

Recreational activities of the elderly during the COVID-19 pandemic in Poland: social and economic determinants

Aktywność rekreacyjna osób starszych w czasie pandemii COVID-19 w Polsce: uwarunkowania społeczne i ekonomiczne

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Abstract

Aim. This paper aims at identifying the determinants of senior citizens' recreational activity during the COVID-19 pandemic. **Material and methods.** The authors used the following methods to investigate the subject: source literature analysis, diagnostic survey with questionnaires, and statistical analysis. **Results and conclusions.** The results demonstrate that recreational activities of senior citizens during the pandemic were affected by factors such as age, residence, education, and financial situation. The results of this research are expected to provide a theoretical and practical contribution to the assessment of how the elderly make decisions regarding recreation and to be taken into consideration in the drafting of strategies and projects for recreational offerings. (*Gerontol Pol* 2023; 31; 67-76) doi: 10.53139/GP.20233115

Keywords: the elderly, recreational activity, determinants

Streszczenie

Cel. Celem artykułu jest identyfikacja uwarunkowań aktywności rekreacyjnej seniorów w czasie pandemii COVID-19. **Materiał i metody.** Autorzy wykorzystali następujące metody badania tematu: analizę literatury źródłowej, sondaż diagnostyczny z kwestionariuszami oraz analizę statystyczną. **Wyniki i wnioski.** Wyniki pokazują, że na aktywność rekreacyjną seniorów w czasie pandemii wpływ miały takie czynniki jak wiek, miejsce zamieszkania, wykształcenie oraz sytuacja materialna. Oczekuje się, że wyniki tych badań wniosą teoretyczny i praktyczny wkład w ocenę sposobu podejmowania decyzji dotyczących rekreacji przez osoby starsze oraz będą brane pod uwagę przy opracowywaniu strategii i projektów ofert rekreacyjnych. (*Gerontol Pol* 2023; 31; 67-76) doi: 10.53139/GP.20233115

Słowa kluczowe: osoby starsze, aktywność rekreacyjna, uwarunkowania

Introduction

Aging is a social, economic, and cultural challenge for societies worldwide, requiring the development of systemic solutions, which should take into consideration the fact that the old age is a period when multiple difficult life situations accumulate. These can include problems with health, finances, living conditions, family members, failure to adapt, addictions, and emotional issues [1,2].

Opportunities to continue one's professional career and be a part of the so-called "silver economy", better health among the elderly, as well as a growing aware-

ness of the need to undertake physical activity are all factors that foster the development of active tourism. The elderly today are a distinctive category of customers recreational services – they have a lot of leisure time and are a potentially valuable source of economic growth [3,4].

Since the year 2020, i.e. following the outbreak of the SARS-CoV-2 pandemic, issues related to the elderly must be investigated from a whole new perspective. The restrictions imposed during the COVID-19 pandemic had a particularly negative impact on the well-being of senior citizens. Due to their age, the elderly were

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considered a high-risk group for developing severe COVID-19, and the resulting partial or complete isolation deprived them of opportunities to maintain their everyday activity levels. They no longer received visits from their families, friends, or colleagues, and could not go to church or even for a walk. All this led to a significant drop in their physical activity levels, increased fatigue, and poorer mental condition, among other consequences. This is evidenced by the results of a study on the quality of life among people over 60 during the COVID-19 pandemic, in which over 60% of respondents reported less physical activity and poorer subjective physical condition, which affects life expectancy [5].

Even though the activity of the elderly is mainly related to their leisure time [6], the experiences of the SARS-CoV-2 pandemic demonstrate that this problem is multifaceted [7]. Investigating the recreational activity of the elderly has become even more important because of the restrictions imposed during the pandemic.

This paper aims at describing identifying the determinants recreational activities of the elderly during the pandemic. In particular, it is about answering the following questions:

- How much leisure time did the respondents have per week?
- What types of recreational activities did they perform?
- Who organized recreational activities for the respondents?
- With whom did the respondents pursue recreational activities?
- How much money did they spend on these activities?

The present results are expected to contribute to an assessment of factors determining the decisions made by the elderly in terms of recreational activity, both at a theoretical and practical level. They can also be used to design an appropriate recreational offer for this particular category of users.

Following the introduction, this paper is divided into four parts. In the first part, theoretical aspects concerning the elderly and recreational activity are explored. The second discusses the study design, while the third presents the results of our investigations during the pandemic (in 2020 and 2021); this is followed by a discussion. The final part of the paper contains a summary of the findings and conclusions.

Theoretical aspects concerning the elderly and recreational activity

With increasing human life expectancy, issues concerning the elderly have become the subject of theoretical research and practical studies by scholars in many fields, both in Poland and globally. Poland, along with most European countries, is at present an “aging” society – i.e. the number of people over 60 years old is constantly growing [8].

Demographic changes occurring in the Polish society mean that the share of the elderly in the general population is growing. It is estimated that by 2035, people over 65 will have made up around 24.3% of the general population [9].

In most cases, the social and economic problems of the elderly begin at retirement, when they are no longer involved in their professional activities, which up until that point had guided and provided substance to all their actions. Retirement brings about many consequences, including a lower income and a deterioration of economic status. State pensions are small and do not allow for covering all the retirees’ expenses [2]. For many people, retirement also entails social exclusion, with shrinking social circles. In some families, aggressive attitudes towards ill and elderly family members can be observed [10].

All of these problems require the expansion of services in various fields: medicine, care, welfare, but also recreation and tourism. Therefore, one element that is and will remain crucial is the development of a strategy for good aging that would include such aspects as physical, mental, and social health, and would encourage senior citizens to remain active participants of social life and help protect them against age-based discrimination [11]. Regardless of various challenges that the elderly may face, contemporary societies create conducive conditions for activities appropriate for this age group. Multiple institutions (e.g. senior centers, the University of the Third Age) protect the interests of the elderly and organize various social, intellectual, recreational, and tourism-related activities. Some people will find these options appealing, others will take no interest in them. There is no single solution that would satisfy all the elderly [12].

In contemporary societies, we can find representatives of four distinct generations. What distinguishes them are not only their demographic characteristics, but also the values they share, their attitudes towards employment, or their leisure and travel habits. We refer to these generations as generations X, Y, Z, and “baby boomers”. Generations X, Y, Z are outside of the scope of the present

paper, so focus is placed on the baby boomer generation [13].

Baby boomers are people born between 1945 and 1964, in a period of demographic and economic boom following the end of the Second World War. Baby boomers are now over 50 years old and like to actively discover the world. Those of them who have retired are happy to undertake recreational activities, travel, and devote their time to their hobbies and passions.

People over 50 travel to relax, but also to see new places. They take advantage of interesting and rich touristic offerings: they visit museums, theaters, and galleries, or see landmarks, often in the company of tourist guides. The elderly are also interested in resorts that offer good conditions for relaxation. They choose places where they can hike in the mountains, try rafting, visit open-air museums or local taverns. They want to spend their time actively, but also learn about the places they visit. Baby boomers also travel to improve their health and physical fitness [4]. They choose health resorts that offer interesting medical treatments and options for recreation. Therefore, the correct identification of their needs and offer customization remains key. Studies demonstrate that people over 50 value comfort and research destinations before making a purchase decision rather than act impulsively. They like visiting places recommended by friends and family, and they also check offers on the Internet [14].

The term “recreation” comes from a Latin word *recreo*, referring to revitalization, revival, invigoration, or restoration. In contemporary literature, one can find multiple, yet similar, definitions of recreation. According to Ryszard Winiarski [15], recreation is a set of activities undertaken on top of one’s professional, family, or social obligations. Their purpose is to provide relaxation, entertainment, and psychological and social development to an individual. Teresa Wolańska defines recreation as various types of activities undertaken in one’s leisure time, voluntarily, for pleasure, for the purpose of self-expression, formation of one’s personality, invigoration, and restoration of mental and physical powers. According to Iwona Kielbasiewicz-Drozdowska [16], modern recreation generally means all types of activities undertaken in one’s leisure time, understood as the time that is left after all professional, family, and social obligations had been fulfilled. Therefore, recreation can only be understood as an activity, action, or undertaking, and not in terms of time. Both terms – leisure time and recreation – do however go hand in hand, as recreational activity can be undertaken only in one’s leisure time [17].

In general, recreational activities are associated with four fundamental values:

- cultural values (in many social groups recreation is something that deserves respect, a desirable subject of interest offering satisfaction of needs);
- social values (recreational activities are coordinated by organized institutions rendering various services);
- individual and psychological values (recreational activities are the subject of interest for many people; they create needs and motivate one to satisfy them).

The three above aspects of recreation together comprise the fourth type of value, namely:

- maintaining the mental and physical health of individuals and social groups [17].

In literature and in practice, a binary division of recreation into “active” and “passive” is common. Active recreation involves all types of activities requiring mental effort (for example playing chess, bridge, doing crosswords) or physical effort (examples include games and sports, swimming, gardening) that the person undertakes voluntarily, to restore their vitality, to derive pleasure, to develop their personality and to improve their health, in their leisure time and for the purpose of relaxation. Passive recreation involves activities that do not require physical or mental effort (for example listening to the radio, watching TV, napping, lounging). According to Teresa Wolańska [18], active (physical) recreation includes physical activities (sports, tourism) that an individual undertakes voluntarily in their leisure time for the purpose of relaxation, pleasure, and the development of one’s personality. Such activity can be considered a value in itself, undertaken voluntarily out of personal interest, or a means to an end – a way to stay in shape, keep healthy, restore one’s vitality, or maintain physical fitness. One can engage in it individually or in social groups, using the offer of many institutions that exist for this purpose (such as fitness clubs, gyms, sports clubs, non-governmental organizations), and with the necessary equipment [18].

However, the division of recreation into active and passive cited above is simplistic, biased, and incomplete. It does not allow one to accurately determine how actively an individual participates in any recreational activities. Therefore, another division is also used in source literature:

- physical recreation, comprising all forms of physical activity of an individual (walking, playing sports, exercising, traveling);
- creative recreation that shapes one’s personality, affects their emotions, stimulates imagination (with forms including art, theater, photography, music, hobbies);

- cultural recreation and entertainment including reading, intellectual games, parlor games, meetings with interesting people;
- social recreation – voluntary activities undertaken in one's leisure time for the benefit of other people, including charity work, organizing meetings, performances, or concerts [17].

Methods

The survey method was used in the research. The questionnaire contained 18 questions and a metric. Closed and semi-open questions prevailed. The content of the questions referred to the amount of free time of seniors, forms of activity, financial expenses incurred for physical activity. Survey research was conducted among students of the University of the Third Age and participants of community centers resuming their activities after the Covid-19 pandemic, and among senior friends for the organizers of the research. The survey was completed by the respondents in the presence of the interviewer. The selection of seniors for the study was not random but intentional, as it concerned people aged 50 and more. The research was carried out from October 2021 to January 2022. The research area was the city of Gorzów Wielkopolski and the surrounding towns of the Gorzów powiat. In total, 123 people aged 50+ were examined.

Furthermore, the methodology also included unstructured interview and direct observation. The descriptive statistical analysis method was applied and the Statistica program.

The characteristics of the respondents included such characteristics as: sex, age, education, place of residence and self-assessment of the financial situation (Table I).

People over 60 comprised the largest share 63.8%. More than half of the respondents lived in a city over 101.000 residents (53.3%). The smallest group (6.7%) lived in rural areas. This was likely due to practical reasons. In cities, people have access to institutions that can offer sporting, recreational, and cultural activities. The analysis of the structure of education revealed that most respondents had a high school diploma (40.5%) and a college or university degree (41.5%), and 12.2% of respondents had graduated from a vocational school, or primary school (5.8%). Over half of respondents (50.6%) described their financial situation as average, while 31.8% – as good. The same, small numbers of respondents (8.2%) thought their financial situation was very good or bad (table I).

Table I. Basic characteristics of the respondents (N = 123)

Category	n	%
Total	123	100.0
Gender		
woman	90	73.2
man	33	26.2
Age		
50-59	45	36.2
60 and over	78	63.8
Education		
primary	7	5.8
vocational	15	12.2
high school	50	40.5
college/university	51	41.5
Residence		
rural	8	6.7
urban (below 50.000 residents)	22	17.5
urban (between 51.000 and 100000 residents)	28	22.5
urban (over 101000 residents)	65	53.3
Subjective assessment of their financial situation		
very good	10	8.2
good	39	31.8
average	63	50.6
bad	10	8.2
very bad	1	1.2

Results

Social, health, economic, demographic and humanitarian challenges in the pandemic world concern, among others, aimed at physical activity initiatives dedicated to seniors [19]. The multidimensionality of these activities, requiring the cooperation of various entities and at various levels of public life, was pointed out by them [20,21].

The amount of leisure time among people over 50, broken down by the investigated characteristics (age, residence, education, financial situation), in the period of the pandemic is shown in table II.

Data in table II indicate that in one week, nearly 59% of people over 60 had the most leisure time (over 5 hours) they could spend on recreational activities. People under 60 (around 30%) indicated they had from 3 to 4 hours of leisure time in a week.

The greatest amount of weekly leisure time was also reported by respondents who lived in cities with a population of over 101,000 (approx. 62%) and those from towns of up to 50,000 residents (approx. 44%). Around 17% of residents living in the largest towns reported having 1–2 hours of leisure time per week.

Breakdown of leisure time by the respondents' level of education indicates no clear relationship between the education of respondents and the amount of leisure time per week. Much leisure time (5 and more hours) was reported by respondents with all types of educational background: 36.8% of those with primary and vocational education, 55.1% with high school education, and 60.4% with college/university education.

Data on the respondents' financial situation indicate that having 5 or more hours of leisure time a week was reported both by respondents who had good or very good financial situation (58.5%) and those with an average financial situation (56.7%). On the other hand, respondents with 1–2 hours of leisure time per week had mostly (25%) average financial situation.

Respondents over 50 engaged in various forms of recreational activities according to their needs and motivations. These are presented in table III taking into consideration differences by age, residence, education, and financial situation during the pandemic.

The analysis of data in table III demonstrates that the respondents' do forms of active recreation included: walking (for 83.3% of the respondents up to 59 and 79.2% of the respondents over 60), exercising and fitness classes (for 59.5% up to 59 and for 5.2% over 60) and cycling (for 4.7% up to 59 and for 9.1% over 60). Other activities, such as swimming and Nordic walking, were not frequently chosen by respondents (from 0% to 2.6% and from 2.6% to 2.8%, respectively).

When it comes to the variety of the forms of active recreation, the largest variety (6 forms out of 7) was fo-

Table II. Weekly amount of leisure time by age, residence, education, financial situation of respondents during the pandemic (2021–2022)

Category		1–2 hours	3–4 hours	5 and more hours	No data	In total
Age (years)	50–59	24.4	29.3	46.3	0.0	100.0
	60 and over	16.0	25.3	58.7	0.0	100.0
Residence	population (in thousands)					
	up to 50	37.5	18.7	43.7	0.0	100.0
	51–100	35.7	42.9	21.4	0.0	100.0
	101 and over	17.5	20.6	61.9	0.0	100.0
Education	primary/vocational	36.8	26.4	36.8	0.0	100.0
	high school	20.4	24.5	55.1	0.0	100.0
	college/university	10.4	29.2	60.4	0.0	100.0
Financial situation	very good or good	9.8	31.7	58.5	0.0	100.0
	average	25.0	18.3	56.7	0.0	100.0

Table III. Forms of recreational activity by age, residence, education, financial situation of respondents during the 2021-2022 pandemic**

Category		Walking	Cycling	Swimming	Exercising/fitness classes	Nordic walking	Dancing	Other*	None reported**
Age (years)	50–59	83.3	4.7	0.0	59.5	2.8	0.0	9.5	0.0
	60 and over	79.2	9.1	2.6	5.2	2.6	2.6	1.3	0.0
Residence	population (in thousands)								
	up to 50	94.12	6.0	0.0	13.3	0.0	5.8	2.8	0.0
	51–100	85.7	6.5	0.0	14.3	0.0	0.0	0.0	3.6
	101 and over	75.7	7.6	3.3	6.8	10.4	0.0	6.6	0.0
Education	primary/vocational	80.0	10.0	0.0	3.5	0.0	5.5	5.0	0.0
	high school	82.0	6.2	4.2	4.6	0.0	2.0	6.4	3.4
	college/university	77.5	10.2	4.4	4.8	2.4	4.5	2.1	0.0
Financial situation	very good/good	76.7	9.3	4.65	7.0	2.4	2.4	9.1	0.0
	average	82.3	8.1	1.9	4.1	0.0	1.8	8.7	0.0

* including fishing, roller skating, horse riding, mountain climbing

** values do not add up to 100 as respondents could choose multiple answers

und among those respondents who lived in cities over 101,000. Among the other respondents, residence did not strongly determine their answers. Similar observations were made concerning the respondents' level of education: walking was chosen by 80% of respondents with primary or vocational education, 82% with high school education, and 77.5% with college or university education. Exercising and fitness classes were chosen by 3.5% of respondents with primary and vocational education, 4.6% with high school education, and 4.8% with college or university education.

The respondents reporting good or very good financial situation more frequently chose active forms of recreation (swimming – 4.6%, exercising and fitness classes – 7.0%, Nordic walking – 2.4%) than those with an average financial situation (swimming – 1.9%, exercising and fitness classes – 4.1%, Nordic walking – 0.0%). The reported forms of activity required the respondents to spend more money to engage in them.

Active recreation can be organized by various institutions, including associations, senior centers, the University of the Third Age, community centers; or by private individuals (friends and family). One can also organize them on one's own. The results concerning the organizers of recreational activities for people over 50, broken down by the studied characteristics (age, residence, education, financial situation in the period of the pandemic), are shown in table IV.

Institutional organizers of recreational activities did not enjoy much popularity in this group of respondents. The University of the Third Age was chosen by 11.9% of respondents under 60, and by 19.5% of respondents over 60. In terms of education, the University of the Third Age was chosen by 22% of respondents with high school

education, and by 18.4% of respondents with college or university education. The largest numbers were observed in towns between 51,000 and 100,000 residents (21.4%) and in the smallest towns, with a population below 50,000 (5.9%). Senior centers were chosen by 2.4% of respondents aged under 60 and 6.5% over 60. The smallest percentage of respondents who chose senior centers as organizers of recreational activities lived in towns under 50,000 residents (5.9%). Notably, over half of respondents organized their recreational activities on their own, regardless of their residence. When it comes to education, independent organization of recreational activities was mostly chosen by respondents with primary and vocational education (90%). Other institutions, such as fitness centers, were more frequently chosen by respondents with college or university education (25.7%) who reported a good or very good financial situation (28.9%). Respondents with an average financial situation rarely used the offer of senior centers (3.2%) or the University of the Third Age (14.5%), and more frequently decided to organize their activities on their own (62.7%).

Table V shows with whom the respondents engaged in recreational activities during the pandemic, with differentiation by social and professional characteristics (age, residence, education, financial situation). The data presented in table V reveal that over half of the respondents engaged in various forms of recreation alone. When it comes to recreation with family, this option was chosen by 32.5% of respondents under 60 and 24.3% of respondents over 60, who lived mostly in towns under 50,000 (41.2%), and in cities over 101,000.

The respondents with college or university education clearly dominated in terms of engaging in active recreation with friends (31.4%), and family (64.7%). Those

Table IV. Organizers of recreational activities by age, residence, education, and financial situation of respondents during the 2021–2022 pandemic**

Category		Senior centers	The University of the Third Age	On one's own	Friends	Other*	None reported
Age (years)	50–59	2.4	11.9	59.5	2.4	24.8	0.0
	60 and over	6.5	19.5	54.5	6.5	9.1	0.0
Residence	population (in thousands)						
	up to 50	5.9	5.9	70.6	5.9	13.7	0.0
	51–100	7.1	21.4	71.4	2.4	7.4	0.0
	101 and over	4.55	16.7	51.5	3.0	24.8	0.0
Education	primary/vocational	0.0	10.0	90.0	0.0	0.0	0.0
	high school	6.0	22.0	50.0	10.0	14.0	0.0
	college/university	6.2	18.4	55.1	0.0	25.7	0.0
Financial situation	very good or good	9.3	20.1	41.9	0.0	28.9	0.0
	average	3.2	14.5	62.7	9.7	13.9	0.0

* including fitness centers and community centers

** values do not add up to 100 as respondents could choose multiple answers

with primary or vocational education (57.9%) and secondary education (62%) mostly engaged in recreational activities alone.

The respondents with a good or very good financial situation undertook recreational activities alone (44.2%) and with family (37.2%). Among respondents describing their financial situation as average, as many as 60.3% engaged in recreational activities alone, and only 21.5% with family.

Recreational activities involve financial spending. Differences in expenditure among people over 50 or the inability to include it in one’s household budget can be determined by various factors. Average monthly spending on recreational activity during the pandemic, broken down by age, residence, education, and financial situation, is presented in Table VI.

The analysis of data in table VI shows that respondents between 50 and 59 years old most frequently spent less than 50 PLN on recreational activities (29.3%). The same share of respondents did not spend any money. People over 60 reported the largest monthly expenditure for recreation, in the amount of 101 to 200 PLN (18.2%). No age group reported spending over 300 PLN.

Respondents from towns under 50,000 residents most frequently reported spending less than 50 PLN (29.4%), and 41.2% of the respondents in this group claimed they did not spend any money on recreation. No respondents from towns between 51,000 and 100,000 residents reported spending 201–300 or over 300 PLN. The largest monthly amounts were spent on recreational activity by respondents with college or university education – in total 73.4%; with high school education – 51.1%, and with primary/vocational education – 60%. Spending among respondents with primary/vocational education was mostly under 100 PLN (55%), and among those with high school and college/university education, between 101 and 200 PLN (20.4% and 22.4%, respectively).

Notably, financial situation largely determined the respondents’ average monthly spending on recreational activity. Over 23% of respondents with a good or very good financial situation and over 43% of those with an average financial situation did not report any spendings on recreation, whereas in the former group, spending between 101 and 200 PLN was most common (27.9%). In the latter group, the most common spending was under 50 PLN (20%). No group reported spending over 300 PLN.

Table V. Ways of engaging in recreational activities (with whom) by age, residence, education, financial situation of respondents during the 2021–2022 pandemic

Category		Alone	With friends	With family	Other	In total
Age (years)	50–59	52.5	12.5	32.5	2.5	100.0
	60 and over	57.7	15.4	24.3	2.6	100.0
Residence	population (in thousands)					
	up to 50	41.2	17.6	41.2	0.0	100.0
	51–100	57.1	7.2	21.4	14.3	100.0
	101 and over	49.0	16.3	32.6	2.1	100.0
Education	primary/vocational	57.9	10.5	26.3	5.3	100.0
	high school	62.0	12.0	22.0	4.0	100.0
	college/university	3.9	31.4	64.7	0.0	100.0
Financial situation	very good or good	44.2	16.3	37.2	2.3	100.0
	average	60.3	13.2	21.5	5.0	100.0

Table VI. Average monthly spending on recreational activities by age, residence, education, financial situation of respondents during the 2021–2022 pandemic

Category		up to 50 PLN	51–100 PLN	101–200 PLN	201–300 PLN	over 300 PLN	no expenses	In total
Age (years)	50–59	29.3	12.2	19.5	9.7	0.0	29.3	100.0
	60 and over	14.3	16.9	18.2	7.8	0.0	42.8	100.0
Residence	population (in thousands)							
	up to 50	29.4	17.6	5.9	5.9	0.0	41.2	100.0
	51–100	21.4	42.9	21.4	0.0	0.0	14.3	100.0
	101 and over	16.9	9.2	20.0	13.9	0.0	10.0	100.0
Education	primary/vocational	30.0	25.0	5.0	0.0	0.0	40.0	100.0
	high school	16.3	12.3	20.4	2.1	0.0	48.9	100.0
	college/university	16.3	16.3	22.4	18.4	0.0	26.6	100.0
Financial situation	very good or good	18.6	16.3	27.9	13.9	0.0	23.3	100.0
	average	20.0	16.7	13.3	6.7	0.0	43.3	100.0

Discussion

The needs of seniors, their health, quality of life, social situation and activity have recently become the subject of numerous studies. Recreational activity of the elderly is conditional on psychosocial and economic factors. So far, many studies commissioned by local governments have focused on the diagnosis of the needs and potential of seniors (Bydgoszcz 2021, Zielona Góra 2019, Szczecin 2019). The period of the pandemic showed that social, health, economic, demographic and humanitarian challenges in the pandemic world concern, among others, aimed at physical activity initiatives dedicated to seniors [19]. The multidimensionality of these activities, requiring the cooperation of various entities and at various levels of public life, was pointed out by them [20,21].

This is also confirmed by the research of the SeniorApp Report (2021, 2022), which shows that the deterioration of health – physical and mental, as well as the reduction of the level of activity and independence among seniors is influenced by the phenomenon of technological exclusion, weakening of interpersonal relations, especially during the pandemic. According to experts (60plus.pl 2022), Polish seniors do not leave their homes, do not meet, rarely participate in events organized for them. The results of own research confirm the low interest of seniors in the offer of recreational activities prepared by the organizers, i.e. Universities of the Third Age or Senior Clubs, but it should be emphasized that education was a factor differentiating decisions in this regard.

In the study of the behavior of the elderly on the market of health services and conducted on a nationwide sample in 2019, the vast majority of respondents did not use recreational services in the analyzed period or plan to use them in the future. Among the places where recreational services are consumed, the respondents indicated primarily bicycle paths, swimming/swimming pools, Nordic walking routes and outdoor gyms. The indications of the respondents (2019 and 2021) also differ significantly in terms of the use of sports halls/gyms. Over 70% of the people surveyed showed no interest in such services [22]. This is also confirmed by own research, however, respondents aged up to 59 also indicated recreational services, i.e. gymnastics and fitness classes.

During the pandemic, the health behavior of seniors in the field of recreational activity is not significantly determined by gender, age, place of residence, education, but it is worth paying attention to an additional factor related to the financial situation, which

diversified the selected forms of activity. Wartecka-Ważyńska and Wyszowska [2017] draw attention to the indicated determinants in their research.

The World Health Organization (WHO) recommends at least 150 minutes of moderate aerobic activity per week (or its equivalent – 75 minutes of vigorous activity) for adults between 18 and 64, in sessions of at least 10 minutes. Recommendations for older adults (over 65) are the same time-wise, though with a disclaimer that due to their overall health, the elderly should be as physically active as they can, taking into consideration their individual condition and skills. Recommended types of physical activity include recreational activities in one's leisure time, walking, cycling, physical activity involved in one's professional work, household chores, games, matches, sports, or scheduled exercises [23].

As the research shows, the implementation of the above recommendations in the field of physical activity is possible due to the significant resources of seniors' free time. According to the indications of the respondents, the selected forms of activity, such as walking and cycling, are among the forms indicated by the WHO.

Recognition of the determinants of recreational activity of the elderly during the COVID-19 pandemic, based on own research, initiated the need for cyclical research in this area. In 2023, research will be carried out again according to a uniform methodology in Gorzów Wielkopolski. In the field of research on the health behavior of the elderly, the issue of recreational activity is an interesting topic.

Conclusions

In terms of recreational activities, senior citizens represent a very distinctive market segment. Socio-demographic factors (such as age, residence, education), and economic ones (financial situation) largely determined the participation of the elderly in recreational activities during the pandemic. Based on our surveys on senior citizens' recreational activity, after the pandemic, certain conclusions and generalizations can be made. These conclusions are not representative, because the research sample of seniors did not correspond to the methodological conditions of representativeness.

During the Covid-19 pandemic, over 50% of the surveyed seniors, regardless of their socio-demographic characteristics and financial situation, indicated more than 5 hours of free time a week. Therefore, one can be convinced that a large amount of free time stimulated making decisions in the field of physical activity. The

results of the study showed that, regardless of education and financial situation, physical activity was very limited. The predominant forms of this activity were walking, gymnastics and cycling.

Recreational activity was primarily organized by the elderly themselves. Thus, social isolation of the elderly remained, leading to the deterioration of physical and mental health.

Based on the collected results from empirical research and their statistical analysis, it was generally concluded that during the COVID-19 pandemic, the socio-demographic characteristics of seniors did not have a significant statistical relationship with their recreational activity.

The results of the conducted research have not only diagnostic but also practical aspects. In the latter approach, it should be emphasized that recreational activity, especially physical activity of seniors affects their health situation [24], which has not only a socio-care and social dimension, but also an economic one, as exemplified by the possibility of continuing professional work.

The issues of the elderly, including the need to motivate them to physical activity, should be widely taken

into account in the creation and implementation of separate programs of this activity by government and local government administration institutions and non-profit organizations.

Within the market economy based on supply and demand factors, the issues of recreational activity of the elderly cannot be marginalized by commercial entities either. Recreational activity of the elderly should be an attractive offer of these entities, taking into account, among others, aspects of free time, preferred and implemented forms of activity, household budgets [25].

Conditions related to the changing age of the Polish society and lifestyle should have a more decisive impact on the specialization of tourism and recreation enterprises in health services [26]. The period of the COVID-19 pandemic has definitely confirmed the necessity of such a direction of development. Innovation in this area enables enterprises to adapt to the changing needs of seniors and the changing environment in which they live.

Conflict of interest

None

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