

## DURABLE GOODS IN URBAN HOUSEHOLDS OF SILVER SINGLES IN POLAND

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### ABSTRACT

**Aim:** The purpose of this article is to provide some insight into what home infrastructure is present in single seniors' households. It can be concluded that their home infrastructure is constantly improving, as directly reflected in a better satisfaction of their perceived needs. **Methods:** The research was conducted in two stages in 2018–2022. In the first of the planned stages, the survey was carried out on a sample of 3,167 silver singles in the period from 1 February to 30 October 2018 and from 1 May to 30 October 2019. The second stage lasted from 1 March to 30 September 2021 and then from 6 February to 30 September 2022 and covered a sample of 3,834 elderly people living alone. In accordance with the research assumptions, the sample included only single people aged 65 and older who took independent consumer decisions on the market. **Results:** In the analyzed period, the situation of single seniors' households regarding the possession of almost all durable goods improved, which undoubtedly stems from the fact that these goods are more common and available, e.g., through easily obtainable loans and decreasing product prices. When analyzing home appliances present in silver singles' households, it can be seen that households tend to replace the existing equipment with new appliances and purchase completely new, previously unknown products. The analysis of the infotainment equipment possessed by silver singles indicates a lower degree of its presence than that of home appliances. **Conclusions:** In the context of the obtained results, it can be stated that the surveyed households of single elderly people are increasingly better equipped with home appliances, infotainment equipment, and means of transport. This undoubtedly translates into the level at which the needs regarding durable goods are satisfied. The research findings indicate that in both stages, seniors actively attending U3A courses better assess the level of satisfaction of their needs regarding durable goods more frequently than members of parochial clubs.

**Keywords:** silver singles, home infrastructure, durable goods

**JEL codes:** A12, D03, D18

### INTRODUCTION

The aging of many populations and progressing singalization, especially in Western and Central Europe and the United States, is becoming more and

more common. Changes in mentality, distance from the institution of family, the cult of independence, and the building of one's own social position result in increased numbers of silver singles<sup>1</sup>. This, in turn, means greater social significance for elderly people in

<sup>1</sup> Throughout this article, the terms: "silver singles", "single seniors", "single elderly people", and "elderly people living alone" are used interchangeably.

today's society, including those living alone. The fact that the segment of single seniors is constantly growing has a meaningful impact on their lifestyle, as it has on the structure of consumption and preferences regarding the place and frequency of shopping. All this makes single elderly people, as consumers, an important group on the market, and thanks to their growing purchasing power, they are increasingly attractive to producers. It should be borne in mind that the segment of seniors is very diverse [Zalega 2022].

The purpose of this article is to provide some insight into what home infrastructure is present in single seniors' households. It can be concluded that their home infrastructure is constantly improving, as directly reflected in a better satisfaction of their perceived needs.

The structure of this article is as follows. After a brief introduction and a literature review, the focus is on the research conceptualization and a description of the research sample and its characteristics. Further, the study synthetically analyzes what selected durable goods the households of elderly people living alone possess. Finally, major conclusions end this article.

## LITERATURE REVIEW

A key feature of the consumption preferences of households, and consequently of their consumption model, is their possession of durable goods [Barsky et al. 2007, Dziechciarz and Dziechciarz-Duda 2017, Rocchi 2022]. Durable goods can be defined as tangible goods that are purchased for consumption purposes and whose use does not cause their immediate destruction, thus enabling them to be present in many subsequent acts of consumption. Such goods are accumulated and consumed over a long period of time and indicate the level of wealth that a particular household enjoys; they secure good living and, to some extent, balance out the impact that a temporary reduction in current income exerts on the degree to which the needs of each member of the household are satisfied. In general, the more durable goods a household possesses, the greater its freedom to manage its current income and the higher its average assessment of the standard of living.

Consumers in a specific socio-economic group often emphasize their possessions, thereby wishing to

get closer to a certain pattern shaped under the influence of fashion, preferences, habits, social positions, etc. Such conduct often becomes a game changer for the consumption behavior of society and a modernizer of the structure of consumption and the structure of durable goods that households own.

Expenditure on durable goods is a key component of consumption dynamics, despite accounting for a modest share in aggregate household spending. Expenditure on durables tends to be volatile and pro-cyclical, reflecting the specific characteristics of this type of good. Consumer durables have specific characteristics that set them apart from other consumption expenditure items. Firstly, a durable good provides utility over multiple periods and (like capital) is subject to depreciation. This allows consumers to postpone purchases in times of economic hardship while still benefiting from the flow of services from the accumulated stock, and to adjust to the desired level of durables once the economy has recovered. Secondly, the purchase of durables can often be financed using credit, and the durables are sometimes eligible for use as collateral, which can make them more exposed to credit conditions and lending rates than non-durables. Finally, changes in the stock of durables may be subject to adjustment costs. This could lead to sluggish and protracted cycles in durable goods expenditure, since the presence of such costs determines "inaction zones" where a consumer finds it optimal not to adjust small differences between the actual and the desired stock of durables [Casalis and Krustev 2020].

A specific role of durable goods in the activity of each household consists in the improvement and mechanization of housework. Taking into account the multifaceted meaning of durable goods, three groups of household goods are distinguished in the literature [Kędzior 1989]:

- appliances used for preparing meals and storing food products, referred to as kitchen appliances, i.e., refrigerators, freezers, food processors, microwave ovens, etc.;
- equipment used for keeping order and cleanliness at home, for washing and maintaining clothing, referred to as general household equipment, i.e., washing machines, electric spin-dryers, vacuum cleaners, sewing machines, etc.;

- equipment to satisfy the needs related to home entertainment and leisure, referred to as consumer electronics, i.e., radios, tape recorders, TV sets, video recorders, etc.

Considering the type of household needs and the needs of individual household members, durable goods are divided into three groups:

- goods used directly in the household, related to the need to mechanize housework (e.g., prepare and store food products – cookers, food processors, refrigerators, freezers) and to keep the home clean, to wash and maintain clothing, e.g., automatic and rotary washing machines, dishwashers, ironing machines, food processors, sewing machines, and others;
- consumer electronic equipment to meet various needs related to home entertainment, leisure, or study, serving to directly satisfy the individual needs of household members, i.e., TV sets, video recorders, radio-broadcast receivers, video cameras, personal computers, and others;
- mobility-related goods meeting the needs in terms of movement, i.e., bicycles, motorcycles, cars.

Commonly used identifiers of the degree to which needs are fulfilled regarding durable goods include: the level and structure of expenditure from personal household income and possessed durable goods [Lovatt 2018, Sathya and Indirajith 2018, Kayode et al. 2021]. Expenditure on consumer goods and services determines the final phase of needs satisfaction in specific conditions of choice on the market. In the case of durable goods, it informs about the current purchases of goods and services. By analyzing the structure of expenditure, it is possible to determine the position of durable goods in the process of meeting needs [Zalega 2016, Kulshreshtha et al. 2017].

In order to diagnose the situation in households regarding their equipment facilitating various activities, a three-stage saturation scale is used [Kędzior 1989, Wu 2022]:

- a high degree of saturation where a particular appliance is owned by more than 80% of households;
- an average degree of saturation where a particular appliance is owned by 50 to 80% of households;
- a low degree of saturation where a particular appliance is owned by less than 50% of the population.

In turn, Kramer [1993], assessing durable goods possessed by households, distinguishes:

- standard goods that are available to every household when needed: they are owned by more than half of respondents from the group;
- goods of a higher standard that are owned by 10–50% of households;
- luxury goods present in less than 10% of households.

Durable goods, which form the household consumption infrastructure together with the house or flat, include a wide range of products such as home appliances, infotainment equipment, and means of transport. Therefore, these items are differentiated according to the type of needs met in the household and, at the same time, are characterized by a relatively long lifetime and different paces of physical and moral wear and tear.

Durable goods perform three basic functions: utilitarian, exchange, and symbolic. Utilitarian functions of these goods serve directly to meet specific needs or are a means of indirectly satisfying the felt needs. In turn, the exchange functions of durable goods have a certain exchange value, e.g., in the period of short-age of goods on the market, they serve as objects of the exchange process or become a deposit of surplus money. On the other hand, the symbolic function involves some goods (due to their rarity and indication of wealth) having become a dimension of social distinctions, e.g., a house in a stylish part of the city, various types of devices in which new information technologies are used, etc. Currently, most goods have lost their symbolic function and partly their exchange function. In view of the widespread availability of durable goods on the market, these goods mostly neither have the value of rarity nor are signs of wealth. The exception is durable goods classified as so-called Veblen goods, namely goods that are associated with conspicuous consumption most often pursued in high-income households and those that are referred to as economic elites [Kulshreshtha et al., 2017, Zalega 2017].

Households in a specific socio-economic group often emphasize their possessions, thereby wishing to get closer to a certain pattern shaped under the influ-

ence of fashion, preferences, habits, social positions, etc. Such conduct often becomes a game changer for the consumption behavior of society and a modernizer of the structure of consumption and of durable goods that households own. In addition, household durable goods, together with the house or flat, affect a wide range of everyday consumption behaviors of household members that make up the internal activity of the household. They also determine the length of free time and the way it is managed.

Regardless of the objective benefits, a significant part of durable goods owned by households meets higher-order needs, and as such, they characterize the population's standard of living and are an indicator of modernity. Though not always rightly, they are often treated as a symbol of social prestige, a new material culture, and a new lifestyle [Schwarz 2021, Amendola and Vecchiego 2022, Bertolotti et al. 2023].

The propensity of households to consume durable goods depends not only on their financial capabilities but also on many socio-demographic determinants that indicate the needs of their members. Therefore, in addition to purely demographic characteristics such as age, education, or gender, non-economic factors such as preferences, fashion, subjective preferences, and influence of patterns or tastes have a significant impact on the possessed durable goods.

The possessions of households in Poland at the turn of the first and second decade of the 21st century were changing rapidly, which was facilitated by the market increasingly being better supplied with goods with ever higher technical and quality parameters, and branded equipment. The process of globalization and internationalization of the world economy, as well as constant technical progress (notably the development of information technologies), are having a significant bearing on changes in home infrastructure. The effects of these developments are new and better quality products. For this reason, households seek to change their equipment both by replacing the existing equipment with new appliances and by purchasing completely new, previously unknown products. Over the last few years, some goods (e.g., microwave ovens, dishwashers, LCD and QLED TV sets, smartphones, iPads, tablets, etc.) that were an

indicator of the high material status of their owners at the turn of the 20th and 21st centuries have become common in single-person households. Currently, these products are treated as popular, even standard household appliances that have almost “blended” into the functioning of an average single-person household.

## RESEARCH CONCEPTUALIZATION

The main purpose of the designed and conducted empirical research was to provide some insight into what home infrastructure is present in single seniors' households. The empirical material contained in this article comes from direct research carried out in the form of a survey questionnaire among silver singles. This research method was chosen in view of the older age of respondents whose openness to new media (internet, smartphone, iPod) often used in direct research is limited. The material collected was then arranged, i.e., grouped, counted, and pre-assessed for completeness of the information. From the initial numbers of survey questionnaires received from 3,198 respondents in 2018–2019 and 3,863 respondents in 2021–2022, the following were deemed eligible: 3,167 and 3,834 questionnaires, representing 99.03% and 99.24% of the total sample, respectively. Further, they were coded and the data set thus created was processed by a statistical package. The application of the IBM SPSS 26.0 PL statistical package together with AMOS 29 and Matlab R2023b made it possible to analyze – in a relatively short time – the information obtained from standardized interviews. Pearson's correlation coefficients and Cramér's V association coefficient were used to determine the directions and strength of the relationships between dependent and independent variables.

## SELECTION AND CHARACTERISTICS OF THE RESEARCH SAMPLE

The research was conducted in two stages in 2018–2022. In the first of the planned stages, the survey was carried out on a sample of 3,167 silver singles in the period from 1 February to 30 October 2018 and from 1 May to 30 October 2019. The second stage lasted

from 1 March to 30 September 2021 and then from 6 February to 30 September 2022 and covered a sample of 3,834 elderly people living alone. The COVID-19 pandemic caused by the SARS-CoV-2 coronavirus and the lockdown introduced in Poland in March 2020, limiting free movement, made it impossible to conduct research among single elderly people in 2020. In accordance with the research assumptions, the sample included only single people aged 65 and older who took independent consumer decisions on the market.

In this article, “silver singles” mean people aged 65+, living alone by their own choice (in single-person households or separate flats), for reasons beyond their control (widows, widowers) or those who live alone again (divorced, abandoned, forsaken). These people usually have no parental responsibilities, are economically independent, have most often completed higher or secondary education, have a large group of friends and acquaintances, are strongly focused on themselves and their needs, and lead a specific lifestyle in which they pursue individual values and relationship patterns. In addition, this study assumes that single people cannot remain in informal LAT<sup>1</sup> or distant relationships, and their possible romantic relationships cannot be lasting<sup>2</sup>. This definition thus excludes elderly people who are in a permanent heterosexual or homosexual relationship and narrows the group of “silver singles”, allowing research uniformity.

The author of this study divided silver singles into:

- young-old – people aged 65–74;
- old-old people aged 75–84;
- the oldest-old – people aged 85 and older.

The survey was conducted among participants of the University of the Third Age (U3A) at state universities in: Warsaw, Krakow, Łódź, Poznań, Gdańsk, Katowice, Lublin, Białystok, Toruń and Wrocław, as well as among members of parochial clubs in parishes located in the Archdioceses of Warsaw, Krakow, Łódź, Białystok, Gdańsk, Katowice, Lublin, Poznań, Wrocław and the Dioceses of Warsaw-Praga and Toruń.

In 2018–2019, 53.8% of the survey participants were women, and 46.2% were men. In 2021–2022, these shares changed to 54.3% for women and 45.7% for men. Taking into account the age of silver singles in both stages of the study, almost 3/5 of the respon-

ents were young-old, every third person living alone represented the old-old age, and every tenth was the oldest-old. Respondents with secondary education formed the largest group. In both stages, over 35% of those surveyed declared this level. Every fourth respondent was a university graduate, and those with basic vocational education represented a similar percentage. In the sample surveyed, people with primary education were the smallest group (12%).

In both stages, the largest group among single seniors included people whose monthly disposable income ranged from PLN 2,501.00 to PLN 3,500.00. For every third respondent, the household income did not exceed PLN 2,500.00. In turn, every fourth single senior surveyed earned a monthly disposable income ranging from PLN 3,501.00 to PLN 4,500.00. The smallest group of respondents included households where disposable income was above PLN 4,500.00 per month.

Place of residence was also an important variable in the research. In line with the research assumptions, the sample comprised single elderly people who lived in large cities in Poland: one city with over 1 million inhabitants: Warsaw; one city with a population from 750,000 to 1 million inhabitants: Krakow; three cities with 500,000 to 750,000 inhabitants: Wrocław, Łódź, and Poznań; four cities with 250,000 to 500,000 inhabitants: Gdańsk, Lublin, Białystok, and Katowice; and one city with 100,000 to 250,000 inhabitants: Toruń.

In the first stage of the research covering the 2018–2019 period, almost 45% of silver singles described their economic situation as good, and 2/5 of them as bad. Almost one in ten respondents regarded their economic status as very bad, whereas only one in ten assessed their material situation as very good. In the second stage, however, the percentage of elderly people living alone who assessed their situation as very bad increased. This option was selected by every seventh respondent. The percentage of silver singles evaluating their financial situation as bad did not change. Interestingly, the percentage of single seniors who considered their financial situation as very good in 2021–2022 rose. This answer was given by every sixth respondent. Every third person living alone described their economic status as good. Moreover, the



**Table 1.** Assessment of durable goods possessed by single seniors' households (%)

Assessment of durable goods possessed by single seniors' households	Number of respondents		Percentage share (%)	
	<i>n</i> = 3,167	<i>n</i> = 3,834		
	2018–2019	2021–2022	2018–2019	2021–2022
Very good	795	1,139	25.1	29.7
Good	969	1,346	30.6	35.1
Average (satisfactory)	697	606	22.0	15.8
Bad	396	418	12.5	10.9
Very bad	310	326	9.8	8.5

Source: Author's research.

information obtained from the respondents shows that a positive correlation exists between the population of the city where singles lived and their self-perceived material situation. The bigger the city, the greater the percentage of silver singles who assessed their material situation as good or very good in the first stage of the research and in 2021–2022).

## FINDINGS AND DISCUSSION

In the analyzed period, the number of single seniors content with the durable goods in their household increased. In light of the data obtained from both stages of the research, it can be concluded that every fourth silver single in the first stage of the research and every third respondent in 2021–2022 described their possession of such goods as very good. In turn, every third elderly person living alone assessed their possession of basic durables as good. On the other hand, the situation regarding basic durables possessed was considered bad by every eighth respondent in the first stage of the research and every tenth in the second stage. A very bad situation in this respect was indicated by every tenth single senior in 2018–2019 and every twelfth in the second stage of

the study. Every fourth single senior in the first stage of the research and every sixth in the second stage said that their household was equipped with durable goods at an average level (Table 1). In addition, seniors who were students of U3As (53.3%) indicated higher assessments of their situation regarding durable goods possessed than members of parochial clubs (46.7%).

### Home appliances

In every household, equipment serving to improve and mechanize housework plays an important role. Its purchase requires consumers to make prudent decisions based on information and evaluation of other options. Furthermore, the purchase of such equipment is determined by many economic, social, and cultural factors, as well as subjective consumer habits and experience.

In the analyzed period, the situation of single seniors' households regarding the possession of almost all durable goods improved, which undoubtedly stems from the fact that these goods are more common and available, e.g., through easily obtainable loans and decreasing product prices.

In both stages of the study, the ownership of home appliances in seniors' households and the degree of their commonness varied. Regarding home appliances pres-

<sup>2</sup> LAT (Living Apart Together) relationships are a form of partnership. These are romantic relationships between unmarried partners of the same or opposite gender who have separate domiciles, consider themselves a couple, and are perceived as such by others. Undoubtedly, a LAT relationship is one where the partners do not live together despite remaining in a long-term, stable, satisfying bond. In this case, the initial stages of the relationship, when living apart is still natural, are not taken into account. Partners make an autonomous, deliberate decision to maintain two households, and even other people may permanently stay at their homes.

<sup>3</sup> This definition of a silver single was presented to people participating in the survey before they filled out the questionnaire.

ent in the surveyed households of single seniors, a high degree of saturation concerned automatic washing machines, refrigerators, and electric vacuum cleaners, and an average degree of saturation was noted for food processors and microwave ovens. The least common home appliances included dishwashers and electric cookers with ceramic hobs. All of the above-mentioned appliances save time, make housework more efficient, and facilitate the functioning of respondents at home.

When analyzing home appliances present in silver singles' households, it can be seen that households tend to replace the existing equipment with new appliances and purchase completely new, previously unknown products. A good example of this is the growing popularity of cordless vacuum cleaners powered by batteries that are slowly pushing traditional models off the market. Undoubtedly, cordless vacuum cleaners are ideal for people who appreciate effective and simple equipment and want the convenience of an unlimited range while cleaning. Another example of modern home appliances is an induction cooker, which is characterized by energy efficiency, high cooking speed, good functionality, and aesthetic values. Since it was designed for people who do not cook much and do not use kitchen equipment often, it is increasingly present in many households of silver singles.

### **Infotainment equipment and means of transport**

In addition to home appliances, equipment serving entertainment and leisure at home (so-called infotainment equipment) also plays a significant role, as well as means of transport allowing individual mobility.

The analysis of the infotainment equipment possessed by silver singles indicates a lower degree of its presence than that of home appliances. Nevertheless, the desire of people living alone for convenience and time savings can be seen not only in the automation of household chores but also in the growing interest in electronic devices.

A high level of saturation in single seniors' households can be noted only regarding television sets and mobile phones. Over 93% of silver singles had such devices. The study shows that among the owners of television sets, almost every fifth respondent had a TV set with full HD resolution, and every tenth person declared having

a TV set with a resolution of at least 4K. Moreover, the information obtained from the respondents shows that almost one in five households had two TV sets.

It should be noted that nowadays, the lack of a TV set in the household is not an indicator of the material status of the consumer. Currently, this trend is reversed. Namely, the lack of a TV set is not the result of, for example, financial problems but a conscious decision that is influenced by various factors. Such a trend may ensue from the increased activity of household members on the internet and from the virtualization of life, with the development of consumption as a consequence (watching films, listening to music, storing photos and documents on a computer, using a mobile phone or the internet). It is mostly young-old singles who act in this way. Most commonly, the oldest-old seniors do not possess a TV set at home, usually by their own choice.

A good whose popularity is constantly growing in the contemporary world, at a rate similar to the internet and with a similar effect on people's lifestyles, is the mobile phone. This is reflected in its more common presence in single seniors' households over just a few years. In the context of the conducted research, it can be concluded that over 96% of respondents have a mobile phone, which confirms a high degree of saturation of this good in households. Over 4/5 of single seniors can no longer imagine leading an everyday life without a mobile phone because the list of advantages of having a mobile phone is very long. For example, one can stay in touch with relatives and friends and call for medical help should a need arise. In turn, landline phones were more often owned by the oldest-old respondents who were in a better financial situation, were secondary school and university graduates, and lived in Łódź, Białystok, and Katowice.

For 3.9% of single seniors, the main reasons for not using a mobile phone were: having a landline phone, inability to operate such a device, and too low frequency of making and receiving calls. Such answers were most often given by the old-old and the oldest-old respondents. It is worth noting that reasons such as the lack of confidence in mobile phones and too-high prices of mobile phones are much more frequently

indicated by women. By the same token, men slightly more often said that a landline phone was enough and that they made and received calls rarely.

An average level of saturation can be noted in the case of devices for receiving fixed or cable TV broadcasts and personal computers with internet access. The study shows that only 34% of elderly people living alone use the internet. Young-old people indicated definitely more frequent use of a computer with internet access. It was also observed that those who were more educated declared more frequent use of a computer with access to the internet. The results, however, do not differ regarding the gender of single seniors. The main fears of using the internet, as most frequently indicated by the respondents, are the possibility of becoming a victim of fraud and no belief that they could learn how to use a web browser. Elderly people living alone, mostly the old-old and the oldest-old, use a computer (laptop) relatively rarely – only 26.5% of them declare doing so. The main barrier is the inability to use it, yet also no such need or no access to the equipment. Other barriers to the efficient use of information and communication technologies may be psychological obstacles, mainly fear of and anxiety (often unjustified) about addiction and loss of data, concerns about the security of one's online transactions, and the belief that the use of new technologies is the cause of dangerous radiation, as well as self-exclusion from the world of new technologies, which is very often associated with the aversion to all new things or changes and the conviction that one learns only until a certain age. This behavior of single seniors, especially the old-old and the oldest-old ones, can be explained by digital exclusion<sup>4</sup>, which may be related to the feeling of physical isolation and loneliness. Empirical data shows that digital exclusion is more common in the group of older people due to the so-called digital gap between younger and older adults. The digital gap consists of significantly greater access to the internet by younger people as compared to seniors. For most respondents, therefore, television remains the main me-

dium used on a daily basis. The marginal use of laptops and smartphones significantly limits the possibilities of bilateral communication with the outside world by means of ICT. On the other hand, the progressing digitization of services (including social ones) is focused on the use of state-of-the-art technologies, where access to the internet via a smartphone is the minimum necessity.

As for cable TV, it is used mainly by single seniors with secondary education, most commonly young-old and the oldest-old, with a monthly disposable income in the range of PLN 3,501.00–4,500.00, and living in Warsaw, Krakow, and Wrocław.

The surveyed households were equipped with DVD players and digital cameras at a low level. A very low level of possessions was noted for CD players, home cinema systems, printers, and landline phones.

The conducted survey reveals that the highest medium-term rate of decline in goods related to home entertainment, study, and information was observed with landline phones (a decrease of over 40%). Not having one mainly results from the fact that the respondents possess a mobile phone, which is sufficient for them (57.8%). A secondary reason, indicated by nearly one-third of those not using landline phones, is that they make phone calls rarely. The third factor is too-high prices of services (13.1%).

Analyzing the group of durable goods related to meeting mobility-related needs, an average degree of saturation with bicycles and passenger cars can be observed. In the examined period, these goods were owned by almost 2/5 of the respondents. Households of single seniors had two-wheeled vehicles (motorcycles, scooters, mopeds) at a minimum level. U3A students were better equipped with mobility-related durables than members of parochial clubs. The former owned more passenger cars, while the latter more often possessed bicycles and mopeds.

The study shows that the situation regarding durable goods present in single seniors' households has significantly improved in terms of quantity and quality; hence,

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<sup>4</sup> The concept of digital exclusion is an element of a wider phenomenon, described as digital inequality, which manifests itself in the exclusion of people who do not use the internet for active or passive participation in the digital society. Digital exclusion and related information exclusion, understood as a kind of social exclusion, are predictors of lower quality of life and lower subjective mental well-being [Böhnke and Silver 2014].



**Table 2.** Average lifetime of selected durable goods in households of single seniors (% of responses)

Type of goods	Age of goods			
	2018–2019		2021–2022	
	up to 5 years	more than 5 years	up to 5 years	more than 5 years
Automatic washing machine or tumble dryer	24.2	75.8	23.6	76.4
Corded or cordless vacuum cleaner	22.4	77.6	21.8	78.2
Refrigerator, freezer, or refrigerator-freezer	23.8	76.2	24.3	75.7
Electric cooker with ceramic or induction hobs	50.7	49.3	51.1	48.9
Food processor	28.4	71.6	26.3	73.7
Dishwasher	50.2	49.8	51.1	49.9
TV set	5.2	94.8	3.9	96.1
Device for receiving satellite or cable TV broadcasts	51.1	48.9	52.5	47.5
Home cinema	20.3	79.7	19.9	80.1
Radio-broadcast receiver	10.1	89.9	9.7	90.3
CD player	4.4	95.6	3.6	96.4
DVD player	20.1	79.9	18.6	81.4
Digital camera	27.3	72.7	21.9	78.1
Computer (laptop) with internet access	52.4	47.6	56.7	47.3
Printer	50.6	49.4	52.1	47.9
Landline phone	8.9	91.1	6.7	93.3
Mobile phone (including smartphone) – including up to 2 years	97.7 46.9	2.3 -	97.9 49.6	2.1 -
Bicycle (excluding children’s bicycles)	24.7	75.3	23.4	76.6
Motorcycle, scooter, moped	15.1	84.9	12.9	87.1
Passenger car	8.2	91.8	7.6	92.4

Source: Author’s research.

the structure of such assets is being modernized. The cathode ray tube TV set, monophonic radio-broadcast receiver, and tape recorder have practically disappeared. New goods have taken over and have been quickly adopted. In particular, many new goods have appeared in the field of ICT, notably devices for receiving satellite and cable TV broadcasts, hi-fi equipment, personal computers, the internet, and mobile phones. It should be emphasized here that the lack of some durable goods in the surveyed households of silver singles may result not so much from the lack of financial capabilities, but from the reluctance to own them.

### Lifetime of selected durable goods

The actual use of equipment for housework is primarily determined by its efficiency. Its efficiency can be inferred from its average lifetime. Appliances utilized longer than the so-called theoretical useful life are used to a limited extent. In general, their lifetime is closely correlated with the degree to which such goods are present in households. Therefore, it can be concluded that goods with a high and medium saturation level are those that are used for the longest period of time. In order to examine the most modern equipment present in silver singles’ households, it was assumed

that it had been used for up to five years, while the older generation included models used for five years and more. Older-generation equipment is considered as appliances that are less efficient, consume more electricity, are large, heavy, and do not meet the standards of use. Information on the average lifetime of home appliances, infotainment equipment, and means of transport is included in Table 2.

The data analysis reveals that in the examined period, the most modern infotainment equipment was a mobile phone (including a smartphone), owned by over 97% of silver singles. Slightly more than 2% of respondents had an older type of mobile phone used for more than 5 years, whereas a 2-year-old phone was owned by every second single senior. New equipment included a computer with internet access (about 54% of single seniors had it), a device for receiving satellite or cable TV broadcasts (every second silver single had it), and a printer (more than half of respondents possessed it). On the other hand, silver singles' households were poorly equipped with digital cameras (every third respondent had them), and DVD players and home cinemas were owned by only every fifth single senior. In turn, the oldest infotainment equipment used in singles' households includes a TV set and a CD player (over 96% of respondents had owned them for over five years) as well as a landline phone and a radio-broadcast receiver (over 93% of silver singles had owned them for over five years).

Regarding home appliances, the most modern ones used for less than five years turned out to be dishwashers and electric cookers with ceramic or induction hobs. Every second respondent had them. On the other hand, households were poorly equipped with new food processors (every third respondent had one) and automatic washing machines or tumble dryers and refrigerators or refrigerator-freezers. These appliances were possessed by only every fifth silver single. It should be borne in mind that households most often buy home appliances for a longer period because their age does not usually affect the quality of operation.

The study shows that in silver singles' households, means of transport are used for more than five years. The oldest means is a passenger car (more than 92% of

respondents had one aged more than five years), whereas the most modern one was a bicycle (more than 3/4 of single seniors had a bicycle aged more than five years).

Taking into account the percentage of households equipped with durable goods, divided according to the cities where the research was conducted, there is a slight variation in household equipment, while the scale of this variation is correlated with the type of durable goods.

A detailed analysis of the obtained information, with consideration of individual independent variables, made it possible to observe certain regularities.

The situation regarding the equipment of the surveyed silver singles' households is statistically significantly influenced by their belonging to a specific income group ( $VC = 0.281$ ,  $p < 0.01$  in the first stage of the research and  $VC = 0.291$ ,  $p < 0.01$  in 2021–2022). The fewest differences were noted for the possession of such durable goods as: a refrigerator/refrigerator-freezer, an automatic washing machine or a tumble dryer, a corded or cordless vacuum cleaner, a TV set, and a mobile phone. Households of single elderly people with a monthly income of above PLN 4,500.00 significantly more frequently declared having such items as: a dishwasher, a home cinema system, and a digital camera.

The level of education of single seniors was also a variable with a very strong differentiating power regarding the standard of equipment present in the surveyed households. The strength of the relationship between the two variables is reflected in the value of Cramér's  $V$  coefficient,  $VC = 0.126$ ,  $p < 0.01$  in 2018–2019 and  $VC = 0.119$ ,  $p < 0.01$  in the second stage of the research. It was observed that households of single elderly people with primary education were significantly more often equipped with older-generation equipment than the remaining households. This conclusion is particularly relevant to the comparison of household equipment possessed by silver singles with divergent levels of education.

Statistically significant opinions expressed by the respondents on their durable goods were differentiated by their self-assessed satisfaction with the assessment of their current financial situation ( $r = 0.216$  to  $0.291$ ,  $p = 0.01$ ). Age also had a statistically significant im-

**Table 3.** The level at which needs are satisfied with regard to selected durable goods in silver singles' households (% of responses)

Type of goods	Level of satisfaction of needs					
	completely satisfied		average level		unsatisfied	
	2018–2019	2021–2022	2018–2019	2021–2022	2018–2019	2021–2022
Washing machine and electric spin-dryer or laundry machine	85.5	90.6	5.2	3.1	9.3	6.3
Electric vacuum cleaner	96.9	99.2	1.8	-	1.3	0.8
Refrigerator or freezer	99.3	99.7	0.3	0.1	0.4	0.2
Electric cooker with ceramic or induction hobs	72.5	80.7	12.1	8.9	15.4	10.4
Microwave oven	73.9	79.2	17.3	14.9	8.8	5.9
Food processor	61.2	64.3	26.6	21.5	12.2	14.2
Dishwasher	38.4	56.2	39.7	27.9	21.9	15.9
TV set	93.5	94.1	1.0	1.0	5.5	4.9
Device for receiving satellite or cable TV broadcasts	50.9	59.8	36.0	30.4	13.1	9.8
Home cinema	68.9	71.6	11.9	18.2	19.2	10.2
Radio or radio tape recorder with CD player	73.2	81.5	19.0	12.9	7.8	5.6
VCR player	61.8	63.8	17.1	16.8	21.1	19.4
DVD player	58.6	64.8	25.9	21.3	15.5	13.9
Digital camera	56.3	51.9	31.3	36.2	12.4	11.9
Computer (laptop) with internet access	72.1	74.4	16.0	15.0	11.9	10.6
Printer	51.2	53.1	28.0	26.7	20.8	20.2
Landline phone	68.4	71.3	19.5	19.1	12.1	9.6
Mobile phone	96.6	97.8	2.3	1.2	1.1	1.0
Bicycle (excluding children's bicycles)	60.4	61.7	19.4	20.2	20.8	18.1
Motorcycle, scooter, moped	38.2	36.9	26.7	24.9	35.1	38.2
Passenger car	55.6	57.1	23.2	22.8	21.2	20.1

Source: Author's research.

pact on the respondents' opinions. It should be stressed here that with age, the number of people indicating an improvement in the standard of household equipment decreased ( $r = -0.151$ ,  $p = 0.01$  in the first stage of the research and  $r = -0.147$ ,  $p = 0.01$  in 2021–2022), as did the number of people expecting an improvement in this respect in the near future ( $r = -0.211$ ,  $p = 0.01$  in 2018–2019 and  $r = -0.223$ ,  $p = 0.01$  in the second stage of the study). In turn, slightly lower values of correlation coefficients were noted for changes to take place in the future, depending on the degree of satisfaction

with possessed durable goods ( $r = 0.109$ ,  $p = 0.01$  in the first stage of the research and  $r = 0.109$ ,  $p = 0.01$  in 2021–2022) and the self-assessed current situation ( $r = 0.104$ ,  $p = 0.01$  in 2018–2019 and  $r = 0.105$ ,  $p = 0.01$  in the second stage of the research).

### The level of satisfaction of needs regarding durable goods

The level of satisfaction of needs regarding durable goods is strongly correlated with the level of household wealth. Durable goods owned by the surveyed

seniors' households met their needs to varying degrees (Table 3).

In the analyzed period, the level at which silver singles' needs in this respect were met increased by 5.3%. The study shows that 68.3% of silver singles in the first stage of the research and 71.9% in the second stage said that their needs in terms of durable goods were completely fulfilled. On the other hand, every fifth single senior in the first stage and every sixth in the second stage assessed the extent to which their needs in this area were fulfilled as average. Every seventh respondent in 2018–2019 and over every eighth in 2021–2022 considered that their needs were unsatisfied.

In the context of the obtained results, it can be stated that the surveyed households of single elderly people are increasingly better equipped with home appliances, infotainment equipment, and means of transport. This undoubtedly translates into the level at which the needs regarding durable goods are satisfied. The research findings indicate that in both its stages, seniors actively attending U3A courses better assess the level of satisfaction of their needs regarding durable goods more frequently than members of parochial clubs.

## CONCLUSIONS

The conducted analysis of durable goods possessed by urban households of silver singles in Poland allows for drawing the following conclusions:

1. Households of single elderly people are better equipped with home appliances than with infotainment equipment and means of transport.
2. Regarding home appliances, silver singles are best equipped with automatic washing machines, corded or cordless vacuum cleaners, refrigerators, or freezers. The worst situation regards electric cookers with ceramic or induction hobs and dishwashers. In the case of infotainment equipment, high saturation levels concern TV sets and mobile phones, whereas low saturation levels are noted for CD players, home cinema systems, and printers.
3. Almost every third single senior, mostly the old-old and the oldest-old, is affected by digital exclusion, which may be related to the feeling of

physical isolation and loneliness.

4. The most modern equipment owned by single people is a mobile phone, an electric cooker with ceramic or induction hobs, and a dishwasher, while the oldest equipment includes a TV set, a CD player, and a landline phone.

Taking into account the presented survey results, some limitations ensuing from a small research sample should be borne in mind. Following the conclusions made, they should not be treated as representative of the population of silver singles in Poland. They only allow for providing some insight into housing conditions and satisfaction with the place of residence and durable goods present in silver singles' households.

This publication should contribute to a broader discussion and exchange of views on the home infrastructure of single seniors, thereby encouraging other scholars and researchers in Poland from various scientific and research centers to carry out extensive research in this area.

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## WYPOSAŻENIE W DOBRA TRWAŁEGO UŻYTKU MIEJSKICH GOSPODARSTW DOMOWYCH SREBRNYCH SINGLI W POLSCE

### STRESZCZENIE

**Cel:** Celem artykułu jest przybliżenie infrastruktury domowej w gospodarstwach domowych samotnych seniorów. Można wnioskować, że infrastruktura domowa w gospodarstwach samotnych osób starszych ulega ciągłej poprawie, co znajduje bezpośrednie odzwierciedlenie w lepszym zaspokojeniu odczuwanych potrzeb.

**Metody:** Badanie zostało przeprowadzone w dwóch etapach w latach 2018–2022. Pierwszy z zaplanowanych etapów badań został przeprowadzony na próbie 3167 starszych singli w okresie od 1 lutego do 30 października 2018 roku oraz od 1 maja do 30 października 2019 roku. Z kolei drugi etap badań przeprowadzono od 1 marca do 30 września 2021 roku, a następnie od 6 lutego do 30 września 2022 roku na próbie 3834 osób starszych żyjących w pojedynkę. Zgodnie z przyjętymi założeniami badawczymi, w próbie znalazły się wyłącznie osoby żyjące samotnie w wieku 65 lat i więcej, które podejmowały suwerenne decyzje konsumenckie



na rynku. **Wyniki:** W analizowanym okresie zaobserwowano wzrost wyposażenia gospodarstw domowych prowadzonych przez samotną osobę starszą w niemal wszystkie dobra trwałego użytku, co jest niewątpliwie konsekwencją większej powszechności i dostępności tych dóbr, m.in. poprzez łatwość kredytową i coraz niższe ceny produktów. Analizując wyposażenie gospodarstw domowych srebrnych singli w zmechanizowany sprzęt gospodarstwa domowego można dostrzec wymianę posiadanego sprzętu na nowy, jak i zakup zupełnie nowych, nieznanych dotąd produktów. Analiza stanu posiadania poszczególnych sprzętów informacyjno-rozrywkowych wskazuje na niższy stopień ich upowszechnienia niż zmechanizowanych sprzętów gospodarczych. **Wnioski:** W kontekście uzyskanych wyników można stwierdzić, że badane gospodarstwa domowe samotnych osób starszych są coraz lepiej wyposażone zarówno w sprzęt zmechanizowany, informacyjno-rozrywkowy, jak i sprzęty związane z mobilnością. Ma to niewątpliwie swoje przełożenie na poziom zaspokojenia potrzeb w zakresie dóbr trwałego użytku. Wyniki badania wskazują, że w obu jego etapach, seniorzy uczestniczący aktywnie w zajęciach organizowanych przez UTW częściej niż badani uczestniczący we wspólnotach parafialnych, lepiej oceniają poziom zaspokojenia swoich potrzeb w dobra trwałego użytku.

**Słowa kluczowe:** srebrni single, infrastruktura domowa, dobra trwałego użytku