

## Stimulating The Development of a Silver Economy in The Least Economically Developed Regions by Shaping Ageing-Friendly Cities and Communities

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### Abstract

The article presented the problems of the development of the silver economy and the formation of aged-friendly cities and communities in the Subcarpathian Voivodeship in Poland, one of the least economically developed regions of the European Union. The analysis was based on the results of the survey, which included 2120 seniors, taking into account the division into rural areas and cities of different sizes.

The aim of the study was to identify the needs of seniors and their expectations related to active aging, so that their potential for the development of a silver economy could be determined. There was also an attempt to identify factors limiting the development of senior activity, which are critical to the development of a particular model business small and medium-sized enterprises in less developed regions with a large share of rural and small and medium-sized cities. The article also provides an analysis of the determinants that increase seniors' self-reliance so that it is possible to plan for the development of public spaces tailored to the needs of the elderly, which is an action for the benefit of all residents, entrepreneurs and the entire economy of the region.

The study indicated to the necessity for conducting local level and quality of life studies, market research and social attitudes studies involving seniors. This makes it possible to counteract the stereotypical approach to old age and to accurately identify areas of strategic interventions in the context of adapting cities and rural areas to the ageing phenomenon of population.

**Keywords:** Silver Economy, Healthy Ageing, Elderly Consumers, Aged-Friendly Cities And Communities

### Introduction

The economic imperative of adapting to changes in age structure was discussed in the *World report on ageing and health* (2015), which is a conceptual model for healthy aging and sets out a public health framework for actions to support it. This process should proceed in such a way as to minimize the expenditure associated with the ageing population, while maximizing the numerous contributions made by the elderly. The report proposes a new approach to analyzing the economic effects of ageing population. Instead of presenting expenditures on older people as a cost, they are considered as investments that enable welfare and diverse contributions from the older people. This approach can change the mindset from a particular emphasis on minimizing the cost of an ageing population to an analysis that takes into account benefits that may be lost if society fails to make appropriate adjustments and investments.

Implementation of new solutions in *Healthy Ageing* areas fits into a silver economy taking the advantage of the broadly understood potential of older people, whose overarching objective is to improve the daily lives of older people (Graafmans et al., 1998). According to Golinowska (2014) the concept of a silver economy has two meanings – social and economic. A social meaning of the concept consists in meeting the needs and aspirations of the ageing society. As far as the economic meaning is concerned, it consists in indicating benefits which result from establishing supply and demand factors. The supply factors include: longer work, higher qualifications, experience and life's stability. However, the demand factors represented by the elderly include purchasing power and consumption with a considerable potential for economic growth. Klimeczuk (2015) defines that the silver economy may be defined as an economic system that focuses on balancing the fields of the production and distribution of goods and services as required by older adults and younger but already ageing generations. Szukalski (2012) observed that the real thinking in categories of the silver economy begins with the move beyond the narrowly defined target groups, i.e. the individual seniors. The potential clients of the silver economy, aside from entities, should also include groups and organizations. This is important, because satisfied needs 'are not so much the needs of seniors but the structures dealing with seniors'.

The dynamic growth of older consumers enforces companies to constantly seek new solutions to ensure they gain a competitive market position. The pursuit of meeting the specific needs and expectations of older consumers by offering new

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products and services, therefore it creates opportunities for entrepreneurial development (Świda, Kubejko-Polańska, 2017). Since entrepreneurship is primarily responding to changes in demand, competition conditions, technological advances and institutional changes (Bossak, 2013). The development of entrepreneurship in the area of the silver economy is also accompanied by a number of socio-economic, spatial, technical and technological challenges. The interdisciplinary nature of this area determines the need for analysis, e.g.: the impact of the ageing population on changes in consumer demand in different sectors of the economy (Iparraguirre, 2019), the determinants of digital exclusion in an ageing society (Adamczyk, Bettlej, 2021), or work and volunteering of the elderly, which is a very important aspect of active aging (Morrow-Howell N, 2010). An important research area also includes the issue of the problems, challenges and scope of activities of local government units, and how local government authorities can exploit the potential of a silver economy (Maj-Waśniowska, Jedynek, 2020).

Therefore, the opportunity for the economic development of the regions is to introduce comprehensive actions and solutions to regional and local policy for so called *Aged-friendly Cities and Communities* (*Global Age-friendly Cities...*, 2007), which in turn creates a number of opportunities to exploit the widely understood potential of older people, that is, the concept of a silver economy. These two areas of the least economically developed regions, i.e., the creation of an ageing environment and the development of a silver economy, should be treated complementary as mutually reinforcing development pathways.

The aim of the article is to identify factors affecting seniors' activity and self-reliance in the context of the construction of aged-friendly cities and communities as well as to show opportunities to stimulate the development of the silver economy in economically underdeveloped regions. The article is a case study of the Polish region, that is Subcarpathian Voivodship, one of the three poorest regions in Poland, and one of the least economically developed regions of the European Union (49% of the EU average GDP per capita in 2017). Subcarpathian Voivodship is a region inhabited by rural population in 60%. In addition, the relatively higher rates of population growth in the region in relation to the rest of the country, result in completely wrongly marginalizing the issue of ageing population, development of aged-friendly cities and communities, and the exploitation of the potential of a silver economy. This article is the result of the implementation of a scientific project, with the overarching objective "*to develop awareness of the business potential of the silver economy in the Subcarpathian region*". An original research tool was used to implement it, through which a survey was conducted on a sample of 2120 seniors from the region.

## Research Methodology

In the study of opportunities for the development of the silver economy and the increase in the activity of older people living in Subcarpathian Voivodship, a survey technique, being common in the area of polling methods, was used. This method allowed to determine seniors' attitudes as well as the potential and barriers to elderly people personally engaging in the construction of ageing-friendly communities. A specifically prepared tool was used for the need for this study, i.e. a questionnaire of the survey. This study discusses these questions, which addressed issues of lifelong activity, participation of seniors in organized and private social life, barriers and challenges in public spaces as well as seniors as consumers in the marketplace of goods and services in the silver economy.

Because of the fact that general community (i.e. the number of inhabitants of Subcarpathian Voivodship aged 55+, according to data of the Central Statistical Office in Poland for 2018), was formed by 619.7 thousand persons, the selection of the sample was made in a non-random (non-probabilistic) manner of a share (quota) nature (Babbie, 2004). The basis for the selection of the participation sample was available knowledge of the relevant characteristics of the inhabitants of the region (Subcarpathia), obtained from the databases of the Central Statistical Office in Poland. Subsequently, the so-called quotation report was generated, depicting the share of three selected characteristics, namely the gender of residents (M, F) in individual age categories (55-64, 65-74, 75 and above), specifying the place of residence (rural areas and cities up to 20 thousand, cities from 20 to 100 thousand, cities over 100 thousand, cities over 100 thousand residents) (Table 1).

**Table 1: Quotation report expressed in % of the population of the Subcarpathian Voivodship**

	Rural areas		A city of up to 20k		City 20-100k		Rzeszów (city over 100k)		
Age	W	M	W	M	W	M	W	M	Total
55-64	14.2	12.4	2.7	2.2	2.9	2.7	4.1	3.8	45.0
65-74	10.2	8.1	1.7	1.5	2.6	1.8	2.7	2.4	31.0
75 and above	9.5	5.1	2.0	1.2	1.7	0.9	2.4	1.2	24.0
In total	59.5		11.3		12.6		16.6		100
In total	59.5				40.5				100

Source: own elaboration.

During a survey conducted between December 1, 2018 and January 31, 2019, among the inhabitants of the cities and municipalities of Subcarpathian Voivodship, all the criteria for selecting respondents were included in the quotation report. Additionally, individuals from different social and environmental groups of the researched region were included in the study. Eventually, the accepted sample size amounted to 2120, covering respondents from 125 different territorial units. The sample population size constituted 0.34% of the researched general community (Table 2).

**Table 2: Population of respondents surveyed [expressed in number of people]**

	Rural areas		A city of up to 20k		City 20-100k		Rzeszów (city over 100k)		Total
	W	M	W	M	W	M	W	M	
Age									
55-64	302	263	58	46	62	57	86	81	955
65-74	216	172	36	31	54	38	58	51	656
75 and above	200	108	43	25	36	20	51	26	509
In total	1261		239		267		353		<b>2120</b>

Source: own elaboration.

The results obtained in the conducted survey created a database of information allowing for the use of statistical analyses. Data exploration was intended to capture the correctness between respondents' opinions and assessments and the characteristics characterizing the sample community and features characterizing the respondents' place of residence.

## Results of the research and discussion

Given the widely discussed problem of the ageing population in Europe, including the increase in demographic dependency ratios, it should be expected that the creation of regional and local solutions in line with the assumptions of age-friendly cities and communities, would be a space for strategic activities in all regions, cities and rural areas. Meanwhile, many regions lack even basic economic, social and spatial studies to determine the local needs, preferences and attitudes of seniors. Without such research, on the basis of which it is possible to fairly plan the development of local activity and entrepreneurship, it is difficult to talk about effective creating and supporting the development of a silver economy. Each, even the smallest territorial unit, may have its own individual needs or factors limiting the activity of the elderly. Without knowing individual, local conditions, it is impossible to build well-functioning and durable solutions in the region or generally in a given State.

**Table 3: Summary of areas related to life in ageing-friendly cities and municipalities according to WHO and their extended description used in the conducted survey**

No.	Areas according to WHO	Extended description used in the survey questionnaire prepared for the purposes of the polling survey
1.	Outdoor spaces and buildings	Organized and secure public space, buildings, roads and walkways tailored to the needs of the elderly
2.	Transportation	The ability to move independently thanks to easily accessible and cheap public transport
3.	Housing	Raising the level of independence by owning a suitable (customised) accommodation
4.	Social Participation	Participating in social, cultural and spiritual events with family and friends
5.	Respect and social inclusion	General respect and courtesy for the elderly, building a positive image of the elderly, intergenerational integration
6.	Civic Participation and Employment	Possibility of further paid employment in retirement or volunteering, performing social functions
7.	Communication and information	Constant access to reliable information about local events and knowledge that facilitates everyday life
8.	Community support and health services	Availability of adequate health and social care provided at a sufficiently high level

Source: own elaboration.

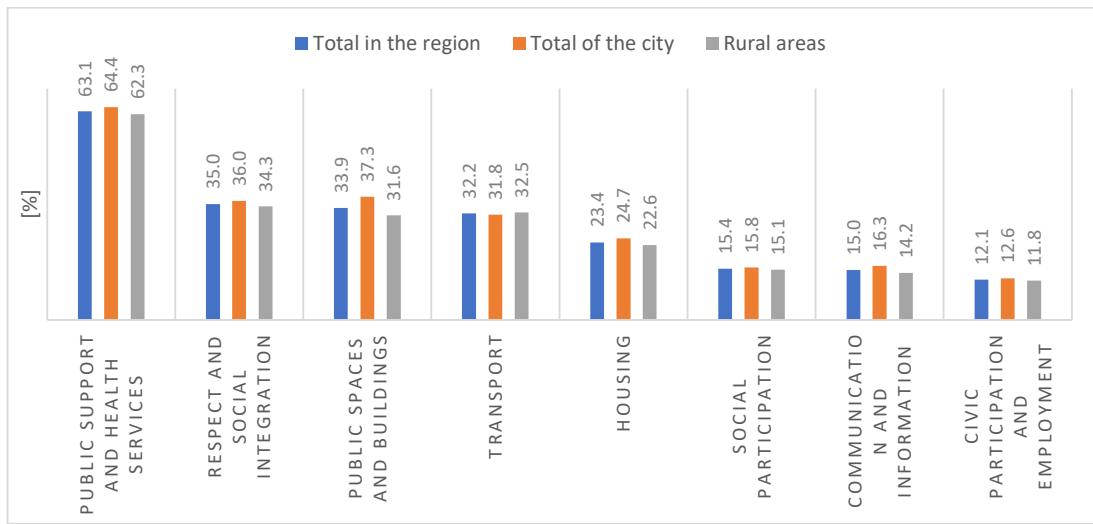
The key issue in taking effective actions regarding the activity of older people is to know the validity and quality of the features characterizing the environment of their lives, namely their immediate surroundings. In this study, the analysis of opinions and needs in this area was based on the answers to the question: *What in the opinion of respondents is most important for maintaining as long as possible activity and independence of older people in private life and different areas of social life?* Therefore, eight areas related to living in ageing cities and communities were used, described by the World Health Organisation as key aspects of adapting cities and communities to the ageing phenomenon of residents (*Global Age-friendly Cities...*, 2007) (Table 3).

**Table 4: Percentage of indications on the question of the importance of individual areas of adaptation of cities and municipalities for maintaining as long as possible activity and self-reliance of elderly people in the Subcarpathian Voivodship**

Areas of adaptation of cities and communities according to WHO	Total in the region	Total of the cities	Towns up to 20k	Cities from 20 to 100k	Rzeszów (city over 100k)	Rural areas
	Values expressed in % of respondents in a given territorial categories*					
Public support and health services	63.1	64.4	59.4	65.5	66.9	62.3
Respect and social integration	35.0	36.0	38.9	36.3	33.7	34.3
Public spaces and buildings	33.9	37.3	38.5	38.6	35.4	31.6
Transport	32.2	31.8	30.5	31.1	33.1	32.5
Housing	23.4	24.7	27.2	24.7	22.9	22.6
Social Participation	15.4	15.8	18.0	15.4	14.7	15.1
Communication and information	15.0	16.3	19.2	16.5	14.2	14.2
Civic Participation and Employment	12.1	12.6	13.0	13.5	11.6	11.8

\* Each of the 8 areas was subject to a separate relevance assessment. The presented values show the percentage of individuals in each category of territorial units that considered the area of adaptation of cities and communities according to WHO as the most important. Source: author's own study.

In determining the validity of the characteristics of the living environment and the immediate surroundings of seniors from the Subcarpathian Voivodeship in Poland, the issue of public support and access to health services was most often pointed out (63.1% of the total surveyed). This area was placed first in all spatial units analysed, ranging from rural areas through all urban size categories. The highest rate of relevance of this area of adaptation of the city to the ageing process (66.9%) was recorded in Rzeszów, which is the capital and largest city of the region. Residents of Rzeszów in the next two positions in terms of relevance, indicated the need for access to organized and secure urban space, buildings, roads and walkways tailored to the needs of elderly people as well as the need for respect and building a positive image of the elderly person (33.7% and 35.4% respectively). Further indications of the relevance of characteristics in general for the whole region concerned sequentially: respect and social integration (35%), quality of public spaces (33.95%), transport (32.2%), housing (23.4%), social participation (15.4), communication and information (15%), and civic participation and employment (12.1%) (Table 4).



**Figure 1: Percentage of indications on the question of the importance of individual areas of adaptation of cities and municipalities for maintaining the longest possible activity and autonomy of elderly people in the Subcarpathian Voivodship**

Source: author's own study.

Generally in all types of cities (small, medium and in Rzeszów) and rural areas, the issues of respect and social integration, as well as the quality of urban space and urban transport (Figure 1) were the most important, apart from health care. The results of the survey mostly did not differ significantly due to the gender of the respondents. Significant variation was noted only in urban areas, where women were more likely to pay attention to the issues of safe and convenient urban transport that allows autonomous movement around the city. In contrast, men were significantly more likely to point out that overall respect and courtesy for older people and the building of a positive image of an elderly person affected senior activity.

The results of the research on the most important determinants of participation in organized and personal social life, in the opinion of respondents, were presented in Table 5 and Table 6.

**Table 5: Conditions of participation of elderly people in organized and personal social life according to individual territorial areas of the region of Subcarpathian Voivodship**

Territorial area Conditionality categories	The item calculated based on weighted average of all responses*					
	Total in the region	Total of the city	Towns up to 20k.	Cities from 20 to 100k	Rzeszów (city over 100k)	Rural areas
Financial issues related to the cost of commuting and participating in the event	1	4	5	2	5	1
Access to full information about the event	2	1	3	1	1	3
Internal motivation, approach to life, belief and personal interests	3	2	2	5	3	2
Providing facilities for elderly people at the meeting site as well as during the meeting	4	5	6	4	2	4
Safe and self-driving options	5	6	4	3	6	5
Quality and diversity of the offer of social, cultural events	6	3	1	6	4	6

\*Respondents selected the 3 most significant categories of conditioning in their opinion by awarding 3, 2 and 1 point respectively (where 3 was the most significant).

Source: author's own study.

Taking into account the general surveyed individuals determining what the opportunity for older people to participate in organized and personal social life depends on, financial issues related to the cost of commuting and attending the event were most often pointed out. The relatively low household incomes and one of the lowest average pension benefits in the country make seniors dependent their activity on the financial situation and costs of attending the event. Additionally, the fact that

most villagers have to reach the city to participate in an event, for example cultural, is important. In contrast, this offer is almost on site for small town residents. Small, well-organized urban centers are active organizers of local social life for their elderly residents and inhabitants from the surrounding countryside. Young people inhabiting these centers usually label them completely unattractive, while seniors feel good in an environment and space familiar to them. In addition, these towns are very often inhabited by other family members and long-time friends who are the major meeting companions in personal and organized social life. The financial category was only in the 5th (penultimate) place among respondents from the smallest cities also because the local offer is maximally tailored to the financial capabilities of the residents, otherwise entrepreneurs could not count on the customers. For the smallest cities, the quality and variety of social and cultural event offers, and internal motivation and attitude towards their own activity, is the most important for seniors.

Residents of the largest city in the region, like residents of middle cities, indicate access to full information about events in the first place. This aspect is referred to very often as a key problem for the functioning and activity of seniors in cities. The larger cities are, the harder it is to organize mechanisms satisfactorily informing seniors about events and specific opportunities for spending time actively. Although seniors are more mobile and open to active leisure, there appears a very important problem in the Subcarpathian region of the digital exclusion of older residents. If in rural areas or small towns, a few announcements are sufficient in public spaces, or in a parish newspaper for instance, information chaos often creeps in big cities. On the one hand, events and opportunities for leisure activities are numerous, while on the other hand it is difficult for seniors to deal with the offers, deadlines and a scope of services provided. Seniors from older age groups, especially living alone, without children or grandchildren who can introduce them into the world of, e.g., social media, do not usually use online sources of information. Generally, however, the most important condition for seniors over 75 in the region of Subcarpathian Voivodeship is to provide facilities for the elderly at meeting place as well as during the meeting (Table 6).

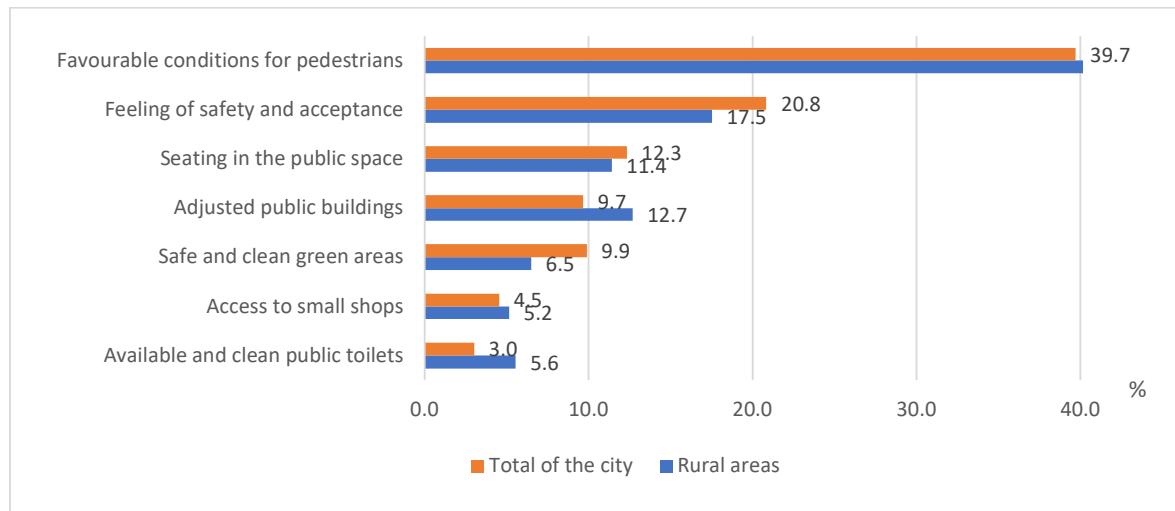
**Table 6: Percentage of indications in response to the question about the single most important determinant of elderly participation in organized and personal social life**

Gender and age of respondents Conditionality categories	Women	Men	55-64 years of age	65-74 years of age	75 and more years of age
	% among all respondents in particular gender and age categories *				
Financial issues related to the cost of commuting and participating in the event	17.5	17.9	19.0	16.3	17.7
Access to full information about the event	19.1	19.4	18.7	22.0	15.7
Internal motivation, approach to life, belief and personal interests	18.4	21.1	22.1	18.8	15.9
Providing facilities for elderly people at the meeting site as well as during the meeting	14.1	13.1	10.9	12.2	21.2
Safe and self-driving options	14.5	12.3	11.6	12.5	18.5
Quality and diversity of the offer of social, cultural events	16.4	16.2	17.7	18.3	11.0
In total	100	100	100	100	100

\* The summary includes the single most relevant response for individual respondents.

Source: author's own study.

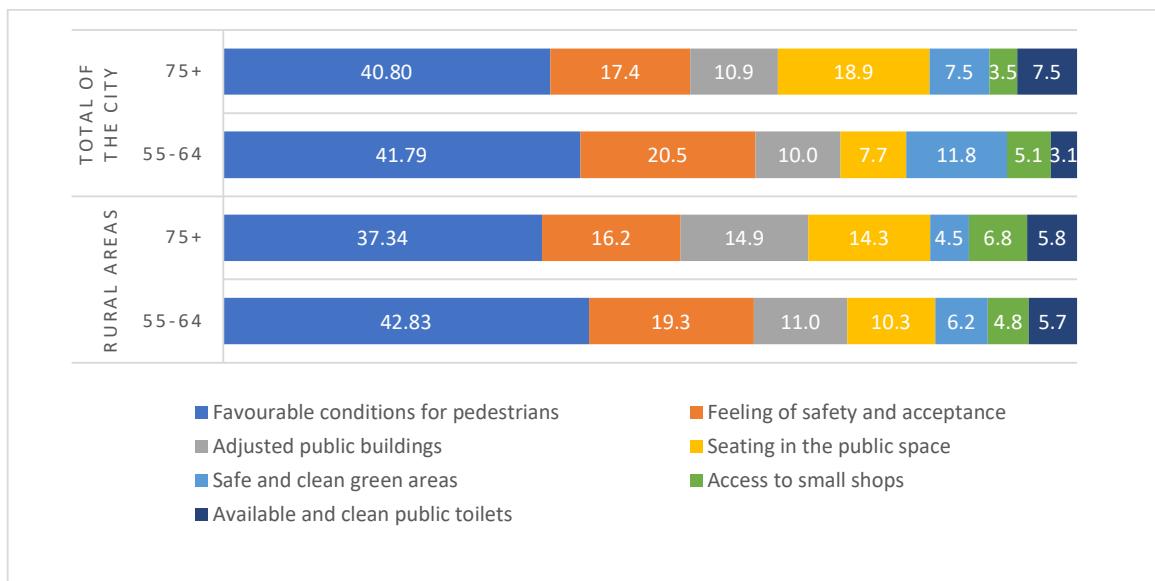
According to the surveyed individuals, another very important aspect is internal motivation, approach to life, belief and personal interests. It should be pointed out here that this category is very widely discussed in senior-activation environments. Especially the oldest seniors in the Subcarpathian region are characterized by a low level of internal motivation, which is mainly due to the state of health and very frequently to the limitations of mobility or/and perception. A generation of younger seniors often already have a different, more open approach to life. For the age group between 55 and 64 years of age, both motivation or financial issues and access to information are relevant. However, it needs to be clearly emphasized that this is a completely different sector of society in terms of activity, preferences for leisure time and participation in social events. They are often professionally active, far better educated people, with higher incomes and a higher social status. Youngest seniors do not normally have a problem with mobility and independent commuting, do not indicate the need to provide special facilities for the elderly, and have higher expectations for the quality and diversity towards the offer of social and cultural events (Table 6). Analysis of the results of the survey did not show much variation in views and preferences in relation to the gender of respondents.



**Figure 2: Percentage of indications on the question of the most important area of adaptation of public places to the needs of seniors in the cities and rural areas of Subcarpathian Voivodeship**

Source: author's own study.

In the poll survey conducted, seniors were also asked to pinpoint the single most important condition by which public places could be considered friendly and tailored to the needs of seniors. The results indicate that in both cities and rural areas, regardless of the age and gender of respondents, convenient pedestrian conditions are most significant, that is, sidewalks, pedestrian crossings, lighted roads and stairs tailored to seniors' abilities. In second position, the sense of security, acceptance of older people by others and courtesy towards seniors were indicated most frequently. The third most significant indication in cities overall was the availability of seats along pavements and in squares where it is possible to rest. In rural areas, however, the third indication were public buildings suited to seniors' needs. Access to small shops and outlets without a necessity to go into hypermarkets, or access to clean, well-marked and conveniently placed public toilets (Figure 2) proved to be less relevant to all groups of respondents.



**Figure 3: Percentage of answers to the question about the relevance of individual categories of adaptation of public places to the needs of seniors (divided into two extreme age categories of respondents)**

Source: author's own study.

When analyzing survey results broken down into two extreme age groups of respondents in urban areas, the amount of indications by the oldest seniors is distinguished for the availability of seats to relax or wait for (18.9%). In rural areas, by contrast, the oldest seniors paid more attention to appropriately adapted public buildings, e.g. lifts, handrails, information

point, etc. (14.9%). The youngest group of respondents in cities, that is, people in from 55 to 64 years of age, most often paid attention to clean, well-maintained green areas where it is safe to relax (11.8%) (Figure 3), apart from the convenient conditions for pedestrians (41.8%) and the feeling of safety (25.5%).

A significantly smaller amount of indications for certain areas of adjustment of public spaces, such as available public toilets (a few %), does not at all mean that this aspect can be omitted. In all public spaces, access to clean, well-marked and conveniently placed public toilets should be the absolute standard.

## Conclusions

The major problem, which should be successfully countered in the analysed region of the Subcarpathian Voivodeship in Poland, is definitely the premature withdrawal from the organised and personal social life of older people and the decline of their self-reliance. This results in a deterioration in their quality of life, low self-esteem and becoming addicted to other people's assistance. It also causes negative social and economic consequences for local and regional entrepreneurs, thereby for the society as a whole.

The decline in seniors' activity and self-reliance is due both to an insufficient level of health care for the region's residents, an insufficient scope of social assistance, and a maladjusted offer of market and non-market services. However, one of the most commonly indicated limitations of activity in many areas of everyday life is the lack of a sense of security and respect for older people. This is due to the low level of public awareness in this regard and the often stereotypical approach to older people. Recommended activities at local and regional levels should primarily include intergenerational integration, education and building a positive image of seniors. These are activities difficult to carry out in the short term because they require many scattered, bottom-up initiatives, additionally coordinated with regional and national education campaigns. However, without this, significant progress and development of a broadly understood silver economy in the least economically developed regions cannot be expected.

In order to maintain the longest activity and self-reliance of seniors, enabling them to function freely in public spaces is essential as well. These are areas of special importance for satisfying the needs of residents of all ages, therefore the ability to plan spaces that are friendly to all social groups is important. The conducted study shows unequivocally that already small investments, for example, in resting benches, are able to significantly increase the comfort and self-reliance of seniors. It is also important to give due attention to the issue of seniors' availability for information.

There is a firm necessity for conducting local level and quality of life studies, market research and social attitudes studies involving seniors. This allows you to counteract the stereotypical approach to old age, to accurately define areas of strategic interventions in the context of adapting cities and rural areas to the ageing phenomenon of population, and to effectively stimulate the development of a silver economy.

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