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THE FORM OF RESIDENTIAL PREMISES OWNERSHIP VS. RESIDENTIAL STANDARD OF SENIORS IN POLAND IN THE OPINION OF RESIDENTS

Maria Hełdak[1], Agnieszka Stacherzak[2*], Katarzyna Przybyła[3], Alina Kulczyk-Dynowska[4], Monika Płuciennik[5], Jakub Szczepański[6], Olgierd Kempa[7], Joanna Lipsa[8]

[1]*Institute of Spatial Management, Wrocław University of Environmental and Life Sciences, ul .C.K. Norwida 25 , 50-357 Wrocław, Poland, (1) e-mail: maria.heldak@upwr.edu.pl, ORCID: 0000-0002-6171-8548, (2) e-mail: agnieszka.stacherzak@upwr.edu.pl, ORCID: 0000-0003-2098-0096, (3) e-mail: katarzyna.przybyla@upwr.edu.pl, ORCID: 0000-0002-9717-1599, (4) e-mail: alina.kulczyk-dynowska@upwr.edu.pl, ORCID: 0000-0002-1312-3224, (5) e-mail: monika.pluciennik@upwr.edu.pl, ORCID: 0000-0002-9186-0203, (6) e-mail: jakub.szczepański@upwr.edu.pl, ORCID: 0000-0002-4370-1929, (7) e-mail: olgierd.kempa@upwr.edu.pl, ORCID: 0000-0002-5153-2010, (8) e-mail: joanna.lipsa@upwr.edu.pl, ORCID:0000-0002-3553-0074.*

** Corresponding author*

ARTICLE INFO

Keywords:

housing resources, residential standard of elderly people, council flat, condominium, cooperative apartment

JEL Classification:

R20, R21, R29, R30

ABSTRACT

The study addresses the problem of diverse housing conditions experienced by seniors in Poland and equipping their apartments with installations improving the quality of life for people with reduced mobility, taking into account various forms of residential premises ownership: a condominium, a cooperative apartment and a council flat. The study aimed at providing answers to a number of questions, including: what is the readiness to change an apartment into a council flat adapted to the needs of people with mobility limitations, taking into account the current ownership status of the apartment (condominium, cooperative member's ownership right to residential premises, the right to rent a flat from the council-owned housing resources).

The research was conducted in the cities of Wrocław and Jelenia Góra, located in Poland in the Lower Silesia Voivodship. A total of 208 people aged 50 and over were covered by the study. The authors found correlations between access to utilities and facilities in an apartment and the form of ownership of the dwelling. Among other things, the survey found that a toilet in the stairwell and the lack of central heating are much more common in communal apartments than in cooperative apartments and condominiums. Residents also pointed to the need to adapt bathrooms that are located in apartments. Tenants of public housing were also more-likely to express a desire to adapt their apartments to the needs of people with limited mobility.

Citation: Hełdak, M., Stacherzak, A., Przybyła, K., Kulczyk-Dynowska, A., Płuciennik, M., Szczepański, J., Kempa O., & Lipsa, J. (2024). The form of residential premises ownership vs. Residential standard of seniors in Poland in the opinion of residents. *Real Estate Management and Valuation, 32*(1), 114-125. https://doi.org/10.2478/remav-2024-0012

1. Introduction

The standard of residential premises, especially those of people who spend a lot of time in their dwelling, can have a big impact on both physical and mental health. The housing conditions experienced by seniors are essential in managing the difficulties connected with walking and everyday life, as well as taking care of an elderly person in their place of residence. The usefulness of accommodation for the elderly was discussed by, e.g., Cullen et al. (2007), Fox et al.(2017). Research on the quality of life of older people is undoubtedly correlated with research on the theory of "aging in place". Remaining in a community and enjoying a certain level of independence, rather than

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staying in a nursing home, is a more advantageous solution for seniors and, at the same time, cheaper for the state (Davey & de Joux, 2004; Lawrer, 2001; Sixsmith, & Sixsmith, 2008; Hwang et al., 2011; Wiles et al., 2011; Szewrański et al., 2018; Kazak et al., 2017; Przybyła et al., 2019; van Hoof &Kazak, 2018). Many studies dealing with the problem perceive "aging in place" as an advantage in terms of a sense of attachment or connection, and feelings of security and familiarity in relation to both homes and communities (Wiles, 2011).

Choosing between staying at home and moving to a more supportive environment is a complex decision for older adults facing autonomy loss. Most of them would prefer to remain in their homes (Roy et al., 2018; Caron et al., 2007). Roy (Roy, 2018) compiled various theories about housing decisions made by older adults. They suggest six main dimensions that best account for the meanings and experiences of home using the research carried out by Després and Lord (Després & Lord, 2005). The reasons underlying the decision of the elderly to "age in place" or to change their place of residence were divided according to the following groups: Psychological dimensions, Social dimensions, Economic dimensions, Material dimensions, Temporal dimensions, Space-time dimensions. In Polish socio-economic conditions, the economic dimension plays a very important role when making decisions about older adults staying at home, it even happens that aged persons are trapped in their apartment (house) as a result of economic barriers. Other dimensions also play a role, but a significant proportion of retirees simply cannot afford to change their place of residence. The form of real estate ownership is of great importance in this case, which is the subject of the presented article.

Roy analyzed the research discussing housing decisions made by older adults and found that, among 200 articles, 21 studies included renters and owners specifically (Roy, 2018). However, only four of them compared the factors influencing housing decisions between those two tenure types (Granbom et al., 2014; Angelini & Laferrere, 2012; VanderHart, 2002, 1998).

The studies addressing the impact of various forms of real estate ownership on the readiness to change the place of residence were rarely presented in the source literature, hence the undertaken subject matter may be of interest to the public.

The possibility of adapting living space along with the emerging mobility limitations faced by older people is determined, i.a., by the person's place of residence. Not every building can be adapted to the needs of seniors due to the year of its construction and the related technical limitations, or the building technology. Financial constraints have a major impact and, indirectly, also the form of residential premises (apartment) ownership.

Housing stock in European Union countries depends on the housing policy implemented by the state. In Western European countries, housing problems were often solved by means of social housing (in 2017 Germany was the country with the largest number of apartments in the European Union – 40,722.6 apartments, in Poland the number of apartments was 14,465.8) (Hełdak et al., 2020). In the European Union, the real estate ownership structure is quite varied. The structure of housing resources in Poland is dominated by condominiums (approx. 78.9% of the total of almost 11.53 million apartments), followed by cooperative apartments (approx. 2.03 million apts.) and council flats (approx. 0.84 million flats). In the case of cooperative member's ownership apartments, the form of ownership makes them similar to condominiums (Statistics Poland (GUS), 2020), however, they are formally owned by the cooperative, whereas regarding council flats – the city remains the owner of the premises.

Council flats are resided in by the poorest group of Polish society and, simultaneously, the group including the largest number of retirement age people.

The quality structure of housing resources, directly related to equipping residential premises with technical and sanitary installations, is an important aspect correlated with residential housing (Surówka, 2019). The overall housing deprivation rate in the European Union remains at the level of 4%, while in Poland it reached as much as 9.8% in 2019 (Hełdak et al., 2020). Seniors requiring special care often live in a flat without their own toilet, bathroom or shower.

This study is a continuation of the research addressing the involvement of the Polish state in the elimination of architectural and technical barriers (Hełdak et al. 2018), and also the need to eliminate mobility barriers faced by the elderly (Kurtyka-Marcak et al., 2019) as well as the housing preferences declared by the retirement-age individuals (Przybyła et al., 2019). In the presented work, attention is drawn to the status of the ownership right to residential premises in the context of the standard of living.

The purpose of the study is to identify the housing

eISSN: 2300-5289 | Received 2023-07-27 | Revised 2023-11-28 | Accepted 2024-02-14

conditions of people reaching retirement age, including council flats, cooperative apartments and condominiums, and the influence of the form of ownership on the condition of equipping residential premises with installations improving the mobility comfort for older people. The study also aimed at providing answers to the formulated problem questions taking into account the current status of the ownership right to the occupied dwelling: condominium, cooperative member's ownership right to residential premises, and the right to rent a flat from council-owned housing resources.

2. Material and methods

The research covered the residents of Wrocław and Jelenia Góra in Poland, in the Lower Silesia Voivodship (Fig. 1).

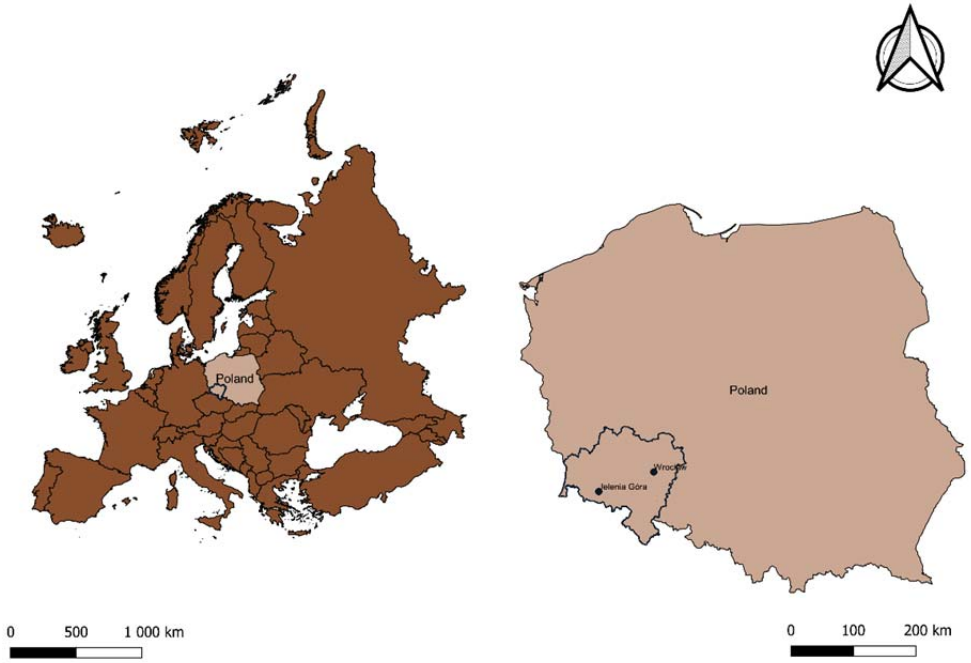


Fig. 1. Location of Wrocław and Jelenia Góra in the European context. *Source*: authors' compilation.

At the end of 2021, there were 642,687 people living in Wroclaw, and 77,335 in Jelenia Gora. The populations of both cities have recently increased due to the settlement of refugees from Ukraine (as of April 1, 2022, the population of Wroclaw increased by about 23%, to 829,209 people (Wojdat & Cywinski, 2022) - an estimate based on data from mobile devices and the number of PESEL numbers assigned, excluding the municipalities of the metropolitan area).

In these cities, the dominant form of housing ownership is by individuals. Still, a large part of the population resides in cooperative (i.e., owned by cooperatives) and municipal (owned by the city) apartments. The latter are most often inhabited by people of retirement age under an indefinite lease. In choosing these cities, we also wanted to see if the scale of the city had an impact on the answers given. This will make it possible to analyze local aspects of the problem and provide valuable insight into the living conditions of seniors in the region.

Below we characterize the housing stock in the analyzed cities by the three main ownership groups (Table 1).

The technical condition of buildings is an unquestionable problem in Polish cities, including the buildings from municipal resources along with council flats which are rated the worst in terms of technical assessment. The majority of the buildings require renovations of staircases, facades, window and door woodwork, as well as sanitary installations. Technical wear and tear of the building components goes along with their functional wear: there are still toilets in the stairwells of buildings. The current demographic situation of Polish cities, including the progressive aging of the Polish society facing the housing situation of the population, fully justifies the direction and purpose of the presented research.

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Table 1

Housing resources broken down into the form of ownership in Wrocław and Jelenia Góra at the end of 2020

city	Type of housing resources:						average useful floor area of dwelling (m2)	average useful floor area per 1 person (m2)	average number of rooms in a dwelling
	municipal resources (council)		cooperative resources		natural persons' resources including buildings covered by housing communities				
	flats (units)	usable area of flats (m2)	apartments (units)	usable area of apartments (m2)	apartments (units)	usable area of apartments (m2)			
Wrocław	33 493	1 634 063	60 004	3 048 081	641 202	39 777 567	59.4	31.9	3.23
Jelenia Góra	2 207	97 046	5 541	273 164	56 634	3 517 247	64.7	30.9	3.51

Source: authors' compilation based on the data provided by Statistics Poland.

In the course of the research, the following research questions were formulated:

1. Is the standard of council flats actually much lower than that of condominiums and cooperative apartments?
2. Is any renovation work to install facilities performed more often in council flats, cooperative apartments or condominiums?
3. Do the owner, cooperative member and tenant have the same opinion about creating a special offer to change their dwellings into council flats adapted to the needs of seniors and people with disabilities?

Subsequently, the study presents, the source literature review, the purpose and scope of the research, the prepared questionnaire and the conducted surveys. It is followed by an analysis of the findings using a descriptive method and statistical methods.

The survey covered randomly encountered people, totalling 208 respondents – 115 in Wrocław and 93 in Jelenia Góra, aged 50 and over:

- 24% of respondents were aged 50 to 55,
- 14% of respondents were aged 56 to 60,
- 15% were aged 61 to 65,
- 16% were aged 66 to 70,
- 14% of the respondents were aged between 71 and 75,
- the remaining respondents were aged 76 to 80 (9%), 81 to 85 (4%) and over 85 (4%).

There were no statistically significant differences between the groups when separated by place of residence in terms of the age of the respondents ($p = 0.065$).

The subject of research was also the readiness to move to a flat adapted for the disabled, hence it was important that younger people who would enter retirement age in a few years also took part in the study.

The authors did not establish guidelines for the number of people by gender. In the selection of respondents for the study the random-purposive sampling method was used. The purpose criterion was the age of the respondent and the place of residence: Wrocław or Jelenia Góra, and also the form of residential premises ownership.

The purpose criterion was the age of the respondent and the place of residence: Wrocław and Jelenia Góra, as well as the form of residential premises ownership – breakdown below:

- Municipal Apartments on Lease Agreement: 101 people from both Wrocław and Jelenia Góra live in municipal apartments on the basis of a lease agreement;
- Limited Property Right (Cooperative Ownership Right): 42 people have a limited property right to the premises, which typically means they have cooperative ownership rights to their homes. This could be in a cooperative housing society or a similar arrangement;
- Ownership Right: 65 people have ownership rights to their homes. This suggests they own their homes outright.

Each form of housing possession was represented to ensure the correctness of the research.

The full feedback from the respondents' questionnaire in the examined cities (Fig.2) has been broken down by the form of residential premises ownership.

Below is an enclosed example of the survey related to the housing needs of elderly residents in the context of different forms of housing ownership. The survey was conducted anonymously and the

questionnaire is presented in the table below (Table 2).



Fig. 2. Breakdown of research according to the form of residential premises ownership in Wrocław and Jelenia Góra. *Source:* authors' compilation.

Table 2

Survey related to the housing needs of elderly residents

1. Do you have facilities in your apartment adapted to mobility needs?

o various handles and grippers	o widened door frames
o adapted bathrooms or toilets	o elevators
o anti-skid floors	o different texture and color floors
o additional handrails along the walls	o lifts/elevators
o adapted floor thresholds	o none of the above
o ramps	o Other .....

2. Which of the following amenities should be available in your apartment to make it easier to move around:

o various handles and grippers	o widened door frames
o adapted bathrooms or toilets	o elevators
o anti-skid floors	o different texture and colour floors
o additional handrails along the walls	o lifts/elevators
o adapted floor thresholds	o None of the above
o ramps	o Other .....

3. Have you carried out any renovation works in your apartment to install above-mentioned amenities?
   - o Yes
   - o No

4. Do you live in:
   - o Council flat
   - o Cooperative apartment
   - o Condominium

5. If you live in a council flat, has the city recently renovated the building in which your flat is located?
   - o Yes
   - o No
   - o I do not remember

6. If you live in a flat that is owned by you or in a cooperative flat - has the building in which your flat is located recently been renovated within the housing community/cooperatives?
   - o Yes
   - o No
   - o I do not remember

7. Do you think that a special offer should be created to exchange flats for council flats adapted to the needs of seniors and people with disabilities?
   - o Yes
   - o No
   - o No opinion

8. Would you be willing to exchange your flat for a communal flat adapted to the needs resulting from mobility restrictions?

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	○ Yes	○ No
		○ maybe
9.	Do you currently have the following utilities and equipment in the premises?:	
	○ Hot water	○ Toilet on the staircase
	○ Only cold water	○ Toilet and bathroom in the apartment
	○ Central heating	○ Bathroom without toilet in the apartment
	○ Tiled stove	○ Gas from the grid
	○ Electric heating	○ Other .....
10.	Sex :	
	○ Woman	○ Men
11.	Age :	
	○ 50-55	○ 70-75
	○ 56-60	○ 76-80
	○ 61-65	○ 81-85
	○ 66-70	○ 85 and more

Source: authors' compilation.

The chi-square test of independence was used in this research to examine the relationship between two nominal (categorical) variables. Here is breakdown of how the test works:

- Purpose of the Chi-Square Test: The chi-square test is used to determine if there is a statistically significant relationship between two categorical variables. In your case, it's used to explore the relationship between the form of ownership of dwellings (e.g., lease agreement, limited property right, ownership right) and opinions about the housing needs of the elderly;
- Observed vs. Expected Values: The test compares the observed values (the actual data collected during the survey) with the expected values. The expected values are calculated based on the assumption that there is no relationship between the two variables being studied;
- Statistical Significance: If the difference between the observed and expected values is large enough, it suggests that there is a significant relationship between one variable and the other. In other words, the variables are not independent of each other;
- Percentage Results: In the interpretation of the test results, percentages are often analyzed because the chi-square test is used to compare proportions and values relative to all the collected data. This helps in understanding the strength and direction of the relationship between the variables.

A significance level of p = 0.05 was assumed for the statistical analyses. This significance level is commonly used in statistical testing and hypothesis testing. When conducting statistical analyses using the SPSS program, a p-value of 0.05 is often chosen as the threshold to determine whether a result is statistically significant.

3. Results

3.1. Qualitative view of housing in Poland

One of the key dimensions for assessing the quality of housing, not only in Poland, is the availability of sufficient space. The overcrowding rate describes the percentage of people living in an overcrowded dwelling, defined by the number of rooms available in the household, the size of the household, as well as the age and family situation of its members.

Over the years 2007-2017, it was observed that the overcrowding rate in Poland was constantly decreasing. In 2017, 40.5% of Poles lived in overcrowded apartments. Comparing to 2007, the indicator dropped by 11.8 percentage points. Despite the fact that an increasing number of residential buildings are being built in Poland, the overcrowding rate is still at a high level. This problem is caused by a location mismatch. New investments are made mainly in housing estates,–whereas areas characterized by lower economic attractiveness still have a lot of undeveloped land. The housing deprivation rate in Poland has changed significantly over the last 10 years. According to the data in Table 3, in 2017, 9.8% of Poles lived in flats presenting poor technical conditions. Compared to 2007, this indicator declined by 16.1 percentage points. It can also be noticed that, in Poland, more men than women reside in dwellings characterized by poor technical conditions (Table 3).

Table 3

Deprivation index in Poland by sex in 2007-2017

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
deprivation index	25.9	18.1	15.2	13.3	11.4	10.5	10.1	9.1	9.8	9.4	9.8
male deprivation index	26.5	18.4	15.5	13.3	11.6	10.7	10.3	9.2	10.1	9.6	9.9
deprivation index among women	25.4	17.8	14.8	13.4	11.2	10.3	9.9	8.9	9.5	9.3	9.6

Source: authors' compilation based on data provided by Eurostat.

In addition to overcrowding, other aspects of housing deprivation, such as no bathtub or shower, lack of adequate lighting in the flat and no toilet, are taken into account when developing a more accurate indicator of housing quality. In Poland, the percentage of flats without a flush toilet, too dark and not equipped with a bathtub or a shower is constantly declining.

In 2017, 2.5% of citizens did not have access to a flush toilet in their flat. As compared to 2007, an improvement in housing conditions was recorded - a decrease by 3.7 percentage points. Flats in Poland also have inadequate lightening; 4.3% of the Polish society was found to reside in too dark flats. In terms of this analysis, the biggest change over the years can be observed. The percentage of dwellings with this problem dropped by 4.8 percentage points since 2007, and remained at the same level in 2016.

In Poland, 2.9% of the population lived in households without a bathtub or a shower. Over the last 10 years, this indicator decreased by 4.2 percentage points.

3.2. The form of residential premises ownership and the living conditions of the respondent

In the course of searching for answers to the problem questions, the authors established correlations between the access to utilities and equipment in the apartment and the form of residential premises ownership. Considering the total number of respondents, statistically significant differences were found in the actual equipment at the disposal of the groups identified based on the ownership right to residential premises.

Hot water was most frequently available for the respondents living in cooperative apartments (100%) and condominiums (95%), and less often for those occupying council flats (81%). The difference is statistically significant (p = 0.001). Only cold water was most often marked by the respondents living in council flats (12%), less often by condominium owners (3%), p = 0.014. Central heating was most frequently provided for the respondents living in cooperative apartments (78%) and condominiums (86%), less often for the council flat tenants (40%), p <0.001.

Using a tiled stove was most often indicated by the respondents living in council flats (31%), and only a few people residing in cooperative apartments (2%) and condominiums (2%). In this case the difference is also statistically significant (p <0.001). Electric heating was also most often available for the dwellers of council flats (28%).

A low standard of residential premises due to, i.a. a toilet in the stairwell was most often experienced by the respondents living in council flats (24%), rarely by those residing in cooperative apartments (5%) and never by condominium owners (0%). The difference is statistically significant (p <0.001). A bathroom and a toilet were most often available for respondents living in cooperative apartments (83%) and condominiums (86%), and less frequently in the case of respondents occupying council flats (64%), (p = 0.003). The condition of the equipment and utilities in the apartment and the degree of dependence have been presented in table (Table 4).

Table 4

Access to utilities and equipment currently available in the dwelling, broken down into the form of residential premises ownership. Total respondents

Specification:	Current place of residence			p
	Council flat	Cooperative apartment	Condominium	
Hot water	81.0%	100.0%	95.3%	0.001
Only cold water	12.0%	0.0%	3.1%	0.014
Central heating	40.0%	78.0%	85.9%	<0.001
Tiled stove	31.0%	2.4%	1.6%	<0.001

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Electric heating	28.0%	17.1%	4.7%	0.001
Toilet on the staircase	24.0%	4.9%	0.0%	<0.001
Toilet and bathroom in the apartment	64.0%	82.9%	85.9%	0.003
Bathroom without toilet in the apartment	5.0%	2.4%	3.1%	0.719
Gas from the grid	35.0%	73.2%	75.0%	<0.001
Other	2.0%	0.0%	3.1%	0.528

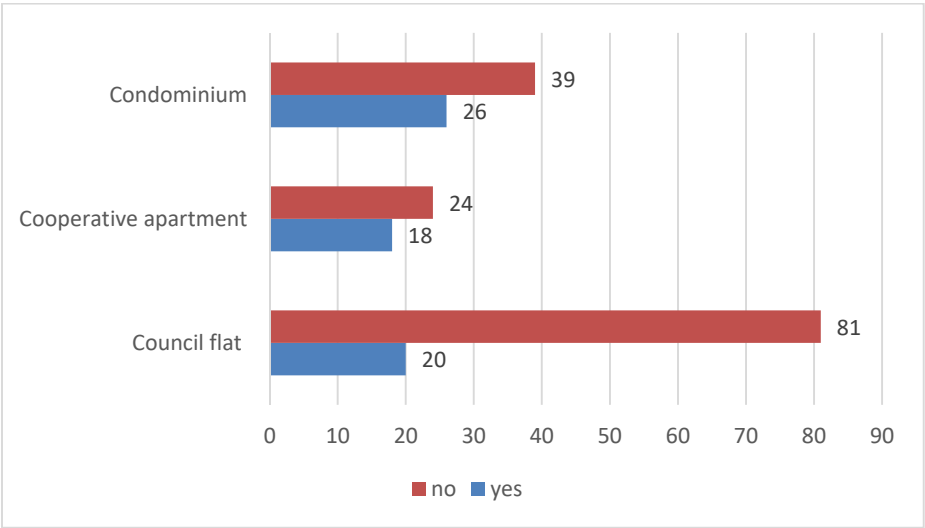
Annotation. p – significance level

Source: authors' compilation.

The research has shown the underinvestment of council flats, manifested, i.a., in difficult access to utilities and low levels of underperforming dated facilities. When considering only the respondents from Jelenia Góra, statistically significant differences in having some facilities or equipment were also found between the groups identified by the type of residential premises ownership. Having analyzed, e.g., the availability of a toilet in the stairwell, it was most often indicated by the respondents living in council flats (35%), less often in cooperative apartments (8%) and never in condominiums (0%), p <0.001. Similarly in Wrocław, a toilet found in the stairwell was most frequently marked by respondents living in council flats (13%), less often by those living in cooperative apartments (4%) and never in condominiums (0%). In this case, the difference is also statistically significant (p = 0.043).

A tiled stove was predominantly used by the respondents from Jelenia Góra living in council flats (44%), and less often by those living in cooperative apartments (8%) and condominiums (4%), p <0.001. In Wrocław, only the respondents occupying council flats (17% of them) had a tiled stove, p = 0.002.

Further analyses addressed the renovations performed in order to adapt dwellings to the mobility needs of council flat tenants, cooperative members and condominium owners. It was found that renovation works were most often carried out by respondents living in condominiums (41%) and cooperative apartments (42%), and less often by respondents occupying council flats (20%). The difference is statistically significant (p = 0.005) (Fig. 3).



Annotation Chi square test of independence $\chi 2 = 10.57$; p = 0.005

Fig. 3. Renovations aimed at the installation of facilities to remove architectural and technical barriers, broken down into the form of residential premises ownership. Total respondents. *Source*: authors' compilation.

The indicated renovations were carried out independently by condominium owners and apartment residents. Moreover, the respondents were asked whether the city, the cooperative or the housing community had recently carried out renovations to the building. In this case, almost 16% of the council flat tenants claimed that the city had recently renovated the building in which the given residential premises were located, and such renovations were carried out more frequently in Jelenia Góra (37%), less often in Wrocław (29%), p = 0.036. Among the tenants of cooperative apartments, 22% indicated that the cooperative has recently completed a renovation of the building in which the cooperative apartment is

located. In this case, such renovations were also performed much more often in Jelenia Góra (74%) than in Wrocław (39%).

3.3. The number of people reporting the need to eliminate architectural and technical barriers based on the form of residential premises ownership

In addition to analyzing the current status of adapting a dwelling to the mobility needs of the elderly, the demand for the elimination of architectural and technical barriers broken down into the form of residential premises ownership was investigated. The respondents most often indicated that, in order to facilitate mobility, the apartments should offer adapted bathrooms or toilets (52%). When all the respondents were analyzed, it was found that adapted bathrooms and toilets were most often required by people living in council flats (72%), less often by those residing in cooperative apartments (37%) and condominiums (33%). The difference is statistically significant (p <0.001). Expanded door frames were most frequently needed by council flat tenants (18%), and less often by respondents occupying cooperative apartments (7%) and condominiums (6%) (p = 0.046). A similar share of residents of condominiums and cooperative apartments did not need any facilities (28% and 29% respectively). This was not the case for people living in council flats, where merely 8% reported that these needs were fulfilled (Table 5).

Table 5

Demand for the installation of facilities eliminating architectural and technical barriers broken down into to the form of residential premises ownership. Total respondents

Specification:	Place of residence:			*p*
	Council flat	Cooperative apartment	Condominium	
various handles and grippers	16.0%	19.5%	31.3%	0.064
adapted bathrooms or toilets	72.0%	36.6%	32.8%	<0.001
anti-skid floors	37.0%	31.7%	28.1%	0.488
additional handrails along the walls	9.0%	17.1%	18.8%	0.161
adapted floor thresholds	33.0%	19.5%	26.6%	0.254
ramps	1.0%	9.8%	4.7%	0.047
widened door frames	18.0%	7.3%	6.3%	0.046
elevators	6.0%	4.9%	4.7%	0.925
different texture and color floors	2.0%	12.2%	4.7%	0.038
lifts/elevators	4.0%	9.8%	10.9%	0.200
None of the above	8.0%	29.3%	28.1%	0.001
Other	1.0%	0.0%	0.0%	0.590

Annotation. p – significance level

Source: authors' compilation.

Considering the demand in individual cities, it was found that, in Jelenia Góra, council flat tenants most often declared the need for adapted bathrooms and toilets, amounting to as many as 85% of the respondents, those living in cooperative apartments (15%) and condominiums (28%) expressing this need less often, p <0.001. Only 2% of the residents of council flats did not request any facilities, which reflects the scale of the need for modernization works in these buildings (p = 0.001).

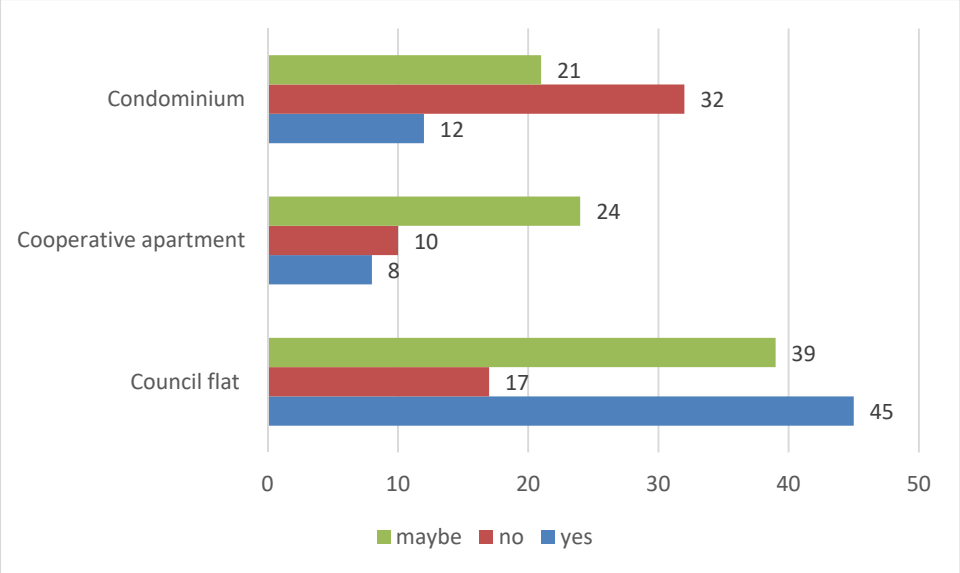
3.4. Declared readiness to change residential premises into those adapted to the needs of a person with mobility problems

Most of the respondents believed that a special offer should be developed to facilitate changing apartments into council flats adapted to the needs of seniors and disabled people (67%). No statistically significant differences were found in the distribution of responses provided by the groups identified based on the form of residential premise ownership, both when considering the total of respondents (p = 0.315) and the respondents from Jelenia Góra (p = 0.248) and Wrocław (p = 0.455) separately. However, it was established that definitely more people from Jelenia Góra than from Wrocław were in favor of creating such an offer.

Almost 31% of the respondents expressed willingness to change their apartment into a council flat adapted to the needs resulting from their mobility limitations, 39% of the respondents stated they might consider changing their current dwelling, and 30%

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expressed their unwillingness to do so. The residents of council flats (45%) were most willing to change their place of residence, with those residing in cooperative apartments (17%) and condominiums (19%) ready to do so less often. The difference is statistically significant ($p<0.001$) (Fig. 4).



Annotation Chi square test of independence $\chi 2 = 31{,}86;\ p < 0{,}001$

Fig. 4. The form of residential premises ownership and the readiness to change an apartment into one adapted to the needs of elderly people. Total respondents. *Source*: authors' compilation.

In Jelenia Góra, such willingness was declared by respondents occupying council flats (37%) as well as cooperative apartments (46%), and less frequently condominiums (16%), $p < 0.001$; in Wrocław, this held true for more than half of those living in council flats (54%), less often for condominium owners (21%) and hardly any residents of cooperative apartments (4%). The discussed difference is also statistically significant ($p < 0.001$).

4. Discussion

In Poland, a notable trend emerges as the majority of residents own their flats rather than renting them. This pattern is consistent, flat ownership is a preference tendency across research area, reflecting the prevalence of privately owned flats. The percentage of owner-occupied flats substantially surpasses other forms of ownership, including municipal and cooperative arrangements.

Owning a flat in Poland depends primarily on market conditions and psychological factors among the population. Homeownership is seen as a way to improve the quality of life and provide a sense of stability. However, it comes with a significant financial burden, which can be a challenge for many people, especially those livening off of their retirement or pension. Various situations may make it necessary for older people to move from apartments on the top floors of buildings to the second floor to reduce the risk of heat or physical barriers (Kazak etal., 2017). Roy (2018), however, indicates in his research that older people who are renters will be inclined to move more often. Also, the presented research shows that residents of council flats are the most likely to move (45%). The size of the city had no impact on this decision.

A concerning aspect is the need for elderly residents to adapt their living spaces to better suit their needs, which can often involve substantial renovations (Hełdak et al., 2020). Many flats in Poland, especially communal ones, exhibit subpar finishes and technical conditions. These communal flats, typically intended for the most financially disadvantaged members of society, often lack essential amenities, such as private bathrooms and showers. This is a problem noted in other countries as well (Hełdak et al., 2020).

The analysis of housing ownership forms in relation to the needs of the elderly confirms this relationship. Communal flats, representing the lowest standard of living conditions, are found to have inadequate amenities in a significant percentage of cases. A substantial number of these flats lack central heating, and toilets in communal hallways are common.

It was established that the standard of council flats is much lower than that of condominiums and cooperative apartments. The study of people aged 50 and over showed that 19% of the surveyed tenants of council flats did not have access to hot water; 12% had only cold water, and as many as 60% had no central heating, with a significant share of residents found to use tiled stoves to heat their apartments (31%). Access to a bathroom and a toilet continues to be a problem – as many as 24% of the respondents living in council flats used a toilet in the stairwell. Regarding condominiums and cooperative apartments, these were either isolated cases or did not occur at all. The indicated differences are statistically significant.

The renovations currently performed in the apartments, aimed at the installation of mobility facilities for seniors, refer more often to cooperative apartments and condominiums than council flats. Such renovations were most often carried out by the respondents living in cooperative apartments (42%) and condominiums (41%), and less often by council flat tenants (20%). This justifies another survey results and the established correlations that the residents of council flats indicated the need to adapt bathrooms and toilets significantly more often than the residents of other types of dwellings, i.e. as many as 72% of their total number ($p < 0.001$).

Readiness to change their apartment into a council flat adapted to their physical condition, either currently or in the future, was indicated by as many as 67% of the respondents. However, not everyone, taking into account the form of residential premises ownership, would be ready to change their current dwelling: this most often pertained to council flat tenants (45%), followed by condominium owners (19%) and cooperative apartment residents (17%) ($p < 0.001$), which, considering the low living standard of council flat tenants, is fully justified. It should also be remembered that some of the respondents own condominiums and, due to the form of ownership, rejected the possibility of changing their dwelling into one that would involve changing their ownership status into a tenant.

5. Conclusions

This study sheds light on the challenges faced by elderly residents in Poland, particularly in communal housing situations. While homeownership is desirable for many, it also highlights the need for improved housing conditions and accessible options for the elderly population.

The presented research allowed for providing answers about the condition of equipping residential premises with utilities as well as the current needs of elderly people, taking into account the ownership structure of the occupied dwellings.

The survey confirmed that the standard of council flats is actually much lower than that of condominiums and cooperative apartments.

Renovation work related to the installation of appliances and the adaptation of housing to the needs of the elderly is most often carried out in owner-occupied housing, and least often in communal housing.

Residents of all types of properties believe that a special offer should be created to facilitate the conversion of apartments to council flats adapted to the needs of the elderly and disabled. However, those living in council flats are the most eager to change to more age-appropriate housing.

Further research to be conducted by the team of authors will address the standard of living of the refugees from Ukraine as well as people of other nationalities forced to flee their country as a result of political repression.

Funding Sources

This work was supported by own founds of Wrocław University of Environmental and Life Sciences.

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