
Green Areas as Recreational Space for Older People - Towards Sustainable Urban Development

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Abstract:

Purpose: The aim of this article is to show that the presence of green areas close to where people live and their recreational utility can have a significant impact on the quality of life of older people.

Design/Methodology/Approach: The main part of the article is based on an exploration of the literature on the importance of green areas (parks) for the quality of life of older people, with a particular focus on issues relating to active recreation undertaken in open public spaces. The theoretical considerations are complemented by the results of a survey conducted using the CATI method on a group of people aged 60+ (407 respondents) and those who are retired or on a pension (301 respondents).

Findings: The discussion confirmed that physical recreation undertaken in green areas close to the residence of older people is an important element affecting the quality of life of older people. For older people, the close proximity of recreation areas is an important determinant of activity-taking and also influences the value and utility of housing. The most common activities chosen by people 60+ are walking, cycling or doing physical work in the garden. Taking into account the recreational needs of older people in the activities of local stakeholders has many benefits and contributes to sustainable development goals.

Practical Implications: The research results and recommendations provide valuable guidance for those responsible for the socio-economic development of cities and the implementation of the concept of sustainable development. The implication of measures aimed at activating older people in green areas can contribute to improving their quality of life and preventing social exclusion while caring for the environment.

Originality/Value: Most of the research on urban green spaces and older people is most often linked to issues of housing design and issues of housing values and climate change. Looking at urban green space in the context of sustainable development that takes into account the needs of older people provides a new perspective on the problem.

Keywords: Green spaces, urban recreational space, recreation, quality of life, sustainability, older people, economic geography.

JEL codes: I30, R23, J220.

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1. Introduction

Current theoretical and research considerations are dominated by the concept of sustainable development, which in its main assumptions is based on the conscious shaping of the relationship between economic growth, care for both the natural and cultural environment and meeting the diverse needs of inhabitants. An important and indisputable direction of development is the improvement of the quality of life for all inhabitants.

Among the factors that have a significant impact on the directions of urban activities are demographic changes, or rather the ageing of the population. The needs of the elderly, whose share in the population structure is increasingly significant, take on particular importance. Population ageing is seen not only as a challenge, but also as an opportunity for the economic development of countries. Well-considered policies, appropriate strategies, measures and tools to support active ageing are becoming key elements to foster the integration of older people in all aspects of life (Thalassinos *et al.*, 2019).

The aim of this article is to show that green areas in cities are an important element influencing the quality of life of the residents. In the context of the idea of sustainable development and demographic changes, it is assumed that the recreation of older people in green areas in the vicinity of their place of residence plays an important role in improving their quality of life. The presence of parks, squares near the place of residence of older people, who for a variety of reasons may have difficult access to other recreational opportunities, can foster recreational activities and bring benefits not only for older people (improved mental and physical health, social inclusion) but also for society as a whole.

With the assumptions made, the following research questions were posed:

- Are urban green spaces being researched in the context of achieving urban sustainability and improving quality of life for residents?
- What forms of outdoor recreation are undertaken by people aged 60+ and retirees?

The assumptions, objectives and research questions set out the structure of the article. In the theoretical part, a review of the literature was carried out to find out whether scientists and researchers address the importance of green areas for the quality of life of residents, especially the elderly. And if so, whether they relate these considerations to the concept of sustainable urban development. This section provides an original take and identifies gaps and directions for further research.

The empirical part of the article presents the results of a study that sought to confirm the importance of green spaces for recreation for older people. This research is part

of a larger study conducted by CATI in 2021 on a representative sample of 1,068 respondents. For the purposes of this article, the survey results were deliberately selected to include respondents aged 60+ (407 respondents) and those describing their status in the labour market as retired/retired (301 respondents).

A limitation of the presented research results, is that they do not provide answers on the impact of reactive activity on the subjective feelings of the respondents. The article concludes with a discussion following from the research and literature studies and a summary of the considerations.

2. Literature Review

As many authors point out, urban green spaces are becoming an important focus for researchers as a way to better adapt cities to climate change and create a high quality living environment for residents (Li *et al.*, 2024a; Garay Gutiérrez *et al.*, 2022; Su-Hong Chen, 2011; Tohan *et al.*, 2024). The authors note that urban parks and public open spaces enhance the quality of life of citizens by offering a variety of services and point out that this is particularly important in developing cities where green spaces are increasingly scarce (Ma *et al.*, 2024).

An analysis of the literature showed that, for the most part, studies of green spaces in cities are linked to issues of housing values or their connection to climate change (Li *et al.*, 2024). The literature linking issues of sustainability and green spaces to the topic of older people's recreation is fragmented.

An overview of the literature showed that mostly studies of green spaces in cities are linked to issues of housing values or their link to climate change (Li *et al.*, 2024). The literature linking issues of sustainability and green spaces to the topic of older people's recreation is fragmentary.

In contrast, in other studies, the authors highlight older people's motivations to live more centrally (Ossokina and Arentze, 2024). They also emphasise older people's attachment to their place of residence. Another study by these authors indicates that housing attributes related to safety and social cohesion (e.g., shared meeting space) play an important role for older people (Ossokina *et al.*, 2020).

Aram (2024), on the other hand, points out that urban green resources play a very important role in the sustainability of cities. He stresses that with urbanisation and population growth in cities, the need for green and relaxing spaces for residents has become more important. Green spaces provide facilities for sports and recreation.

Baxevani *et al.* (2024) emphasise the need for revitalisation and the creation of new green networks. They also point to the importance of the community in managing these spaces at a local level. They propose measures including the revitalisation of green spaces, their connection to cycle paths and pedestrian walkways, and the

creation of a network of applications to inform residents. These authors also recognise the importance of their solutions for improving environmental improvements and increasing urban sustainability (Baxevani *et al.*, 2024).

Some researchers have highlighted the impact of Pandemic Covid-19 in drawing attention to the benefits that urban parks have for residents. Cheng and co-authors conducted a study on the impact of urban parks on the happiness of residents, verifying the thesis positively (Cheng *et al.*, 2021). Also Isabella *et al.* (2022) highlight that urban green spaces provide many benefits for the physical and psychological well-being of residents (e.g., habitat protection, pollution control, recreation and leisure opportunities).

Overall, the results show that COVID-19 elicited positive perceptions of the benefits of urban green spaces and, consequently, greater use of them, which appears to be maintained even after the public health emergency has passed (Isabella *et al.*, 2022).

The need to understand the high importance of green spaces for recreational purposes for any plan to achieve sustainability goals is recognised by Venter and co-authors. They note not only the benefits such as the health and well-being of residents, but also the shaping of sustainable and resilient cities. They also emphasise the need to pay attention to equitable accessibility (Venter *et al.*, 2020).

Rafiemanzelat *et al.*, on the other hand, point out that urban sustainability directives recognise walking in urban areas as a benign and environmentally friendly way to move around in urban areas. This perception is in line with the concept of green urban citizenship and has attracted the interest of researchers in improving urban walkability (Boukrouh and Bouchair, 2024).

Functions that pedestrian movement (including walking) and a pedestrian-friendly area can support include community engagement, health, meeting and recreation, which has a positive impact on sustainability and vice versa. Walkability is fundamental to urban sustainability. Like cycling, walking can be known as a 'green' mode of transport that, in addition to reducing congestion, has a low environmental impact, saves energy without air and noise pollution. In addition to health researchers who consider walking as a type of physical activity, urban designers present walking as a type of social activity (Rafiemanzelat *et al.*, 2017).

3. Data and Methods

The presented research results are a purposively selected part of a survey conducted in 2021 on a representative group of inhabitants of Polish municipalities bordering the Federal Republic of Germany. For the purposes of the article's assumptions, attention was paid to the responses of respondents (people aged 60+) and declaring their status on the labour market as pensioners.

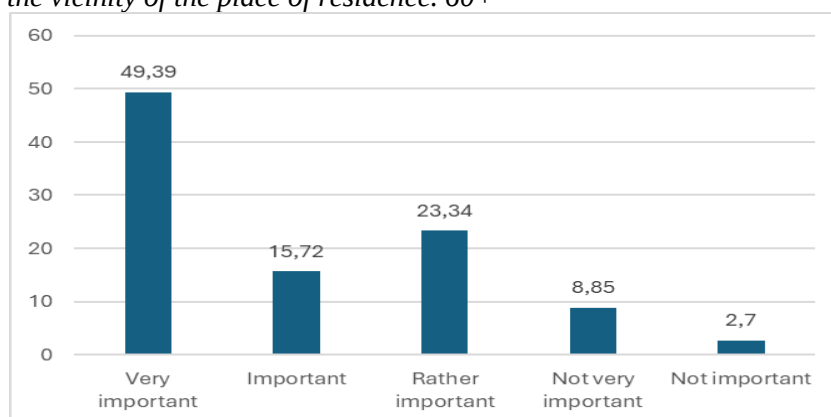
The research was conducted as part of a research project carried out by the Department of Spatial Economy and Tourism entitled ‘Changes in the Functioning of Border Areas. ‘Changes in the functioning of border areas during the Covid-19 pandemic, with particular reference to cross-border relations, leisure time use and tourism and recreational activities of the population’.

The survey was conducted using the CATI method, based on a proprietary survey questionnaire consisting of closed-ended Likert scale questions.

4. Results

The survey showed that the presence of pedestrian areas, squares, playgrounds and outdoor gyms close to where people live is important to over 88% of respondents aged 60+ (Figure 1). The same is true for those who are retired, which may be due to the fact that these groups largely coincide. Regarding the development of green areas (benches, shelters, bicycle paths, walking trails) at the place where they live, only slightly more than 5% of respondents said it was not important to them.

Figure 1. Existence of outdoor gyms, parks, pedestrian areas, squares, playgrounds, etc. in the vicinity of the place of residence. 60+



Source: Own elaboration.

Leisure activities can take many forms. In general terms, recreation can be divided into active (e.g., running, walking, Nordic waking, gardening) and passive (reading books, watching TV, doing crosswords, playing board games, surfing the internet). Active recreation can take place both in publicly accessible green areas and indoor facilities. Active recreational activity, as indicated earlier, has a beneficial effect on human health in a broad sense. Passive recreation refers to the dysfunctions it brings (inactivity, social isolation). Table 1 shows changes in recreation uptake over three periods (before pandemic, during lockdown and during pandemic).

As can be seen from Table 1, the activities undertaken for active recreation did not change significantly over the restriction period. In the case of passive recreation,

there was a noticeable increase in its participation during the lockdown period as well as immediately afterwards. For those who are retired, the level of passive recreation increased, which may be a worrying development.

Table 1. *Differences in recreational activities*

Type of activity	period	60+	Retirement/pension
Physical recreation (e.g., walking, running)	Before the pandemic	39,34	34,47
	During the lockdown	38,76	35,73
	During the pandemic	34,94	33,39
Cultural and entertainment recreation (e.g. cinema, concert)	Before the pandemic	12,06	11,98
	During the lockdown	3,61	3,41
	During the pandemic	12,42	12,30
Passive recreation (e.g. TV, reading)	Before the pandemic	48,60	50,56
	During the lockdown	57,63	60,85
	During the pandemic	50,86	54,31

Source: Own elaboration.

Table 2 indicates the forms of recreation undertaken in physical activity by people aged 60+ and those declaring their status in the labour market as retired/retired. A distinction is made between those activities that are associated with the presence of green areas. The most common forms of physical activity among people 60+ and retired were walking, gardening and allotment work, and cycling. Nordic walking was also mentioned by almost 10 in every 100 retired people.

Table 2. *Preferred physical activities*

Forms of physical activities	60 +		Retirement/pension	
	%	N/L*100	%	N/L*100
Walks	36,55	60,44	36,67	60,80
Nordic walking	5,65	9,34	6,01	9,97
Running	5,20	8,60	4,61	7,64
Swimming (swimming pool)	2,97	4,91	2,61	4,32
Swimming (aquatic environment, kayaks, sailboats, lakes, etc.)	0,74	1,23	0,80	1,33
Exercising in recreational and sports facilities (aerobics, fitness, gym, dance, treadmill)	2,67	4,42	2,61	4,32

Exercising at home (e.g., yoga at home, online fitness)	2,53	4,18	2,81	4,65
Cycling	16,20	26,78	15,83	26,25
Horseback riding	0,59	0,98	0,60	1,00
Indoor team games (e.g., soccer, volleyball)	0,59	0,98	0,00	0,00
Outdoor team games (e.g., soccer, volleyball)	0,74	1,23	1,00	1,66
Work on an allotment/garden	19,47	32,19	19,64	32,56
Other	6,09	10,07	6,81	11,30
Total	100	-----	100	-----

Note: $N/L \times 100$ - Number of indications per 100 respondents in a given group

Source: Own elaboration.

5. Discussion and Conclusion

The study showed that urban green spaces are important for older people to undertake recreational activities. This is in line with the results of a study conducted by Isabella and co-authors during the same period. Their study also shows that the majority of respondents consider urban green spaces very important (82.1%) or important (14.4%).

Furthermore, these authors, showed that while many people reduced their weekly visits to green spaces during the pandemic (-16.5%) the number of people visiting green spaces close to home daily increased (+7.7%) (Isabella *et al.*, 2022).

Other authors estimated that outdoor recreational activity increased by 291% during lockdown compared to the 3-year average for the same days. Both pedestrians (walking, running, hiking) and cyclists seemed to intensify activity on trails with more visible greenery and tree cover (Venter *et al.*, 2020).

Studies have consistently found that activities such as walking, gardening and cycling are important for older people and contribute to greater life satisfaction and well-being (Tohan *et al.*, 2024).

Considering the postulates indicated by Baxevani and co-authors, pointing out the large role of the local community in the management of the city's green space, a new research problem is put forward, concerning the analysis of local projects aimed at the elderly and directed at supporting their recreational activities.

It is believed that civic projects can be an important mechanism in determining local needs for the development of public spaces. However, as the authors rightly point out, the needs of the most active social groups are given preference, excluding seniors (Kolatz *et al.*, 2022).

The considerations undertaken in this article are in line with the reports of Tohan *et al.* (2024) who, in their article, call on governments and private organizations to prioritize the maintenance of open public spaces as important contributors to the mental well-being of the older population. Among other things, these authors postulate (Tohan *et al.*, 2024):

- allocating more land for the creation of parks, gardens and greenways, especially in densely populated cities, and ensuring equitable distribution of these spaces in neighborhoods;
- equipping parks with facilities for physical activity (sports fields, walking paths), social interaction (community centers) and relaxation (green spaces);
- developing and offering free or subsidized programs for the elderly, including nature walks, walking tours and gardening workshops;
- providing sports opportunities through dedicated senior citizens' leagues, open gym sessions and available equipment in parks;
- offering grants or tax breaks to private organizations that offer outdoor hobby classes or nature tours for seniors;
- launching public campaigns to promote awareness of the link between mental well-being and involvement in nature, parks and community activities;
- train health care professionals on the importance of outdoor activities for mental health and equip them with resources to recommend such activities to older patients.

Some authors note that aging can be accompanied by walking disability. People with mobility disabilities are concerned about micro-scale street factors that limit their ability to walk. Despite many guidelines, some cities still have low accessibility for people with mobility disabilities (Horak *et al.*, 2024).

As confirmed by literature studies, green areas of cities are the subject of research and are part of the implementation of sustainable development. As Zysk and Zalewska (2024) point out, local authorities need to meet the needs and expectations of society in terms of recreational spaces and environmental protection by implementing innovative infrastructure solutions.

In the case of the elderly, the concept of the 15-minute city and the smart city, could be the way forward. This innovative approach promotes sustainable urban development, which is based on the links between the environment, economy and society.

The considerations undertaken in the article have identified research gaps. Future research should include issues of sustainable mobility for the elderly, accessibility of recreation sites (not only in the sense of distance, but the time it takes to get to recreation sites), inclusion of the elderly in social participation projects, or research on the link between recreational activities and satisfaction with urban life.

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