Alena Kaščáková

ORCID: 0000-0001-6147-9770
Department of Quantitative Methods and Information Systems
Faculty of Economics
Matej Bel University¹

Miriam Martinkovičová

ORCID: 0000-0001-9223-2842
Department of Economics, Faculty of Economics
Matej Bel University²

Active ageing in Slovakia

Summary

The paper deals with the current challenge of population ageing. International organisations, institutions as well as national governments are looking for ways to solve this problem. Slovakia is also one of the countries that must take measures to mitigate the consequences of this process. Specific attention is paid to the so-called active ageing. It examines ways and forms of active ageing as the lifestyle of seniors (work, education, cultural, sports and other leisure activities). The paper brings the results of representative empirical research on the lives of Slovak households. It identifies seniors' predominant ways of spending time in relation to their own family, intergenerational

¹ Katedra kvantitatívnych metód a informačných systémov, Ekonomická fakulta, Univerzita Mateja Bela v Banskej Bystrici, Tajovského 10, 975 90 Banská Bystrica, Slovakia; author's email address: alena.kascakova@umb.sk.

² Katedra ekonómie, Ekonomická fakulta, Univerzita Mateja Bela v Banskej Bystrici, Tajovského 10, 975 90 Banská Bystrica, Slovakia; author's email address: miriam.martinkovicova@umb.sk.

relationships, interest in the labor market, further education or the use of computer skills. The contribution also offers unique insights into senior well-being. Time allocation is identified at a national level through Time Use Survey (TUS). This type of survey has not been carried out in Slovakia yet. The empirical research, carried out for the first time, created space for studying time allocation and tested one of the methods of detecting positive emotional affectivity of the respondents. The originally processed results show what the seniors consider as the most pleasant activities at their age.

Key words: ageing indicators, silver generation, active ageing, healthy ageing, well-being and leisure

Introduction

The fact that the world population is ageing motivates to create new concepts and approaches helping to solve issues connected with this phenomenon. Every three years The Ageing Report³ is being published, which complements the analysis of the Pension Adequacy Report by the Social Protection Committee. The latter evaluates how past key reform measures aimed at securing adequate and financially sustainable pensions, and identifies further reform needs. Also the Active Ageing Index (AAI, 2013) as a newly developed tool is constructed. It offers national and European policy-makers a way to measure and promote the untapped potential of the older population. In its design, the index follows the conceptual framework of the 2012 European Year for Active Ageing and Solidarity between Generations. The index measures the active ageing performance across four distinct domains that together capture the untapped potential of older people across EU Member States: (1) employment of older workers; (2) social activity and participation of older people; (3) independent, autonomous and healthy living of older persons; (4) capacity and enabling environment for active ageing. Thus, the AAI shows the differential extent to which older people living across EU Member States have and can realise their potential with respect to employment; healthy, independent and autonomous living, and to make other unpaid family, social and cultural contributions to the society in a given country.

The terms as ageing index, dependency ratio, labour force participation age groups, health and care and others are becoming more and more frequent and thus relevant. All related with the term active ageing, its roots can be traced back to the 1940s and 1950s, when socio-gerontologists stressed the importance of active lifestyle in old age for personal life satisfaction, a viewpoint later termed activity theory (Boudiny, 2013, p. 1079). The World Health Organization (WHO) adopted the term active ageing in the late 1990s and played a major role in its rapid popularisation. The WHO (2017) envisioned a broad process of

³ This report is published by the Ageing Working Group of the Economic Policy Committee (EPC) and the European Commission's Directorate-General for Economic and Financial Affairs (DG ECFIN) based on a mandate by the Council.

optimising opportunities for health, participation, and security in order to enhance quality of life as people age.

Demographic trends of silver generation in European countries and in Slovakia

The long term decline of both natality and fertility levels in Europe have caused changes in the population age structure. Not only is the proportion of pre-productive population decreasing, but also the proportion of the population in the productive age under 50 is stagnating or decreasing slightly. On the contrary, the population cohort of over 50 (silver generation) is growing in numbers and its ratio to the overall population has increased from almost 34% in 2003 to 40% in 2017. The European Commission's Ageing Report predicts that the ratio of four people of working age (15–64) per every 65+ person in 2013 will decrease to just two by 2060 (The 2012 Ageing Report, EC). These changes are also reflected in majority of indicators of population ageing defined by the Population Division of United Nations Department of Economic and Social Affairs—DESA (World Population Ageing, 1950–2050, 2002).

The basic indicator of population ageing is ageing index. In 2017, this indicator reached the average of 1.64 in the EU 28 countries, the highest was in Italy (2.1) and in Germany (2.06), the lowest was in Ireland (0.88). In Slovakia, this ratio was 1.4 and its growth is still accelerating. The development of ageing index in above mentioned countries can be found in the Figure 1.

Figure 1. Development of ageing index in 1990-2017

Source: Eurostat, 2018.

The dependency ratio indicators reflect the population structure by age. The old dependency ratio defined as the ratio of the population 65+ to productive population, which reached the average of 29.9% in 2017 in the 28 EU countries, the maximum being 34.8% in Italy, minimum 20.5% in Luxembourg. Youth dependency ratio defined as the number of individuals 0 to 14 years old to the number of individuals 15 to 64 years

old is 24% for 28 EU countries, the highest proportion of the young population is in Ireland (32.2%) and the lowest is in Germany (20.5%). In the context of changes in the population the median age and life expectancy proportion also changed. The average age in 2017 was an interval from 36.9 in Ireland to 45.9 in Germany, in 28 EU countries it was 42.8 years on average. Life expectancy was the highest in the Switzerland (83.7 years) and in the Spain (83.5 years), the lowest in Bulgaria, Latvia and Lithuania (74.9 years), and it reached 81 years for all EU countries on average. The values of the above mentioned ageing indicators in Slovakia and their development in the last decade can be found in Table 1.

Table 1. Selected ageing indicators in Slovakia in 2008-2017

Indicator / Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Proportion of population aged 0–14 years (%)	15.9	15.6	15.5	15.4	15.4	15.4	15.3	15.3	15.3	15.5
Proportion of population aged 65 years and more (%)	12.1	12.2	12.4	12.6	12.8	13.1	13.5	14.0	14.4	15.0
Proportion of silver population (50+) (%)	31.0	31.5	32.0	32.5	33.0	33.4	33.8	34.4	34.8	35.2
Ageing index	1.06	1.11	1.14	1.18	1.22	1.25	1.30	1.35	1.38	1.40
Youth dependency ratio (%)	22.1	21.6	21.5	21.4	21.5	21.5	21.5	21.7	21.8	22.2
Old dependency ratio (%)	16.8	17.0	17.3	17.5	17.8	18.4	19.0	19.7	20.6	21.5
Median age (years)	36.3	36.6	37.0	37.4	37.7	38.2	38.6	39.0	39.4	39.8
Life expectancy (years)	74.9	75.3	75.6	76.1	76.3	76.6	77.0	76.7	77.3	-

Source: own calculation based on the data from Eurostat, 2018.

Values of the ageing indicators in Sloviakia and their changes reveal the acceleration of ageing in this country followed by stagnation of the youngest population, and a decrease of the productive population. This translates into the increase of the older productive and post productive population together with prolongation of life expectancy. These are the characteristics of population's ageing at the summit or so-called mortality dominated ageing.

Economy and consumption in silverhouseholds

Changes in the population structure lead to changes in demand for products and services. The demand is affected by the different level and structure of consumption, which is also due to considerably lower income of individuals at the retiring age. Different income levels and consumption patterns of individual age categories also resulted in a different structure of their expenditures. Proportion of all expenditure items of silver generation decrease except health expenditure which is positively correlated with the age.

Although the majority of expenditure is decreasing with age, the proportion of so-called obligatory expenditure (food, housing and health together) for the silver generation is increasing. For the age category 25–49 years this part of expenditure creates almost 43% of consumption expenditure, for age category 50–64 it is 46%, age category 65–79 has obligatory expenses 63% and the oldiest 80+ population—70.5%. It follows that these households spend less than 30% of their total expenditure in other expense categories than food, housing and healthcare (Figure 2 and 3).

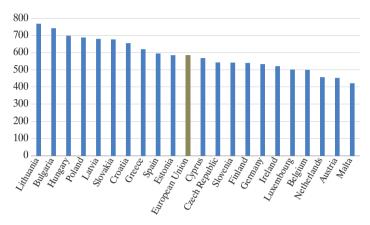
0,25 0,20 0,15 0,00

Figure 2. Overall structure of consumption expenditure by detailed COICOP (Classification of individual consumption by purpose) level by age category in 2015 in Slovakia (in %)

Source: own calculation based on Household Budget Survey data 2015.

In comparison to other European countries, then, most Slovak *silver households* are not able to allocate as much of their expenditure to the so-called facultative expenditure items as the *silver households* in most EU countries, which might be due to the high relative prices of food, housing and low levels of old age pensions. For comparison, the average EU household with a reference person of 60 or over needs to allocate approximately 10 percentage points less expenditure in obligatory categories than a comparable Slovak household.

Figure 3. Ratio of food, housing and health expenditure combined to consumption expenditure in a household with reference person aged 60 or over 60 in EU countries (per thousand) in 2015



Source: Eurostat, 2018.

Our findings correspond to the prognosis that the potential demand of *silver generation* will only rise slowly in Slovakia (Pauhofová, Páleník, 2013). It follows from the above that it is necessary to take into account that the income and expenditure situation of *silver generation* in Slovakia could serve as a barrier for the development of the forms of *active ageing* analysed in this article.

Ageing and well-being

The concept of active ageing is rooted in population ageing and its consequences for public finances are substantial. It is not surprising that several approaches focus either on employment or on physical activity. After all, ageing workforce raises concerns regarding increasing costs for both pension and health care, resulting in efforts to respectively prolong working lives and stimulate physical activity and thus health at older ages. Applying active ageing to a mere economic or physical framework is problematic and unidimesional. This reduction contravenes the intention of the WHO, which explicitly states that the word 'active' does not solely refer to the ability to be physically active or to participate in the labour force, but to continue to participate in social, economic, cultural, spiritual and civic affairs. In this case multidimensional approaches are appropriate. They are based on the concept of well-being or ageing well and try to identify the key wellbeing indicators for older people. People's self-reports of their psychological well-being are becoming a focus of intense debate in public policy and economics. Improving the well-being of the population is emerging as a key societal aspiration. The Commission on the Measurement of Economic Performance and Social Progress initiated by the French government and chaired by Joseph Stiglitz argued that current measures of economic performance such as gross domestic product (GDP) are insufficient as indicators of the progress of society, and that self-reported well-being should also be taken into account (Stiglitz, Sen, Fitoussi, 2009).

Subjective well-being refers to all of the various types of evaluations, both positive and negative, that people make of their lives. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, and affective reactions to life events, such as joy and sadness. Thus, "subjective (personal, psychological) well-being is an umbrella term for the different valuations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live". Although well-being and ill-being are "subjective", manifestations of subjective well-being and ill-being can be observed objectively in verbal and nonverbal behavior, actions, biology, attention, and memory. The term "well-being" is often used instead of "subjective well-being" because it avoids any suggestion that there is something arbitrary or unknowable about the concepts involved (Diener, 2005).

The concept of well-being applied to older people's quality of life is not yet sufficiently understood and reflected in the planning, development and everyday delivery of public services. A common definition or understanding of the term remains lacking. In many investigations older people perceived own quality of life as a life that has value, meaning and purpose when they:

- feel safe and are listened to, valued and respected;
- are able to get the help they need, when they need it, in the way they want it;
- live in a place which suits them and their lives;
- are able to do the things that matter to them.

However, these four points depend to a large degree on both the ability to make choices and on fluctuations and changes in personal/life circumstances. The dynamic nature of well-being is reflected in remarks made by Nic Marks, of the New Economics Foundation: "Well-being is not a beach you go and lie on. It's a sort of dynamic dance and there's movement in that all the time and actually it's the functionality of that movement which actually is true levels of well-being" (Commissioner, 2013).

The concept of well-being comprises of two main elements: feeling good and functioning well. Feelings of happiness, contentment, enjoyment, curiosity and engagement are characteristic to someone who has a positive experience of their life. Equally important for well-being is our functioning in the world. Experiencing positive relationships, having some control over one's life and having a sense of purpose are all important attributes of well-being. A comprehensive definition of well-being must therefore factor-in these elements. Dodge's (et al., 2012) definition of well-being does that in a way that also enables a means of effective measurement and is based upon a balance between available resources and challenges, acknowledging inevitable shifts in personal circumstances.

According to Dodge, stable well-being is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge. When individuals have more challenges than resources, the seesaw dips, along with their well-being, and vice-versa. This definition conveys the multi-faceted

nature of well-being and can help individuals and policy makers move forward in their understanding of this popular term. The definition reflects the emphasis on positive psychology. It views individuals as decision makers, with choices, preferences, and the possibility of becoming valued and empowered. Happiness is not something that just happens, it is a condition that must be prepared for, cultivated, and defended privately by each person (Seligman, Csikszentmihalyi, 2000). This puts the pursuit of well-being in the hands of individuals by teaching them that they can increase their resources or challenges to maintain a sense of equilibrium (Figure 4).

Stay Active Stay Safe Stay Safe Stay Safe Stay Safe Stay Safe Stay Safe Shindfuy Nurture Your Spirit We Balance Spirit Sleep Well Spirit Sleep Well

Figure 4. Well-being for Older Adults

Source: www.va.gov/Geriatrics

Approaches to measuring well-being

There are at least three different approaches to measurement of well-being construct (Steptoe et al., 2014). They capture its different aspects: life evaluation, hedonic well-being, and eudaimonic well-being (Figure 5).

Life evaluation refers to peoples' thoughts about the quality or goodness of their lives, their overall life satisfaction or at times, how happy they are with their lives. Measurement uses such tools like the Cantril Ladder. Individuals are asked to place themselves on an 11-step ladder with 'worst possible life' representing the lowest rung and 'best possible life' the top rung.

Hedonic well-being refers to everyday feelings or moods such as experienced happiness (the mood, not the evaluation of life), sadness, anger, or stress, and is measured by asking respondents to rate their experience of several affect adjectives such as happy, sad, and angry. It is important to note that the negative adjectives are not simply the opposite of

positive indicators of well-being, they carry unique information about peoples' emotional states; in other words, hedonic well-being is not a simple unipolar dimension, but is composed of at least two modestly associated dimensions. Therefore, positive and negative adjectives are required for a reasonable assessment of hedonic well-being.

Eudaimonic well-being focuses on judgements about the meaning and purpose of one's life; because the construct is more diverse, several questionnaires tapping various aspects of meaning have been developed.

An important distinction among the types of well-being is the level of cognitive processing required: feelings can be reported relatively directly, whereas life evaluations and meaning questions are likely to demand considerable reflection including aggregation over time and comparison with self-selected standards (e.g., my life compared to what, when, or whom?).

Income satisfaction Anger Competence Sub-components Health satisfaction Worry Autonomy Work satisfaction Meaning and purpose Hanniness Life satisfaction Affect (+/-) **Eudaimonic well-being** Measurement concept Income Health status Social contact **Employment status** Personality type Culture

Figure 5. Simple model of subjective well-being

Source: OECD, 2013.

The multidimensionality of well-being can be studied in different ways, most often by using indexes and empirical surveys in form of questionnaires. Some of index approaches represent synthetic indicators relating to overall well-being situation, others relate to subjective level only. The most famous of them are Human Development Index (HDI), introduced by the United Nations Development Programme (UNDP), OECD Your Better Life index or Happy Planet Index (HPI), which was introduced by the New Economics Foundation.

As for the measuring the subjective well-being through the extensive empirical studies, there are significant differences among them resulting from the following factors:

- level of the study (international, national, local),
- the frequency of data collection (regular, irregular, one-time surveys),
- form of survey (questionnaires, separate modules, question sets, diaries),
- approaches of measurement well-being (eudaimonic, evaluative, affective),
- timeliness of collected data (memory-based, real time),
- technical support (printed records, telephone, SMS, website, on-line questionnaires).

The measurement of well-being is often viewed from the subjective point of view and measured by an individual's response to a survey question like, "All things considered, how satisfied are you with your life as a whole these days?". The questions on subjective well-being usually use the scale from 4 to 11 points. This type of research is represented by the European Values Study (EVS), European Quality of Life Survey (EQLS), European Social Survey (ESS), Eurbarometer and Time Use Survey (TUS).

Until recently, the only method used for measuring the subjective well-being in Slovakia was eudaimonic type of research using the questions about the overall life satisfaction, or some of its determinants (with health, housing, family life, with the financial situation, environment in which the respondent lives, participation in the society and so on). They were part of the European surveys run in Slovakia like ISSP (International Social Survey Programme), EVS, EU-SILC (Statistics on Income and Living Conditions), EQLS or Eurobarometer. The TUS has not been implemented in Slovakia by now.

Active ageing research in Slovakia according to the time use survey methodology

Time use survey is considered to be the most valuable method of gathering information about well-being. In 1972, it was the first time it was incorporated as an indicator of well-being into the Gross National Happiness Project of the kingdom of Bhutan (Galay, 2007). This type of research uses the questionnaire survey (a questionnaire for the household and questionnaire for an individual) that represents so-called cognitive measuring of well-being. This is based on assessing the life satisfaction either with the life as a whole or by individual life areas (health, family, work, income, housing). The second form of the research is a diary. This enables monitoring the concurrent feelings felt while doing specific activities in the time interval during which the activity takes place.

The types of research that connect three basic variables, time—activity—feeling, use the following methods:

- Systematic analyses of the relationships between time use and well-being by economists were initiated by Thomas Juster, who used time diary data to assess levels of subjective well-being (Juster et al., 1981). In Juster's opinion, a summation of enjoyment ratings (process benefits) associated with activities performed during a specified period of time provides a more realistic valuation of subjective well-being than general questions about life satisfaction or perceived happiness based on past recollections. Researchers proposed to calculate the process well-being benefits (PWB) as a weighted index of the duration of activities and their level of enjoyment.
- In the 2000s, interest in using time use data for the assessment of subjective well-being was revived by Kahneman and Krueger (2006). Kahneman and Krueger's day reconstruction method (DRM) used 'experienced utility' valuations of time diary episodes to assess respondents' well-being. It was more process sensitive and accurate

than Juster's PWB, but shared with the latter the assumption that subjective well-being can be calculated as a multiple of activities' duration and their enjoyment ratings (Zuzanek, J., Zuzanek, T., 2015).

- The truly concurrent valuation of well-being connotations of daily activities was made possible by ESM surveys, where respondents were asked to record their feelings about what they were doing at the very moment when they were signalled by the pager. It is, generally, accepted that Experience Sampling Methods "are the gold standard for assessing people's affective experience. They can capture the experience in actual moment, while the person has access to current feeling, and hence minimize problems of recall and inference" (Schwarz et al., 2009, p. 6).
- Another option is single question which is also intended to be used as part of a timeuse diary and is the so-called column of happiness. This question should generally not be used in conjunction with the DRM, as it is a substitute, and should be completed by the respondent for all time-use diary activities. In the 2010 French time-use survey, the French national statistical office, added the intensity of emotional experience as a separate column in the time diary, asking the respondent to record "was that moment pleasant or unpleasant" on a scale from minus 3 (unpleasant) to plus 3 (pleasant).
- The last method used for assessing well-being also uses the diary logs of the respondents. It can be classified as an effective way of establishing the well-being (hedonic orientation). At the end of the diary day, the respondent is asked to choose an activity during which he experienced the most positive or most negative emotions. This method monitors only extreme emotional states as part of the well-being.

In 2017, we carried out a pilot survey⁴ in the Slovak households which consisted of a diary for one working day and one free day to record the activities of that day. In addition to the diary, the questionnaire contained several modules of questions on paid work, unpaid work and free time, commuting to work and financial situation in the household. After completing the diary, there were modules that served identifying the specific activity during which the respondent felt the happiest as well as the barriers due to which it was not possible to allocate the time of the day in a different way. The question "At what activity did you feel the happiest?" made it at least partially possible to connect subjective feeling of happiness with the concurrent daily activity for the first time in Slovakia.

The survey was carried out on the sample of 833 households in Slovakia while 1767 respondents filled in a questionnaire. Households were selected using quota sampling technique aiming the representativeness. The sample of households was representative by the number of household members and by the structure of households in the regions.

⁴ The survey was part of the project VEGA No.1/0621/17 "Decision-making Process of Slovak Households about Allocation of Time for Paid and Unpaid Work and Household Strategies' Impact on Selected Areas of the Economic Practice" at the Faculty of Economics, Matej Bel University.

The sample of respondents was representative by the gender and age categories. CAPI (computer-assisted personal interviewing) method based on an electronic questionnaire was used for data collection.

For active ageing research, we selected a sample of respondents divided into three age categories corresponding to classification of older adults. There were 660 respondents in total, with the age group 50–64 represented as the highest (64.9%). The following age distribution and the number of respondents are shown in Table 2. The empirical research carried out for the first time created a space for time allocation studies and tested one of the methods used for assessing well-being. It can be classified as an affective way of establishing the well-being (hedonic orientation). This method monitors extreme emotional states as part of the well-being and detects positive emotional affectivity of the respondents. The originally processed results show what the seniors consider as the most pleasant activities at their age.

Table 2. Structure of	f the	sample by t	the age	categories
-----------------------	-------	-------------	---------	------------

Age category	Frequency	Percent
50-64	428	64.9
65–79	182	27.6
80+	49	7.5
Total	660	100.0

Source: VEGA 1/0621/17 data.

Results and discussion

In our research, we have applied a multidimensional approach to *active ageing*, which is based on the *active ageing index*. This tool consisted of different indicators: paid labour, care, voluntary work, sports and active recreation outdoors (e.g. participation in club life). Avramov and Maskova (2003) describe the concept as a socially and individually designed combination of continuous labour-market participation, active contribution to domestic tasks (including care for others), active participation in community life (e.g. voluntary work) and active leisure activities (through hobbies, sports, travel and creative activities).

We focused on leisure time, which is a natural element of many definitions of *active ageing*. Spending leisure time in a meaningful way is an important factor in healthy ageing. Free time activities promote senior mental and physical health, develop emotional well-being and ageing well overall. There are studies that distinguish productive and non-productive leisure activities and claim that old-age tends to focus more on non-productive leisure activities than on productive ones (Baltes, Smith, 2003; Gill, 2006).

This finding seems natural in regards to declining cognitive and physical capacities at later age. Discussions also concern the preference of passive before active leisure. To one, an activity may seem active, to another (Parker, 1996, p. 69). It is also context-dependent. For instance, some authors regard television-watching as a passive pursuit, even though some programmes offer informative and mentally stimulating content. In our opinion, it is important to spend free time in a way that brings emotional, mental and physical satisfaction and well-being of seniors. This consequently affects their health and contributes to healthy ageing.

Psychological well-being and health are closely related, and the link may become more important at older age, if only because the prevalence of chronic illnesses increases with advancing age. As life expectancy increases and treatments for life-threatening diseases become more effective, the issue of maintaining well-being at advanced age is growing in importance. Studies of older people indicate that evaluations of quality of life are affected by the person's state of health. Although the frequent finding that average self-reported life evaluation in the population increases with age suggests that psychological well-being is affected by many factors other than health. These include material conditions, social and family relationships, social roles and activities, factors that also change with age (Steptoe et al., 2014).

In our research, we focused on active and passive leisure in the following categories especially:

- free time (relaxing, reading books and magazines, listening to music, watching TV, hobbies);
- cultural and social activities (theater, concert, social events, meeting with friends);
- sport (movement, walking outdoors);
- using modern technologies (internet, e-mail, social networks, video games).

We verified the connection between age category and type of activity with the highest well-being. Fisher's exact test was used for the verification. The independence between variables in the working and free day was rejected (both p-values = 0). In the working day the age category moderately influences the type of activity (Cramer's V = 0.229), in the free day, the relationship is weak (Cramer's V = 0.168).

We have examined whether these activities belong to those that support the subjective well-being of older adults in three age categories. The used method of monitoring extreme emotional states has shown us during which leisure activities respondents feel the happiest. As Table 3 shows, that it is passive leisure that makes 50–64 and 65–79 age category representatives happy during the working days and for the age group 80+ it is both cultural and social activities.

In case of free days, we observe a more balanced state of happiness regarding individual leisure activities with an increase in the so-called active forms of leisure time use (Table 4). For age categories 50–64 and 65–79 this is in favour of sports, cultural and social activities for age categories 50–64 and 65–79. What's very interesting, seniors 80+ are the one's feeling the most happy during sports activities.

Table 3. The number and share of respondents who have chosen the activity which contributes the most to their happiness during working day

	Age category						
	50-64		65–79		80+		
	Count	%	Count	%	Count	%	
Sleeping	51	12.8	0	0.0	6	12.5	
Personal care	8	2.0	0	0.0	0	0.0	
Travelling	6	1.6	0	0.0	0	0.0	
Paid work	21	5.2	7	3.9	0	0.0	
Study and self-study	0	0.0	0	0.0	0	0.0	
House-keeping	37	9.2	21	12.8	6	12.5	
Children care	18	4.4	4	2.1	0	0.0	
Free time	186	47.0	68	40.4	12	25.0	
Cultural and social activities	16	4.0	39	23.4	18	37.5	
Sport	46	11.6	25	14.9	6	12.5	
Usage of modern technologies	8	2.0	4	2.1	0	0.0	
Voluntary activities	0	0.0	0	0.0	0	0.0	
Total	397	100.0	168	100.0	48	100.0	
Without response	31		14		1		

Source: VEGA 1/0621/17 data.

Table 4. The number and share of respondents who have chosen the activity which contributes the most to their happiness during a free day

	Age category							
	50-64		65–79		80+			
	Count	%	Count	%	Count	%		
Sleeping	29	7.1	7	4.4	0	0.0		
Personal care	6	1.6	0	0.0	0	0.0		
Travelling	0	0.0	0	0.0	0	0.0		
Paid work	0	0.0	0	0.0	0	0.0		
Study and self-study	40	9.8	21	13.0	0	0.0		
House-keeping	14	3.5	18	10.9	6	12.5		

	Age category						
	50-64		65–79		80)+	
	Count	%	Count	%	Count	%	
Children care	2	0,4	0	0.0	0	0.0	
Free time	105	26.0	46	28.3	18	37.5	
Cultural and social activities	86	21.3	43	26.1	12	25.0	
Sport	105	26.0	29	17.4	12	25.0	
Usage of modern technologies	16	3.9	0	0.0	0	0.0	
Voluntary activities	2	0,4	0	0.0	0	0.0	
Total	405	100.0	164	100.0	48	100.0	
Without response	23		18		1		

Source: VEGA 1/0621/17 data.

The necessity of creating opportunities for the development of social contacts and involvement of seniors in various leisure activities and in different programs or voluntary activities also confirms quality of life research of seniors living in the Košice region in Slovakia (Sováriová Soósová, 2016). According to the author these activities help treating depression and anxiety. They have a significant importance in older adults' quality of life improvement, as maintaining and improving self-care has as well. The WHOQOL-BREF and WHOQOL-OLD questionnaires were used to assess quality of life in this research. The WHOQOL-BREF consists of 26 questions, 24 of which are divided into four domains: physical health, mental health, social relationships, and environment. The WHOQOL-OLD questionnaire consists of 24 items, which are divided into six domains: sensory abilities, autonomy, past, present and future activities, social participation, death and dying, and intimacy. After conversion, the standardized scores in these domains fall in a range from 0 to 100, whereby 0 refers to the worst quality of life, and 100 to the best quality of life (Sováriová Soósová, 2016, pp. 484–485).

Another interesting research of the senior citizens' quality of life tried to find indicators affecting mental health, such as having a meaningful life, a sense of well-being and hope, and feelings of loneliness and depression experienced by seniors participating in the University of the Third Age (UTA) at Jessenius Faculty of Medicine, Comenius University (JFM CU) in Slovakia in relation to their age and gender. Data was collected by means of self-assessment scales—the Life Meaningfulness Scale, Snyder's Hope Scale, the Emotional Habitual Subjective Well-being Scale, the Loneliness Scale, and the Geriatric Depression Scale. They were oriented on a cognitive, motivational and affective aspects. As research study shows seniors regarded their lives as meaningful in each of the following three dimensions—cognitive, motivational and affective. They expressed high levels of

hope in the success of their efforts (goal-oriented behaviour) as well as in their plans for achieving their goals. Experience of positive emotions exceeded that of negative emotions, indicating the presence of subjective emotional well-being. A low degree of social and emotional loneliness was identified in the sample. Depression was not indicated by the Geriatric Depression Scale (Tomagová et al., 2016).

The prevalence of positive emotions, which are the result of senior citizens' active social contacts, is also confirmed by the analysis of socio-economic aspects of the seniors' quality of life in Slovakia (Hasa, 2019). The analysis focused on the comparison of socioeconomic aspects of seniors who are living in their homes quality of life and the quality of life of those who are clients of social services. Stay in a social service facility can trigger such negative emotions as anxiety, insignificance or stress from anonymity and uniformity. The society can provide services like food, accommodation or medical care, but fails to give senior citizens a sense of life and to create an emotional background for them. On the other hand, seniors who are clients of social service facilities appreciate the fact that they live in a collective and do not feel alone. They also demonstrate the improvement in maintaining social links with other people and tend to be more interested in their hobbies and leisure activities. As for satisfaction with the quality of life there is no significant difference between seniors—clients of social services facilities and seniors living in the home environment. On the other hand, the feeling of security as part of personal wellbeing is stronger among seniors who are clients of social service facilities than those living at home (Hasa, 2019).

Conclusion

The fact that the population ageing issue in Slovakia is one of the most important topics is also confirmed by the latest information from the Statistical Office of Slovak Republic which was published in May 2019. The basic monitored characteristics include the long-term trend of intensive ageing of the Slovak population. The relationship between the abundance of children and seniors in society is captured by the so-called ageing index. This index exceeded the threshold of 100 for the first time in 2018. In Slovakia, there were more than 102 seniors per 100 children, thus people over 65 years old. The year 2018 is a breakthrough in monitoring of population ageing, the number and proportion of seniors for the first time in Slovakia's history exceeded the number and proportion of children (SO SR, 2019).

As the research shows, the senior citizens' quality of life, centers around health, mental and emotional survival, and is connected to several variable factors. For example, the ability to adapt, participation in social life, the way of spending free time, the social environment or quality of social relations and so on. The socio-economic dimension of seniors' quality of life includes all aspects related to the social environment, as well as financial and material security, transport, safety, health care and social services, as well as access to information and other resources available to society. This dimension is monitored using indicators such as gross domestic product (GDP), life expectancy

and population literacy. In Slovakia, life expectancy is 76.7 years, but large gender gaps still remain. While men live 73.1 years on average, women usually live to 80.2 years old. The differences are also found in relation to socio-economic groups of the population. People with low levels of education live ten years shorter than those with higher education (OECD, 2017).

Social ageing is characterized by changes in social roles, lifestyle and economic security. It also connected to a number of negative conditions, such as social exclusion, prejudice and age discrimination, generational intolerance, segregation, as well as higher morbidity, atypical disease progression, lessen ability to communicated own needs, loss of orientation in social events due to rapid advancement of technology and others. In addition, it may include changes in residence, limitation or loss of social contacts, weakening of interactions, or loneliness (Hasa, 2019).

The value system of today's society is set in a way that highlights the biologically-conditioned competencies of youth and attributes such as performance, vitality, energy, or others, while showing the negative attitude towards the old age. Similarly, the social status of senior citizens is included by the society in the inefficient old-age pensioners category witch results in elderly people being at disadvantage and having to confront with a constantly changing social environment. It is necessary to remember that the senior population is an integral part of society and has a huge potential not only for employment but also for active participation in the life of all social structures (Hasa, 2019). The level of seniors' well-being is a reflection of care and attention of the whole society about this population group.

The term well-being (cognitive, affective and eudaimonic) is a common denominator for finding and acknowledging the broad spectrum of indicators that influence the quality of life of seniors. In general, researching well-being is a relatively new trend, which relates to the shift from GDP to the quality of life. Examining ageing well and the issue of active and healthy ageing is part of this new focus. It brings knowledge of important indicators of quality ageing. It shows the importance of the psychological well-being of older adults and the fact that everyone should have the opportunity to live a long and healthy life. WHO defines Healthy Ageing "as the process of developing and maintaining the functional ability that enables well-being in older age". Functional ability is about having the capabilities that enable all people to be and do what they have reason to value. This includes a person's ability to: meet their basic needs; learn, grow and make decisions; to be mobile; to build and maintain relationships; and to contribute to society (WHO, 2017).

A paradox of ageing has been observed in later life: although advancing age is associated with physical and cognitive decline, well-being is consistently found to be higher in later life than among young or middle aged adults (Myers, Diener, 1995). There was a graded association between self-reported health and well-being. Engaging in physical activity is paramount to ageing well. Being physically active is inextricably linked to independent living and other factors such as social support, both of which are crucial aspects for older adults' well-being. Regular physical activity is also linked to immune function improvements and resistance to illness.

Our research of selected active ageing factors which concerned active and passive leisure activities, shows that older adults in three age categories are ageing in the spirit of ageing well in Slovakia. The fact that during leisure time activities, such as free time (relaxing, reading books and magazines, listening to music, watching TV, hobbies), cultural and social activities (visit theater, concert, social events, meeting with friends) and sport (movement, walking outdoors) the senior citizens experience the greatest happiness and hence the high level of subjective well-being is an interesting finding. This form of satisfaction and joy in life contributes to sustainable ageing and creates the concept of active ageing.

Another important action should be the encouragement and maintenance of senior citizens' independence and the creation of community-based programs aimed at improving or maintaining physical activity of the ageing population (Sováriová Soósová, 2016). Supporting seniors' education is also a significant factor helping to increase the well-being of elderly. It is one of the active form of leisure time spending, it stimulates intellectual and cognitive functions, contributes to the reinforcement of physical and mental health and balance, self-confidence, and thus to life satisfaction too. It provides an opportunity to acquire knowledge in various fields of study, to spend free time profitably, to increase the number and quality of social relations, and it provides an opportunity for self-realisation, contributing towards the achievement of a meaningful life (Špatenková, Smékalová, 2015).

The paper is part of the project VEGA No.1/0621/17 "Decision-making Process of Slovak Households about Allocation of Time for Paid and Unpaid Work and Household Strategies' Impact on Selected Areas of the Economic Practice" at the Faculty of Economics, Matej Bel University.

References

- AAI (2013). Active Ageing Index 2012. Concept, Methodology and Final Results. Vienna: European Centre for Social Welfare Policy and Research. Available at: https://www.researchgate.net/publication/256008735_Project_'Active_Ageing_Index_AAI'_Active_Ageing_Index_2012_Concept_Methodology_and_Final_Results [access date: 25.06.2018].
- Ageing population: projections 2010–2060 for the EU27, epthinktank.eu, statistical spotlights. Available at: http://epthinktank.eu/2013/12/19/ageing-population-projections-2010-2060-for-the-eu27/ [access date: 20.06.2018].
- Avramov, D., Maskova, M. (2003). *Active ageing in Europe*. Volume 1. Population studies, No. 41. Strasbourg: Council of Europe Publishing. ISBN 978-92-871-5240-4.
- Baltes, P.B., Smith, J. (2003). New frontiers in the future of aging: from successful aging of the young old to the dilemmas of the fourth age. *Gerontology*, vol. 49, no. 2, pp. 123–135. ISSN: 1423-0003.
- Boudiny, K. (2013). Active ageing: from empty rhetoric to effective policy tool. *Ageing and Society*, vol. 33, iss. 6, pp. 1077–1098. Available at: https://www.cambridge.org/core/

- journals/ageing-and-society/article/active-ageing-from-empty-rhetoric-to-effective-policy-tool/AE973B91D5F93069AA650C31D215614F [access date: 20.06.2018].
- Commissioner (2013). *Wellbeing Indicators for Older People*. Cardiff: Older People's Commissioner for Wales. Available at: www.olderpeoplewales.com [access date: 25.06.2018].
- Diener, E. (2005). Guidelines for National Indicators of Subjective Well-Being and Ill-Being. Available at: https://internal.psychology.illinois.edu/~ediener/Documents/Guidelines for National Indicators.pdf [access date: 05.07.2018].
- Dodge, R., Daly, A., Huyton, J., Sanders, L. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, vol. 2, no. 3, pp. 222–235. Available at: https://www.internationaljournalofwellbeing.org/index.php/ijow/article/viewFile/89/238 [access date: 12.07.2018].
- Eurostat (2018). Available at: http://ec.europa.eu/eurostat/data/database
- Galay, K. (2007). *Patterns of Time Use and Happiness in Bhutan: Is there a relationship between the two?* V.R.F series, No. 432. Chiba, Japan: Institute for Developing Economies, Japan External Trade Organization. Available at: http://www.ide.go.jp/library/English/Publish/Download/Vrf/pdf/432.pdf [access date: 12.07.2018].
- Gill, Z. (2006). *Older People and Volunteering*. Office for Volunteers, Government of South Australia, Adelaide, Australia. Available at: http://www.ofv.sa.gov.au/_data/assets/pdf_file/0003/8067/older-people-and-volunteering.pdf [access date: 17.07.2018].
- Hasa, P. (2019). *Analýza sociálno-ekonomických aspektov kvality života seniorov na Slovensku*. Available at: https://www.prohuman.sk/socialna-praca/analyza-socialno-ekonomickych-aspektov-kvality-zivota-seniorov-na-slovensku [access date: 25.04.2019].
- Juster, F.T. et al. (1981). A theoretical framework for the measurement of well-being. *The Review of Income and Wealth*, vol. 27, iss. 1 (March), pp. 1–31. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1475-4991.1981.tb00190.x [access date: 22.06.2018].
- Myers D.G., Diener E. (1995). Who Is Happy? *Psychological Science*, vol. 6, iss. 1 (January). pp. 10–19.
- OECD (2013). *OECD Guidelines on Measuring Subjective Well-being*. OECD Publishing. Available at: http://www.oecd.org/statistics/oecd-guidelines-on-measuring-subjective-well-being-9789264191655-en.htm [access date: 07.07.2018].
- OECD (2017). *Slovensko: Zdravotný Profil Krajiny 2017*. State of Health in the EU. Paris: OECD Publishing, Brussels: European Observatory on Health Systems and Policies. ISSN 25227041. Available at: http://dx.doi.org/10.1787/9789264285408-sk [access date: 28.04.2019].
- Parker, M.D. (1996). The Relationship Between Time Spent by Older Adults in Leisure Activities and Life Satisfaction. *Physical & Occupational Therapy In Geriatrics*, vol. 14, no. 3, pp. 61–71. Available at: https://www.tandfonline.com/doi/abs/10.1080/J148v14n03_05 [access date: 13.07.2018].

- Pauhofová, I., Páleník, M. (2013). Súvislosti realizácie koncepcie striebornej ekonomiky v krajinách Európskej únie / The realization of the silver economy concept in EU countries. *Ekonomický časopis /Journal of Economics*, vol. 61, iss. 8, pp. 861–876.
- Schwarz, N. et al. (2009). Global and episodic reports of hedonic experience. In: R. Belli, D. Alwin, F. Stafford (eds.), *Using Calendar and Diary Methods in Life Events Research*. (157–174). Newbury Park, CA: Sage.
- Seligman, M.E.P., Csikszentmihalyi, M. (2000). Positive Psychology: An Introduction. *American Psychologist*, vol. 55, no. 1, pp. 5–14. Available at: https://www.researchgate.net/publication/11946304_Positive_Psychology_An_Introduction [access date: 12.07.2018].
- SO SR (2019). Statistical office of Slovak Republic. Available at: https://slovak.statistics.sk/wps/portal/ext/aboutus/office.activites [access date: 03.05.2019].
- Sováriová Soósová, M. (2016). Determinants of quality of life in the elderly. *Central European Journal of Nursing and Midwifery*, vol. 7, no. 3, pp. 484–493. ISSN 23363517.
- Špatenková, N., Smékalová, L. (2015). *Edukace seniorů: Geragogika a gerontodidaktika*. Praha: Grada Publishing. ISBN: 978-80-247-5446-8.
- Steptoe, A., Deaton, A., Stone, A.A. (2014). Psychological wellbeing, health, and ageing. PMC Article. Published online November 6, 2014. DOI: 10.1016/S0140-6736(13)61489-0. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4339610/#R5 [access date: 10.07.2018].
- Stiglitz, J., Sen, A., Fitoussi, J.-P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Available at: http://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report [access date: 05.07.2018].
- Tomagová, M., Farský, I., Bóriková, I., Zanovitová, M. (2016). Selected indicators of mental health in the elderly the participants the University of the Third Age. *Central European Journal of Nursing and Midwifery*, vol. 7, no. 2, pp. 437–443. ISSN 23363517.
- Zuzanek, J., Zuzanek, T. (2015). Of Happiness and of Despair, Is There a Measure? Time Use and Subjective Well-being. Springer Science+Business Media Dordrecht 2014, pp. 839–856. Available at: https://uwaterloo.ca/canadian-index-wellbeing/sites/ca.canadian-index-wellbeing/files/uploads/files/of_happiness_and_of_despair_is_there_a_measure-time_use_and_subjective_well-being.pdf [access date: 01.07.2018].
- Well-being for older adults. Available at: https://www.va.gov/GERIATRICS/docs/Well_being_for_Older_Adults.pdf [access date: 01.07.2018].
- WHO (2017). Global strategy and action plan on ageing and health (2016–2020). Geneva: World Health Organization. ISBN 978-92-4-1513500.
- World Population Ageing, 1950–2050 (2002). New York: United Nations. ISBN 92-1-051092-5.

Aktywne starzenie się w Słowacji

Streszczenie

Artykuł dotyczy aktualnego wyzwania, jakim jest starzenie się populacji. Organizacje i instytucje międzynarodowe oraz krajowe rządy poszukują sposobów rozwiązania tego problemu. Słowacja jest jednym z krajów, które muszą podjąć działania w celu złagodzenia skutków tego procesu. Szczególną uwagę zwraca się na tak zwane aktywne starzenie się. Analizuje się sposoby i formy aktywnego starzenia się traktowanego jako styl życia seniorów (praca, edukacja, kultura, sport i inne formy spędzania wolnego czasu). W artykule przedstawiono wyniki reprezentatywnych badań empirycznych dotyczących życia słowackich gospodarstw domowych. Ukazano dominujące sposoby spedzania czasu przez seniorów w kontekście życia rodzinnego, relacji międzypokoleniowych, zainteresowania rynkiem pracy, dalszej edukacji lub korzystania z umiejętności komputerowych. Zaproponowano również oryginalne spojrzenie na dobrostan seniorów. Dysponowanie czasem jest określone na poziomie krajowym za pomocą badań TUS (Time Use Survey). Ten rodzaj badań nie był wcześniej realizowany w Słowacji. Przeprowadzone po raz pierwszy badania empiryczne stworzyły przestrzeń do badania alokacji czasu i przetestowały jedną z metod wykrywania pozytywnej afektywności respondentów. Wstepnie opracowane wyniki pokazują, co seniorzy uważają w tej fazie życia za najprzyjemniejsze zajęcia.

Słowa kluczowe: wskaźniki starzenia się, srebrne pokolenie, aktywne starzenie się, zdrowe starzenie się, dobrostan i wypoczynek