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## Quality of life of seniors in the context of population ageing in Slovakia

**Abstract.** Quality of life (QOL) is nowadays becoming part of numerous researches and the term is being developed in several scientific disciplines, such as economics, psychology, sociology, as well as geography, etc. Despite this fact, there is no well established definition that would describe the meaning of the term. There are some common features defining the concept of quality of life, such as disunity (in terminology, within the basic approaches and methods for measuring), multidisciplinary (quality of life is explored by various scientific disciplines) and multidimensionality. The aim of this paper is to analyze the theoretical basis of quality of life of seniors in the context of population ageing and to highlight the basic approaches to the identification of relevant indicators – indicators of the quality of life. From a spatial perspective, population ageing is a global problem, particularly relevant for Europe, where this process is likely to continue in the future. Population ageing and its effects (on society, economy) are perceived as a multidimensional social phenomenon. The paper is a theoretical framework for the definition of indicators of QOL, and within this context we discuss the selected indicators of the older population of Slovakia.

**Keywords:** Quality of Life; Seniors; Population Ageing; Indicators of Measurement; Slovakia

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### **Якість життя літніх людей у контексті старіння населення Словаччини**

**Анотація.** Якість життя в сучасному світі стає частиною численних досліджень, що проводяться в рамках різних наукових дисциплін – економіки, психології, соціології, географії. Незважаючи на цей факт, досі не існує однозначного визначення цього поняття. Риси, що визначають концепт якості життя, це: роз'єднаність, мультидисциплінарність і багатомірність. Старіння населення та вплив цього процесу на суспільство та економіку розглядається як багатомірний соціальний феномен. Стаття є теоретичною базою для визначення показників якості життя. У цьому контексті представлені спеціально відібрані показники, що впливають на якість життя людей літнього віку в Словаччині.

**Ключові слова:** якість життя; літні; старіння населення; індикатори вимірювання; Словаччина.

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### **Качество жизни пожилых людей в контексте старения населения в Словакии**

**Аннотация.** Качество жизни в современном мире становится частью многочисленных исследований, проводящихся в рамках различных научных дисциплин – экономики, психологии, социологии, географии. Черты, определяющие концепт качества жизни, это: разобщенность, мультидисциплинарность и многомерность. Старение населения и влияние этого явления на общество и экономику рассматривается как многомерный социальный феномен. Статья является теоретической базой для определения показателей качества жизни. В этом контексте представлены специально отобранные показатели, влияющие на качество жизни пожилого населения Словакии.

**Ключевые слова:** качество жизни; пожилые; старение населения; индикаторы измерения; Словакия.

**1. Introduction.** The issue of quality of life covers several scientific disciplines, each of which focuses on the area that falls under the direct interest of the discipline. As a result, there are numerous papers assessing the quality of life, focusing only on its certain part, whereas there are no papers using an interdisciplinary approach to gain a comprehensive view on the issue. According to Ira & Andrasko (2007) [1], such a view would be based on the examination of human – environment interaction, which, in terms of quality of life, appears to be crucial. Despite inconsistencies in the research of quality of life, there are two basic dimensions that are acceptable in a broader scientific field. They are: subjective (individual, personal, private) and objective (public, social, environmental) dimension, the mutual interaction of which can be understood as quality of life. The aim of this paper is to analyze the theoretical basis of quality of life issue of seniors in the context of population ageing in Slovakia. We present a variety of approaches among scientific disciplines relevant to comparison of the available papers dealing with the issue of quality of life. Based on the analysis of statistical data on population ageing in Slovakia for the years 2001 and 2011, we have examined the spatial differentiation of the process at district level. Moreover, we have selected the indicators of quality of life that play a key role for the senior population by conducting a critical analysis of the empirical research results.

**2. Brief Literature Review.** Massam (2003, cited by Ira & Andrasko, 2007) characterizes the quality of life as an extremely complex concept. It is very difficult to define the concept since its definition must (Mass, 2002, cited by Ira & Andrasko, 2007) recognize two linked dimensions, namely a psychological one and environmental one [1].

There is not a general agreement at the beginning of the research (Ira & Andrasko, 2007) [1]. The using of the concept of quality of life in the social sciences appears in the second half of the 20th century. Bowling and Brazier (1995, cited by Andrasko, 2005) [2] date the beginnings of quality of life research back into the 60's or 70's of the 20th century. According to Tokarova (2002, cited by Balogova, 2005) [3], the author who is considered to be the first who used the term «quality of life», is an American sociologist and economist J. K. Galbraith who used it in 1958. In this period, the understanding of the concept of quality of life was within the concepts relevant to life satisfaction and a good life. According to Bowling and Brazier (1995 cited by Andrasko, 2005) [2], the very concept of «quality of life» appeared in the list of terms for the first time in the journal «Sociological Abstracts» in 1979.

Quality of life is nowadays becoming a part of numerous researches and the term is being developed in several scientific disciplines, such as economics, psychology, sociology, geography, etc. Economic perspective is offered by Adamek & Nemeč (2005) [4] who have dealt with quality of life in the context of the principle of equal opportunities in the labor market. According to them, the research that measures the quality of life has been done especially to understand the situation in which we are and to compare the level of satisfaction in different strata and segments of society. Quality of life, according to economist Chajdiak (2011) [5], is a multi-dimensional concept and standard of living is its important aspect. We can express it directly by the indicators of income or the consumption indicators. According to him, we can also express the quality of life of the country indirectly through demographic indicators – infant mortality and the average (expected) life expectancy of men and women. According to psychologists Hartl & Hartlova (2000) [6], quality of life can be seen as a degree of self-realization and spiritual harmony - that is the rate of life satisfaction or dissatisfaction, and expression of feelings and life happiness. In the context of the quality of life of seniors, one of the most general signs is a self-sufficiency and mobility. Subjective well-being is thereby one of the aspects of mental health. Slovak psychologist Kovac (2013) [7] is critical of the one-sidedness in framing quality of life by individual disciplines, as well as its division into subjective and objective QOL. He is also the author of a three-level model of quality of life by which he pursues an interdisciplinary view on this issue. Nevertheless, he does not deny star-

ting positions based on psychological sciences. The model is presented by three hierarchically arranged levels from the lowest to the highest, which are basal (panhuman), individual-civilizational and cultural-spiritual. Particular attention is paid to the meaning of life which is located on top of the whole model. Sociological dictionary (1996, p. 557 cited by Balogova, 2005) [3] defines quality of life as a term that refers to «qualitative parameters of human life, lifestyle and living conditions of society». As reported by Vano et al. (2011) [8], the quality of life in terms of demographics is evaluated according to various criteria. The main demographic attributes of quality of life are low mortality, fertility on the border of the enlarged reproduction, low abortion rate, high marriage rate, low divorce rate, and migration gain in accordance with social needs (especially with regard to the labor market) supported by an appropriate integration. Many of the abovementioned attributes are closely linked to health (especially mortality, fertility and abortion). Basic identification of the role of geography can already be evident from the research of quality of life conducted by Frazier (1982) [9], who argues that most of the problems related to human life have a geographic dimension. According to Andrasko (2009), authors such as Helburn (1982), Murdoch et al. (1992); Dissart and Deller (2000) and Massai (2002) more than directly indicate the existence of a «geographic dimension of quality of life» [10] This view is closely related to a need to include the natural aspect of spaciousness in the context of quality of life in connection to the assumption that the quality of life not only changes «from one person to another», but also «from place to place» (Andrasko 2007) [11]. Andrasko (2005) [2] defines the concept of quality of life by the following basic features: disunity (in terminology, within the basic approaches and methods for measuring), multidisciplinary (quality of life is explored by various scientific disciplines) and multidimensionality.

**3. Purpose.** To analyze the theoretical basis of quality of life of seniors in the context of population ageing and to highlight the basic approaches to the identification of relevant quality of life indicators.

#### 4. Results

##### Quality of life indicators

According to Ira & Andrasko (2007) [1], quality of life may be seen as a phenomenon representing a character, ergo quality assessment of human life itself. The complexity of human life is generated by a number of different dimensions that may overlap as there are different types of links. Regarding to the terminological inconsistency, it is important to distinguish between the term basic dimension of life (subjective or objective) and dimension of quality of life which represents a partial component, part of human life, evaluated by means of the selected types of indicators. The authors regard the terms «area» or «quality of life indicator» to be the most appropriate. Although, in the literature (van Kamp et al., 2003; Murgas, 2005 cited by Ira & Andrasko, 2007) [1] we can find the terms «component», «element» or «aspect». Andrasko (2004) [12] claims that there is currently used a fairly wide range of indicators for evaluating the quality of life. He divides them into two groups:

a) objective indicators that evaluate the quality of life through the selected characteristics, e.g. quality of housing, health care, economic indicators etc.;

b) subjective indicators derived from the examination of perception and value system of the population in relation to the locations of their daily activities.

In addressing the quality of life of urban and rural citizens, Andrasko (2005) [2] differentiates between two dimensions, or views on quality of life: *personal* (private, individual) quality of life related to the individual, which is largely descriptive and *resident* (social, «community») quality of life which has a less subjective character; it is focused on social problems. An essential feature of these two perspectives on quality of life is an emphasis on the combination and application of subjective and objective data type. Andrasko (2005) [2] identified the most important factors affecting a person's quality of life: interpersonal relationships, family, finances and profession (with respondents who reported it around 50%). The second group, with 20% to 30% share, was made by environmental

factors, health and housing. Culture, education, sports, facilities, and transportation, with 10% to 20% share, were the third group. The dominant factor identified in residential quality of life was the environment, reported by almost 60% of respondents. Interpersonal relations were in the second place with 41.5%. Furthermore, there is a group of factors with a share of around 30% – transport, facilities, finance, culture and employment. This research has confirmed the divergence of perceptions of quality of life of the individual (personal quality of life) and quality of life in the village (residential quality of life).

#### Population ageing and quality of life of seniors

Population ageing and its effects (on society, economy) are perceived as a multidimensional social phenomenon. This is also reflected in the broad interest of various disciplines that are examining it from the aspects relevant to the subject of their field of study – demography, sociology, psychology, education, social work, medicine and other sciences. One of the consequences of demographic ageing is the increase in the proportion of old people in the population. Rychtarikova (2002) [13] refers to this group of people as seniors. In defining of the lower bound of the interval of seniors, we have to also comprise the aspect of economic activity. Until recently, the post-productive age of men and women was different. In Slovakia, it was 60 years of age, or 54 and more. Due to the extension of the retirement this limit will shift to 62 years of age after 2024. Thus, the defined lower age limit is most widely used as a conventional bound for seniority.

From a spatial perspective, ageing of the population is a global problem, particularly relevant for Europe where the population is ageing and this process is likely to continue in the future. According to demographic prognoses, by 2050 the number of Europeans over 65 years of age will double. The ageing process in Europe is regionally differentiated. While in Northern and Western Europe these changes began in the 1960s, in the countries of post-socialist bloc in the Central and Eastern Europe they did not start until the 1990s, and they were characterized by higher intensity and a relatively short period of time compared to the other regions of Europe (Jurcova & Vano, 2011) [14].

The process of ageing of the Slovak population started in the mid-50s of the 20th century, after the completion of the compensatory phase after WW II (Vano et al., 2011) [9], developed dynamically in the 90s and is forecasted to progress in the future. Jurcova et al. (2010) [15] highlight considerable ageing of the population within demographical trends at the beginning of the millennium with the anticipated beginning of the decrease of the population shortly after 2020.

Population ageing in Slovakia has so far been significantly affected by the fall in the age category to 14 years of age due to fertility and birth rate decrease. However, at the same time this process is accompanied by a gradual increase in the working-age population. The growth of the absolute number and relative proportions of seniors is connected with ageing of the Slovak population. By comparing the number of citizens in senior 5-year age categories from 1970 to 2010 (Figure 1) we see the highest increase in the category of seniors aged 60-64. Mortality decline and increase in life expectancy affect a rise of the number of old seniors (in higher age categories: aged 75-79, 80-84, 85-89). Concerning heterogeneity of seniors, those over 80 or 85 are considered significantly important.

Kacerova & Mladek (2012) [16] examine dependence between a group of inhabitants aged over 80 and the ones aged 50-64 through the index of potential social support expressing a potential opportunity for intergenerational care. However, it is necessary to take into account the fact that decreasing fertility and disintegration of traditional families might lead to a reduction of potential caregivers (Svobodova, 2011) [17]. In terms of impacts of demographic ageing on society, the increase of the number of seniors aged over 80 and/or 85 imposes further requirements for provision of a functional system of health and social care.

In spatial terms, the process of ageing in Slovakia takes place differently, and it exhibits a difference in the value of indi-

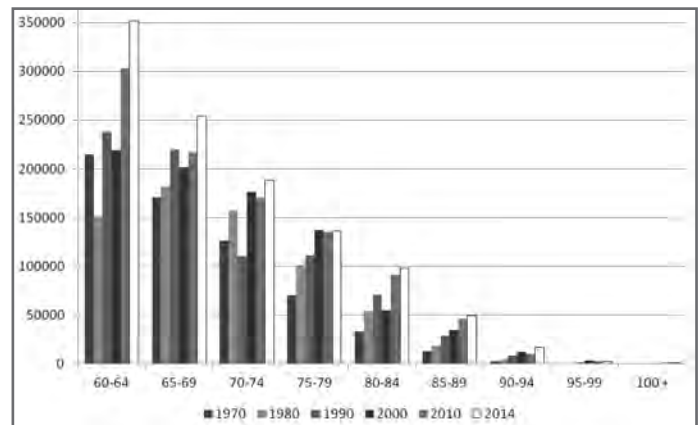


Fig. 1: The number of seniors in the Slovak Republic according to 5-year age categories in 1970, 1980, 1990, 2000, 2010 and 2014

Source: Processed by the Authors according to the Statistical Office of the Slovak Republic

vidual indicators and indices (the mean age, a proportion of the post-working age population, the age index, the aging index, etc.) when examined at various hierarchical levels (Matlovic 2005 [18]; Potancokova 2002 [19]; Bleha & Vano 2008 [20]; Kacerova & Mladek 2012 [16]). We have investigated regional differences and changes over time (comparing the years 2001 and 2011) on the basis of a single-component indicator – participation of seniors over 60 years relevant to the total population in the district.

A comparison of Fig. 2 and Fig. 3 shows that the population of the Slovak Republic is gradually ageing. The fastest pace of ageing is shown in districts in the largest cities (Bratislava and Kosice), as well as districts in Western and Southern Slovakia. On the contrary, the slowest pace of ageing persists in the districts of Northern and Eastern Slovakia, which is associated with above-average natural growth (high fertility) and a favorable age structure of the population.

With a growing participation of seniors in developed societies, there is concentrated attention on the specifics of the quality of life of the society in examining the issue of quality of life. Zumarova (2012) [21] considers biological, physiological, mental, social, society-wide (e.g. political conditions), economic and demographic aspects to be the factors that affect life, and therefore the quality of life of seniors. When measuring the quality of life of seniors, there are tools used to measure quality of life of the general population with some modification. Research has often used the WHO methodology for measuring the quality of life – WHOQOL -100, which includes 6 areas with a diverse range of indicators:

1. Physical health, which depends on energy and fatigue, pain and discomfort, sleep and development.
2. Mental health, which expresses the image, negative and positive feelings, self-esteem, a way of thinking, learning, attention (concentration).
3. Degree of independence, which is associated with movement, daily activities, work capacity, drug addiction.
4. Social relationships, which are represented by personal relationships, social support, sexual activity.
5. Environment, which is indicated by access to finance, freedom, safety, health protection and social care, home, access to information, participation in recreation, travelling, physical environment.
6. Spirituality, which is marked by personal faith and beliefs, a system of values.

The conclusions of empirical research with a focus on the seniors shows that their quality of life is affected not only by one of these areas, but also by the interaction of social, health, economic, environmental conditions. Kovac (2013) [7] summarizes the most serious problems that plague seniors in Slovakia from economically due to the conditions such as low income, poverty from the health condition, morbidity, poor health status and care, as well as socially and mentally due to the conditions such

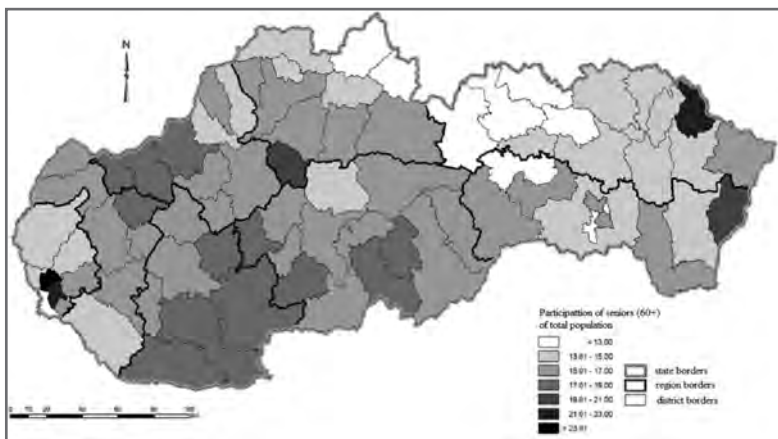


Fig. 2: Seniors in the population of the Slovak Republic by districts (NUTS IV) in 2001  
Source: Processed by the Authors according to the Statistical Office of the Slovak Republic

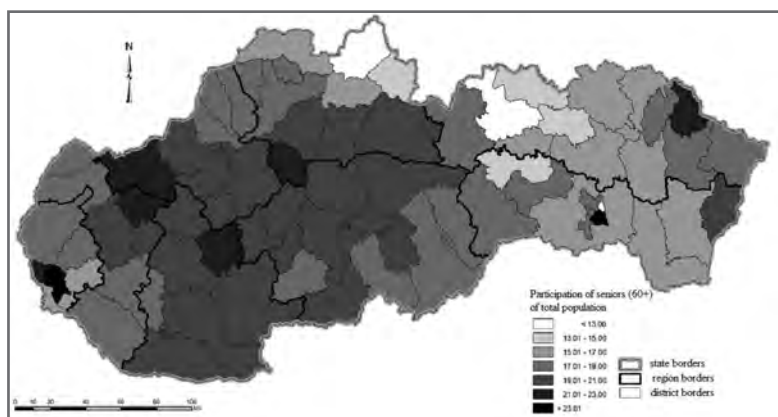


Fig. 3: Seniors in the population of the Slovak Republic by districts (NUTS IV) in 2011  
Source: Processed by the Authors according to the Statistical Office of the Slovak Republic

as loneliness, pointlessness of existence and social discrimination (ageism). On the other side of the scale, there are aspects that contribute to a positive change in the QOL of seniors, including priority for activity and self-realization in terms of practical daily activities, leisure activities, activities leading to a personal growth. Changes in the demographic structure of Slovakia and the changing ratio between the population of post-working and working age (in favor of dependants) is shown by increased rates of economic dependence, thereby affecting the QOL of all ages.

The emergence of the so-called «silver economy» is a specific phenomenon associated with ageing of population in developed countries. It can be characterized as adapting of the economy to the needs of a growing number of seniors in the community. It includes the production of goods intended for seniors (food products, medical devices, electronic products), as well as the provision of services – health, social, educational, etc. It is therefore a relatively significant potential which can contribute to the overall growth of the economics. We can agree with the psychologist Kovac (2013, p. 38) [7] who claims that activities associated with older population and priority care for them can be regarded as one of the main criteria for assessing the maturity of states and their progressivism in humanism.

**5. Conclusions.** In recent decades, the number and the share of seniors in Europe, and thus of Slovak population, has increased. Senior care, health, economic and social consequences of ageing and old age are gaining interest throughout the society. There also comes a need for a systematic study of the factors and consequences of the aging process. An important part of this research is the measurement of the quality of life of seniors through selected indicators that reflect the specific needs of seniors. Their practical significance consists in obtaining documents for the application of specific measures to improve the quality of life of seniors in Slovakia.

The basic principle, which is prominent in solving the problems of ageing at the international level, mostly through the WHO (World Health Organization), the UN and ILO (International Labour Organisation), is the principle of active ageing, which affects not only individuals but also society as a whole. The term active ageing reflects a process that allows people to use their potential to create the best possible conditions for life – in the physical, mental and social areas, to participate in the life of society according to their needs and abilities, while the society provides them with adequate protection, security and nursing care.

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