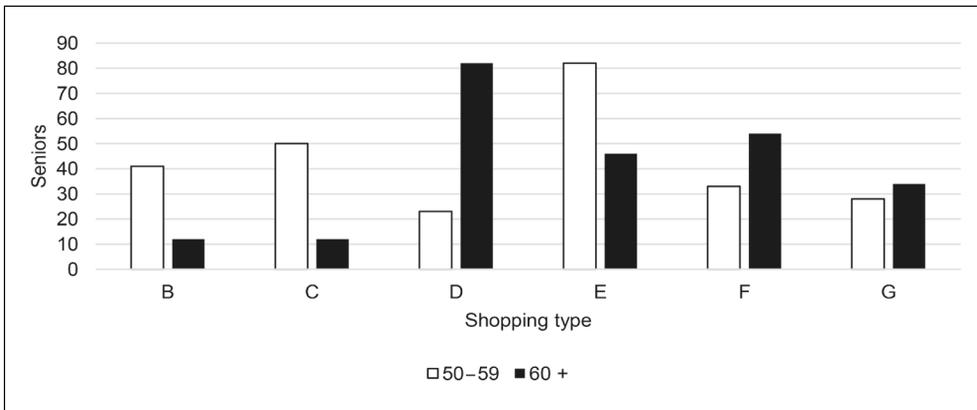
Only one district, the Old Town, was included in the first cluster, the second cluster includes housing estates with complex housing construction, Chrenová and Klokočina, which concentrate a substantial part of the retail infrastructure, consisting mainly of shopping

centers and large specialized stores. The third city districts of Diely, Zobor and Kynek with large specialized stores were assigned to the third cluster. The most numerous is the fourth cluster, formed by other city districts, which are characterized by individual housing construction. These include Dolné Krškany, Horné Krškany, Mlynáre, Drážovce, Čermáň, Janíkovce, and Párovské Háje, which are characterized by a higher number of small shops, which are constantly created mainly by adapting the residential function to a retail one. The process of building large-scale shops on a green field, using vacant land with a convenient location for transport and accessibility along the main roads, also rarely takes place in them. These parts of the city have retained their rural character, presented by the low number of retail stores, mainly food ones. The position of clusters in three-dimensional space is shown in figure (Fig. A2 in Appendix). It expresses the links between the number of inhabitants, the sales area and the number of stores.

Consumer and shopping behavior is influenced by several factors – gender, education, employment, religion, nationality, amount of financial income, etc. Other factors such as location, sales culture, store atmosphere, product range, price, real household income, lifestyle and some more also affect shopping behavior.

Although the older generation was used to shopping mainly in small shops, the concentration of retail units in shopping centers also creates a suitable space for ‘silver’ customers not only for shopping, but also for meeting friends, visiting children’s corners with their grandchildren, as well as other activities. At the same time, it provides them with postal, banking, catering services located under one roof and other services. The results of the questionnaire survey also prove this.

497 interviewed seniors expressed their shopping type. The responses were subjected to a good agreement test and a Pearson’s coefficient, which reached 0.59 for the entire senior sample, which is a slight statistical dependence. Among all respondents, 23% of seniors identified with a modern way of shopping (11% stated a demanding type and 12% a mobile pragmatist). As many as 77% stated a significant traditional way of shopping for seniors. Of this, 21% prefer conservative shopping and up to 26% of respondents

**Fig. 2:** Number of shopping type of seniors in Nitra city

Source: own

Note: B – demanding; C – mobile pragmatist; D – conservative; E – frugal; F – loyal; G – undemanding phlegmatic.

advocated a frugal approach (Fig. 2). Current research has pointed to a change in previous trends in the traditional shopping of seniors in Nitra (Trembošová et al., 2016a, b, c). The thrifty trend (26%) comes to the fore over conservative (21%), loyal (18%) and undemanding phlegmatism (12%).

The first cluster, a mixed one, represents the Old Town with historically traditional retail facilities, which in 2019 consisted of 403 stores with an area of 49,383 m<sup>2</sup> and the rate of assortment focus reached 17. Senior consumers had a wide choice of shopping from separate small stores to shopping centers of various sizes. Nevertheless, all respondents were traditional in shopping (Fig. 3) with the highest share of loyal shoppers (32%). They were shopping very often and in small quantities, preferred small shops near their homes, professed tradition and focused their shopping on the social side of life in the form of meetings with acquaintances, for the purpose of social communication. Pearson's coefficient of 0.56 indicates a low tightness, which is not statistically significant and is lower than the city-wide correlation (0.59).

The second cluster with a predominance of large-scale stores consists of housing estates with complex housing construction called Chrenová and Klokočina, marked by advancing

gentrification, i.e., the generational change of the permanent population (Fig. 3). These housing estates originated mainly in the 60s and 80s of the last century. At present, they are complemented by a wide range of retail formats, offering 14 assortment specializations in 151 stores on an area of 26,102 m<sup>2</sup>. At present, they concentrate a substantial part of Nitra's retail infrastructure, through shopping centers and large specialized stores with a large number of parking spaces. These stores used the location factor of the customer's proximity. Up to 1/3 of seniors prefer a modern way of shopping in these malls. Nevertheless, a significant proportion of seniors are still traditional with a frugal and rational approach to shopping (22%). With a tightness of 0.75 the results of this cluster can be considered statistically significant. It reaches a higher value than the city-wide Pearson's coefficient (0.59).

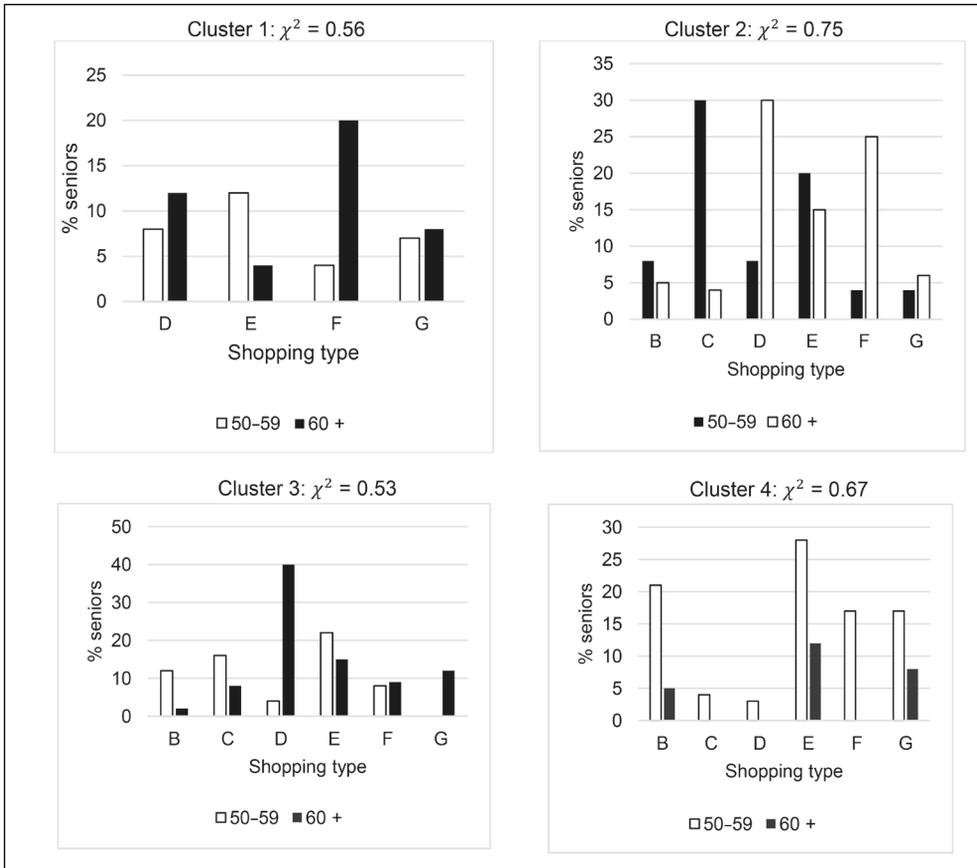
The retail commercial services of the Diely, Zobor, and Kynek districts, the third cluster with a predominance of large specialized stores, consist of 30 stores and 11 assortment groups operating on an area of 22,570 m<sup>2</sup>. While Diely is the youngest housing estate with prefabricated residential houses and low retail facilities, Zobor has the character of a residential area for wealthy residents and Kynek has an almost rural style of living with elements of suburbanization. The link factor of these last two housing units is the occurrence

of large specialized stores. The lack of vacant space for the construction of new department stores or large stores, or their expansion, as well as high prices of building land and their leases in the city center, conditioned the development of commercial suburbanization. This enabled the relocation of non-productive activities, including the retail network, to the suburbs. As many as a quarter of seniors in the third cluster tended to the traditional way of shopping, the low share of impulsive purchases, they did not trust advertising and made rational decisions. In the modern orientation, a mobile pragmatist prevailed (21.38%), optimizing the ratio between the price and value of goods,

preferring large stores. Pearson's coefficient reached its lowest value and was also below the city average (Fig. 3.)

The fourth largest cluster in urban areas, with a predominance of separate small-area units (8 districts), is represented by less variable, rather rural retail facilities – only 7 assortments, offered in 154 stores on an area of 56,425 m<sup>2</sup>. The rural character of urban areas and a higher quality of life have also been reflected in the demands of senior consumers. From the traditional orientation, 34.78% (Fig. 5) of seniors represent predominantly economical type, focusing on purchases mainly of food and consumer goods resulting from the rural

**Fig. 3: Number of shopping type seniors and Pearson's coefficient according to spatial clusters**



Source: own

Note: B – demanding; C – mobile pragmatist; D – conservative; E – frugal; F – loyal; G – undemanding phlegmatic.

lifestyle. Older seniors were found in the formulas of only three types, which can lead to the homogeneity of shopping of older seniors in the rural character of the development.

New large-scale retail stores, hypermarkets, gardening centers, specialized centers, such as large-scale stores or shopping centers with building materials, furniture, cars, electronics, hobby products, etc., are being established here. In these parts of the city, especially along the main roads, residential houses are also being converted into smaller retail spaces. Pearson's coefficient of tightness of significance was 0.67, which can be considered a statistically significant agreement, which is higher than the city average (0.59).

The results of the questionnaire survey of shopping behavior imply that 23% of the surveyed seniors inclined to a modern way of shopping in the city of Nitra. As many as 77% of respondents tended to the traditional method. Based on the achieved results from the cluster analysis, 4 clusters were created, where in the first cluster seniors made smaller and more frequent purchases near their place of residence, as pointed out by Kunc et al. (2012) in the research of purchases of basic foodstuffs for seniors over 51 in the city of Brno. Matušovičová (2019) also achieved similar results, according to which seniors prefer everyday purchases in small local stores. In the case of the third and fourth clusters seniors used their cars because of an insufficiently built retail network with large-scale and small-scale facilities. The purchase in large-scale facilities was made by seniors, especially in the second cluster. The results show that even Slovak seniors, on the example of the seniors in the city of Nitra, are increasingly reorienting themselves to shopping in large stores, where they make everyday purchases and use other services. This statement is supported by Matušovičová (2019), who in her research divided seniors into 4 types – active with children, independent without children, traditional and vital seniors. She has identified traditional seniors as conservatives who are not interested in trying new goods. Another approach is shown by Pavlič et al. (2017), who examined the shopping behavior of seniors over 50 in Croatia and suggested 3 groups of respondents – i) 'careful traditionalists' satisfied with the friendliness of store staff and store cleanliness, opening hours, product placement on shelves, offered value

equal to price and frequency of discounts; (ii) 'dedicated modernists' are particularly satisfied with the cleanliness, opening hours, product quality, frequency of the discounts and the benefits of the loyalty program; and (iii) 'cherry pickers' are satisfied in particular with the helpfulness of the store staff, the cleanliness of the store, the choice of local products and the frequency of promotions.

## Conclusions

The silver generation is a growing group of consumers who have considerable purchasing power of accumulated savings and their growing consumption is becoming important and promising for the retail market as well.

The results of the study confirmed a statistically significant dependence between the shopping behavior of seniors and their age structure, as evidenced by the correlation between the retail space of the city and its parts and consumer patterns of shopping of the silver generation. The hypothesis of the closest connection between the loyal way of shopping of seniors in the Old Town district has not been confirmed. One of the reasons may be the loss of traditional small stores in the city center and the emergence of large shopping centers on its outskirts. Younger seniors aged 50–59 showed both orientations of shopping – modern and traditional, when they declared 6 out of 7 types of shopping. We assume that one of the reasons is the higher income of their households due to their employment than older seniors 60+ income (4 out of 7 types of shopping).

Despite the wider range of shopping of younger seniors, both groups tend to prefer the traditional type of shopping with a lower share of a modern one. For seniors, visits to traditional shops tend to prevail. Their purchasing is influenced by qualitative aspects of their own decisions, which include prioritizing the quality of goods, the level of pro-customer service over price, the quality and speed of service and more. In the fight for the customer, a new segment is becoming more and more important – the senior segment, which will grow in a competitive environment. Retailers who operate brick-and-mortar stores – both small and large-scale stores – are forced to constantly improve the quality of sales services, adjust existing offers and respond to emerging trends in demographic development. They are introducing new technologies, focusing

on online space also in connection with the COVID-19 pandemic. Senior shopping is changing significantly and is in line with modern trends. These new forms of shopping will increasingly play an important role in senior shopping as well.

Predicting the purchasing behavior of the silver generation is much more difficult as demographic, social, economic and COVID-19 pandemic changes will continue in Europe. These trends are also very important for the Slovak economy and the society will have to pay increased attention to them.

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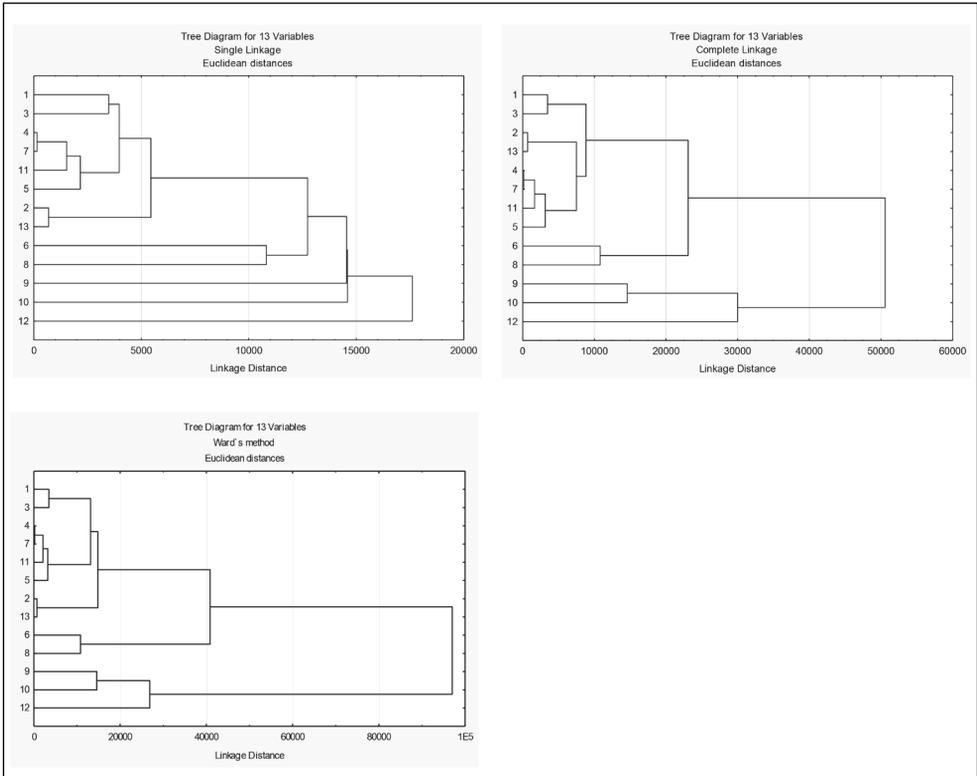
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Appendix

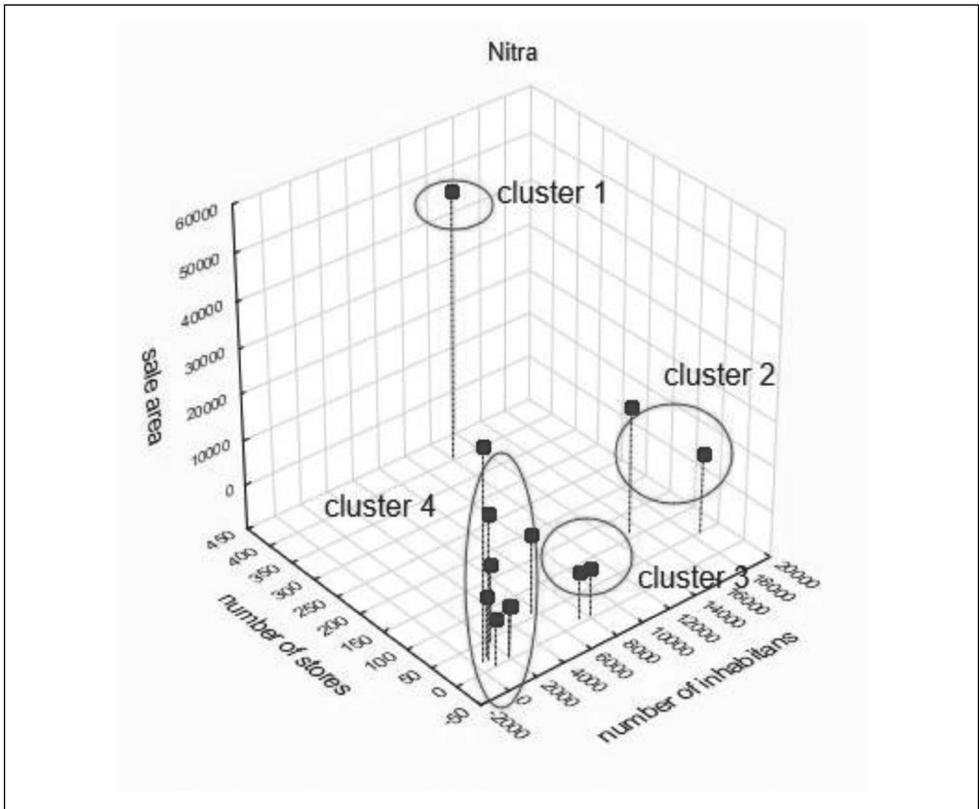
Fig. A1: Graphic output of cluster analysis of the retail network of the Nitra city



Source: own

Note: City districts: 1 Čermáň; 2 Diely; 3 Dolné Krškany; 4 Dražovce; 5 Horné Krškany; 6 Chrenová; 7 Janíkovce; 8 Klokočina; 9 Kynek; 10 Mlynáre; 11 Párovské Háje; 12 Staré Mesto; 13 Zobor.

Fig. A2: 3D visualization of Nitra city districts



Source: own

Note: Cluster 1: Staré Mesto; Cluster 2: Chrenová, Klokočina; Cluster 3: Diely, Zobor and Kynek; Cluster 4: Dražovce, Čermáň, Dolné Krškany, Horné Krškany, Janíkovce, Mylnárce, Párovské Háje.