



AFE^{CO}

EMPOWERING OLDER ADULTS TO APPLY AFFORDABLE
ECO- AND AGE-FRIENDLY SOLUTIONS TO AGE IN PLACE

AFECO – National report of Poland

A1 literature review /A2 comparative analysis of barriers and facilitators
/A3 good practices



WROCLAW UNIVERSITY
OF ENVIRONMENTAL
AND LIFE SCIENCES



Co-funded by
the European Union

The AFECO project is co-funded by the European Union's Erasmus + KA220-ADU – Cooperation partnerships in adult education programme under grant agreement no. 2022-1-NL01-KA220-ADU-000086242. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

About this publication

This report summarises the results of the research activities carried out in Poland within the Erasmus+ project AFECO – Empowering older adults to apply affordable eco- and age-friendly solutions to age in place (cooperation partnership in adult education, project number: 2022-1-NL01-KA220-ADU-000086242). More information is available at <https://afeco.eu/>.

Authors

Rengin Aslanoglu, Jan Kazak

Uniwersytet Przyrodniczy We Wrocławiu

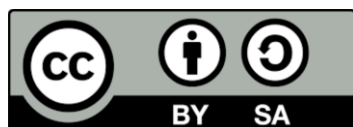
rengin.aslanoglu@upwr.edu.pl

jan.kazak@upwr.edu.pl



WROCLAW UNIVERSITY
OF ENVIRONMENTAL
AND LIFE SCIENCES

Copyright © 2023 [SHINE 2Europe, Lda]



This publication is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/) (CC BY-SA 4.0) License.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Co-funded by the
European Union

TABLE OF CONTENTS

About this publication	2
Authors	2
TABLE OF CONTENTS	3
List of definitions	4
Definition of age-friendly principles	4
Definition of eco-friendly principles	4
Introduction.....	6
Results of Poland	6
Age-friendly principles in Poland.....	7
Eco-friendly principles in Poland	10
Age-friendly and eco-friendly principles in Poland	11
Analysis of factors, variables or parameters that affect the implementation of age- and eco-friendly principles	11
Gaps and challenges	13
Needs and requirements of older adults	13
Education.....	13
References	15

List of definitions

Definition of age-friendly principles

Any practical solutions linked to one or more of the eight domains of the age-friendly cities framework that older adults themselves or with the support of others can implement in their own home or community. Any practical solutions linked to one or more of the eight domains of the age-friendly cities framework that in AFECO older adults can implement themselves or with the support of others in their own home or community. The World Health Organization (WHO, 2007, 2016, 2023) developed the age-friendly cities framework to encourage and support active and healthy living by enhancing opportunities for health, participation and security to improve the quality of life of the ageing population. The eight domains of the framework are as follows: outdoor spaces and buildings; transportation; housing; social participation; respect and social inclusion; civic participation and employment; communication and information; and community support and health services.

According to (Menec et al, 2017), Age-friendly principles “(...) support and enable people to age actively (...) with the notion of “active aging” broadly defined in terms of health, participation, and security.”

Definition of eco-friendly principles

Any practical solution that older adults themselves or with support of others can implement in their own home or community to act more sustainable or environmentally friendly. Environmentally friendly means that the practical solutions should aim to reduce, minimise the impact on, or do no harm to ecosystems or the environment (Webster).

According to Ragheb et. al (2016), a building to be considered “green” or “eco-friendly” needs to have:

- Ventilation systems designed for efficient heating and cooling
- Energy-efficient lightning and appliances
- Adaptive reuse of older buildings
- Water-saving plumbing fixtures
- Landscapes planned to maximize passive solar energy
- Minimal harm to the natural habitat
- Alternate power sources such as solar power or wind power
- Non-synthetic, non-toxic materials
- Locally-obtained woods and stone
- Responsibly-harvested woods

- Use of recycled architectural salvage
- Efficient use of space

Introduction

This report aims to give an overview of current state of the art in the occurrence and policies regarding affordable age-friendly and eco-friendly solutions in the partner countries. The report consists of the findings from the literature review, the comparative analysis and the reporting of good practices. It aims for the consortium as a whole to gain an understanding of the state of the art and on affordable age and eco-friendly solutions in partner countries and particularly the home and community fields, and to present that knowledge in the form of a written report.

The literature review, the analysis of barriers and facilitators, and the survey on existing or even planning good practices in the project countries, will help the partners to build and update a strong knowledge base in these fields. To be closer to the practical issues that define the adaptability of eco and age-friendly solutions in community, the consortium decided to use mostly grey literature and websites for tools and advice, such as governmental pages. Common grey literature publication types include reports (annual, research, technical, project, etc.), working papers, government documents, white papers and evaluations, which will help all partners to reach conclusions around the common field between age and eco-friendly developments.

Barriers and facilitators found in each project country will be used for stipulating the right consequence of actions needed to propose a sound methodology that could – in combination with other actions and stakeholders – promote the implementation of age and eco-friendly principles into the public and private sphere of care for older people.

Finally, the selection of good representative practices by each project country can be the basis for a report, and a publication, that depicts the level of maturity and progress of the notions of age-friendliness and eco-friendliness, as well as their impact on the care of older people.

Results of Poland

Today, Poland is one of the youngest countries in the European Union but it will rapidly turn into one of the oldest (EUROSTAT, 2020; Mikołajczyk, 2023). The population aged 65 and over was 18.7% in December of 2021 (GUS, 2021). Polish older adults are also the most dependent on other people in terms of living with the lowest percentage of independent living arrangements in the whole European Union (Kazak et al., 2017).

Care for older adults considers the family as the main provider—reliance on family commitment.

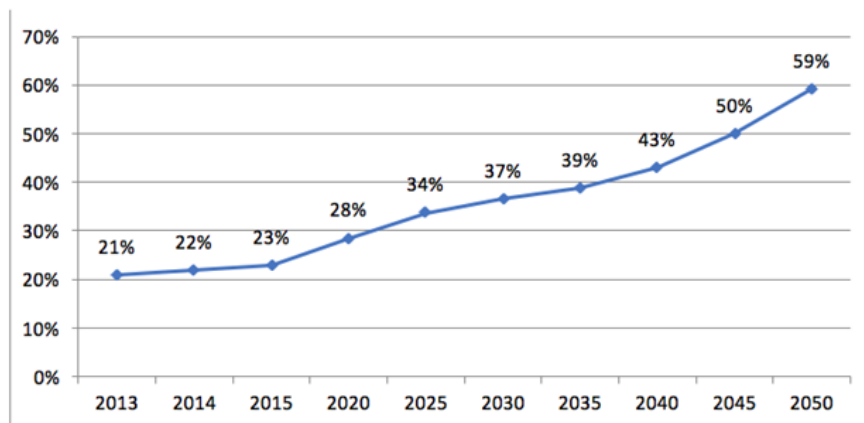


Figure 1 - Dependency ratio of the elderly population in Poland (Figure taken from: Schubert, A., Czech, M., and Skrzekowska-Baran, I. (2018). Aging society: Organization of long-term care for the elderly in Poland. Journal of Health Policy and Outcomes Research, (1), 44-50.)

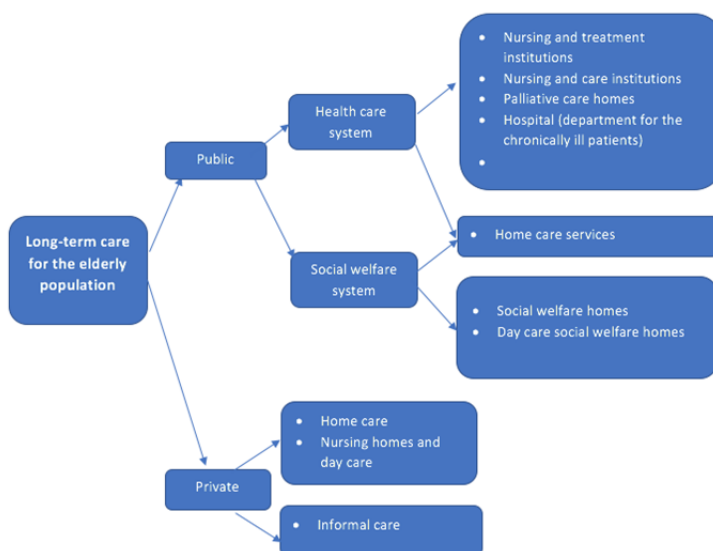


Figure 2 - Organization of long-term care for the elderly population in Poland (Figure taken from: Schubert, A., Czech, M., and Skrzekowska-Baran, I. (2018). Aging society: Organization of long-term care for the elderly in Poland. Journal of Health Policy and Outcomes Research, (1), 44-50.)

Age-friendly principles in Poland

The European Year for Active Aging and Solidarity between Generations in 2012 and the country's 2004 entry into the EU contributed to including this issue on the policy agenda (Ruzik et al., 2013). Poland being placed fourth-to-last in the domain of older workers' employment and last in the domain of involvement in society in the first edition of the Active Ageing Index (Zaidi et al., 2013) also facilitated age-related agenda. The Ministry created a new Department of Seniors Policy in response to the rankings.

There are several policies and programs that are undertaken at the central/national level in the domain of older adults. Below major activities in that field are described.

- At the public policy level, the critical document is “Social Policy for Older Persons 2030. Safety – Participation – Solidarity” (SPOP) adopted in 2018 by the Council of Ministers in its resolution No 161 as the long-term senior citizens' policy (Council of Ministers, 2018). The document is programmatic in nature and provides for the implementation of a number of activities for older adults in the area of shaping a positive perception of old age in society, participation in social life, and supporting all forms of civic, social, cultural, artistic, sports and religious activities. Its aim is to create conditions for solidarity and intergenerational integration, and to use the potential of older adults as active participants in economic life and the labor market, adapted to their psychophysical capabilities and family situation. It refers to activities in the areas of education, health, and safety of older adults.
- Another important document with the potential to counteract age discrimination and ageism was adopted in May 2022 – the Council of Ministers’ Resolution on the National Action Programme for Equal Treatment for 2022-2030 – NAPET. The program is being developed by the Government Plenipotentiary for Equal Treatment (GPET) and is aimed at raising public awareness of equal treatment, including the roots and RASP – Research on Ageing and Social Policy, consequences of violations of the principle of equal treatment; countering violations of the principle of equal treatment; cooperation with social partners, NGOs and other entities in the field of equal treatment (Council of Ministers, 2022).
- In addition, there are long-term programs, including the “Active+” Programme for 2021-2025. It aims to support NGOs by providing funding for projects in four priority areas: education, social activity promoting intra- and inter-generational integration, social participation, and social services for older adults. The long-term program for the elderly "Active+" for the years 2021-2025 contributes to an increase in the involvement of older adults in social contacts by enriching the offer for managing their free time, increasing the involvement of older adults in participatory processes taking place in public life, improving seniors' digital competences and shaping attitudes conducive to the use of new technologies in everyday life, and building a positive image of old age and aging, as well as developing social competencies (knowledge, skills, attitudes) towards old age in people of all ages. The “Accessibility +” Programme 2018-2025 was adopted to ensure access to goods, services, and the ability to participate in social and public life for people with special needs, including older adults¹. Another program, “Senior+” for 2021-2025 is addressed to local government units and consists in developing a network of day-care facilities for older adults. The “Care 75+” Programme is addressed to local authorities of up to 60 thousand residents, which receive financial support of up to 50% of the expected costs of providing care services, including specialist care services (MFSP, 2021). A

¹ https://www.funduszeuropejskie.gov.pl/media/72628/Dostepnosc_angielski.pdf

government program called Medicine 75+ was launched to provide free medicines (mostly for chronic diseases) for older adults over 75 (Plisko and Rutkowski, 2018).

- ASOS (the Government Program for Social Participation of Senior Citizens, in Polish: Rządowy Program na rzecz Aktywności Społecznej Osób Starszych). Its key areas for action in the senior policy are: health and independence; economic activity; educational activity, social and cultural activities; silver economy and intergenerational relations². ASOS is one of the main instruments of an active aging policy programmed and financed in Poland after 1989 at the national level. It was developed as a result of two processes: the accession of Poland to the European Union (EU), where support for the active aging of the elderly is a part of the social investment policy (Wiktorska-Święcka et al., 2017) and the ongoing process of population aging in Poland. ASOS has been developed by the Ministry of Labor and Social Policy (in Polish: Ministerstwo Pracy i Polityki Społecznej; MPiPS) since 2012, as a response to the challenges which have emerged as a result of demographic and social changes in Poland (Michalewska-Pawlak and Klimowicz, 2021). ASOS has a comprehensive character because its implementation is oriented towards the improvement in the quality of life of older adults in varied aspects.
- At the state level, the Department of Senior Policy was established within the ministry responsible for social policy in 2012. In 2013 the first Senior Policy Council was created as a consultative body of the Minister of Family, Labour, and Social Policy – MFLSP (since 2020 Minister of Family and Social Policy).
- Senior Citizens Days- Senior programs implemented by the Ministry of Family, Labour and Social Policy³.

Additional to national actions, the local administration also undertakes many good practices to improve the quality of life of older adults in their communities, which vary according to local needs or opportunities. Some examples are **senior clubs** (offering different workshops and activities as well as a place for networking), programs that assign special status to citizens (offering discounts or free admissions to selected services, both public and private), or **universities of the third age** (offering different courses at universities). The common approach in the case of many municipalities is that topics concerning older adults are managed by specific units in local administration, which confirms the importance assigned to that field by local governments. Information about local activities is also very often collected and shared via websites (examples: <http://www.seniorzy.wroclaw.pl/>, <https://dlaseniorka.krakow.pl/>).

Example of good practices: The University of the Third Age promotes lifelong learning to keep the body and the mind healthy. Its target audience is older adults. The Statistics Poland research Population Projection 2014–2050 findings show that the aging population trend will

² <https://www.gov.pl/web/rodzina/ogloszenie-o-otwartym-konkursie-ofert-w-ramach-programu-wieloletniego-na-rzecz-osob-starszych-aktywni-na-lata-20212025-edycja-2023>

³ <https://www.gov.pl/web/family/international-day-of-older-persons-on-the-polish-policy-regarding-seniors#:~:text=International%20Day%20of%20Older%20Persons%20On%20the%20Polish%20policy%20regarding%20seniors,-01.10.2020&text=The%20International%20Day%20of%20Older,for%20a%20wise%20senior%20policy>

accelerate. Hence, lifelong learning becomes important for increasing the quality of life of older adults, whose population is steadily growing.

The University of the Third Age concentrates on educational, artistic, and recreational activities, allowing its participants to exchange knowledge, skills, and interests in a welcoming setting. A wide range of classes and training in foreign languages, sports, leisure activities, yoga, computer fundamentals, and Internet use are all part of a diversified curriculum that is specially designed for older adults. The University of Third Age provides the framework for the expansion of further organisations for senior citizens. A deeper experience, more understanding of one's own life, and development of a new identity via the interpretation of earlier life events can all result from learning as an older adult (Czerniawska, 2007). It is also essential for the development of preventive gerontology. Topics covered in its courses include healthcare and addressing the sociopsychological needs of the aged (Szwarc, 1993). Universities specifically designed for older individuals provide these groups greater autonomy while preventing alienation among their members, who often find it difficult to keep up with the world's changes.

There are four main types of practice: as independent non-governmental organisations, as distinct organisational units within another non-governmental organization, as entities functioning within the structures of higher education institutions, and as entities that are part of the organisational bodies of local authorities (Gierszewski and Kluzowicz, 2021). The most common of these forms is operating independently as associations (Jachimowicz and Nalepa, 2012). The University of the Third Age strives to hire qualified academic staff, which ensures that students receive an acceptable level of education. On the other hand, they also strive to be independent and explore new funding streams for their endeavors. The students' council often has a significant impact on a chairman's or manager's actions, and its management is frequently based on representative organisations established through regular elections.

The University of the Third Age is an ongoing practice. It provides older adults with greater chances of achieving life satisfaction and well-being. Also, they have been operating for a long time in Poland, so they have created specialized educational programs that are better suited to the requirements of older adults.

The educational demands of studying older adults should, however, be routinely identified and examined, and the educational programs provided by these institutions should be continuously updated and augmented (Istance, 2015).

Eco-friendly principles in Poland

Under the “State Environmental Policy 2030”, approximately PLN 72 billion (16.8 billion EUR) was spent in the years 2018-2020 for the implementation of environmental protection projects in Poland, and PLN 146 billion will be spent in the years 2021-2025.

Most people aged 65 and over live in their own houses or flats. In the social rental sector, about 12% of such households exist. Considering the data for the total population, members of “older” households more often own flats or cooperative rights to accommodations and less frequently rent flats on the commercial market (Informacja o sytuacji osób starszych za rok 2016, Warszawa

2017 r.). At present, the majority of older adults (around 85%) live independently. As people get older, the share of single-person households increases. Among people aged 80 and over, approx. 60% run single-person households and demographic forecasts indicate that the number of such households will rapidly increase (MFSP, 2021). A survey conducted by Zalega (2018b) shows that seniors in the 75-84 age group occupied the smallest flats (31.75 m² – 39.87 m²), taking into account both the number of rooms and usable area. The biggest dwellings were used by seniors aged 65-74 (77.69 m² – 82.62 m²). In the context of the findings, it is worth noting that those households paid the highest fixed costs (electricity, gas, rent, and other fixed charges).

Renewable energy sources (RES) are used exclusively in households of older people living in single-family detached or semi-detached houses. However, a small percentage of seniors stated that they had invested in alternative energy sources to produce electricity and heat, representing 1.5% of all the households surveyed (23% of all interviewed households living in single-family detached or semi-detached houses). It can be concluded that the most important determinants of the use of alternative energy sources include, on the one hand, expected savings on current bills, and, on the other, willingness to become partially independent of indeed constantly growing prices of conventional energy sources (almost 90% of respondents indicated the first option, and the second was chosen by more than 3/4 of the seniors interviewed). This distribution of responses reveals the interrelatedness of both motives that drive the households of people aged 65+ to invest in renewable energy sources (Zalega, 2018b).

Example of a good practice: GreenSAM⁴ Interreg- Co-funded by the EU (2019-2021)

Several cities in the Baltic Sea region are implementing green urban mobility options, however, older adults often remain reluctant towards these alternatives. Project partners (the Municipality of Gdansk from Poland) addressed three specific mobility challenges; to make bicycle sharing systems more age-friendly, to develop public transport systems more age-friendly, and to design public spaces in a way that seniors feel more confident with green mobility modes.

The GreenSAM project aims to increase the acceptance of eco-friendly mobility services among senior citizens. The project encouraged behavior change among the user group of older adults, helped public authorities to gain structured knowledge on user needs, and increased needs-driven decision-making in urban mobility planning.

Age-friendly and eco-friendly principles in Poland

Analysis of factors, variables or parameters that affect the implementation of age- and eco-friendly principles

A survey conducted by Zalega (2018a) showed that the environmental awareness of seniors is unsatisfactory, and their responses were often inconsistent. The senior respondents believed in individual responsibility for protecting the environment. It should be noted that almost every

⁴ <https://greensam.eu/>

second respondent does not feel the need to look for information about the natural environment and its protection on their own. More than 70% of respondents are satisfied with what they hear about environmental protection in public media. Only every fifth senior gains information about the environment and its protection from magazines, scholarly studies, thematic lectures organised at Universities of the Third Age, and from their own observations.

Senior citizens often mention financial problems as the key barrier to developing renewable energy projects. The primary reason is high investment expenditure. Seniors' households that benefit from energy from renewable sources are generally those that are wealthy, with a monthly disposable income exceeding PLN 4000.00 per capita, and that report higher or secondary education (Zalega, 2018b). The structure of monthly expenditure of seniors' households is dominated by spending on food and non-alcoholic beverages (GUS, 2021).

In 2021, according to the "Survey on the use of information and communication technologies", household use of the Internet (in the last three months preceding the study) was reported by 57.6% of people aged 60–74 (58.2% of women and 56.9% men). Compared to the previous year, there was an increase in the share of Internet users at this age by 6.2 pp, although the share of Internet users in this age group was still much lower in comparison with younger people, among whom 94.8% used the Internet (users aged 16–59) (GUS, 2021).

The Internet was used regularly, at least once a week, by 54.0% of 60–74-year-olds. The percentage of regular Internet users was not differentiated by gender. The frequency of Internet use depended more on the level of education. Among seniors aged 60–74 with primary or lower secondary education, the percentage of regular Internet users in 2021 reached 21.4%, while for those with secondary education, it equaled 50.3%, and for those with tertiary education – 91.3% (GUS, 2021).

Older adults most often used smartphones and laptops to use the Internet. These devices were used by 44.6% and 32.1% of people aged 60–74 respectively. The most commonly reported reasons for not using the Internet by the population aged 60–74 (within the last 3 months) is: a lack of need or a lack of necessary skills. In 2021, the percentage of persons aged 60–74 in the total seniors not using the Internet because of the above-mentioned reasons equaled respectively as follows 27.4% and 23.1%. Excessive costs or a lack of necessary equipment hindered only 1.3% and 6.8% of persons in this age group (GUS, 2021).

In the healthcare area, there are currently no commonly available solutions in the area of telecare and telemedicine, which could be used in the support and supervision of the elderly while reducing caregiver strain and stress and improving the safety of seniors^{5,6}.

⁵ <https://senior.gov.pl/program/asos/strona/5>

⁶ https://www.ohchr.org/sites/default/files/Documents/Issues/OlderPersons/MIPAA/NHRI_Poland_Annex1.pdf

Gaps and challenges

The problems connected with rapid aging differ in various regions of Poland, with marked differences between provinces and large and small municipalities; the largest metropolitan cities can expect to increase their population through internal and external migration, but depopulation processes are progressing in some regions, particularly less developed ones (Duszczek et al., 2019; Perek-Białas et.al., 2017; GUS 2021).

Educational initiatives often do not reach older adults equally (the significant feminization among participants in educational activities and the disproportion of access to educational activities in the countryside and in small cities)^{5,6}.

The majority of the policies and programs are in the areas of social services, health, and community support and are mostly associated with the work of the Ministry of Family and Social Policy, Department of Senior Policy, and other pertinent departments there as well as the Ministry of Health. Also, it is possible to say that there is a lack of a comprehensive aging policy because of having diverse policies toward older adults in certain areas but not in a holistic way (Mikołajczyk, 2023).

Needs and requirements of older adults

- creating system solutions for the learning of older people in the field of digital literacy
- development of the intergenerational education system, especially in this thematic area
- dissemination of the benefits of having digital skills and practices in the context of new technologies among seniors
- supporting educational activities in the use of modern technology in the service of the elderly to enable seniors and people with disabilities to live independently and as full as possible social active
- disseminating the results of research on modern technologies for and with the participation of older people and support their implementation.

Education

Older adults' most common areas of education include health education, citizenship, and new technologies. However, there is currently a lack of appropriate forms of education and learning in Poland that effectively support people over 65. The existing training is not conducted in a manner appropriate to the needs and predispositions of those people. Information about their training is also not widely available. There is also a wide variation of access to the educational offer, depending on local conditions (especially occurring limited educational services in smaller towns and rural areas)^{5,6}.

An expression of the effects of the environmental civil society senior's movement is a dynamic development of organised forms of learning that meet the growing need in this environment, the extension of formal education, and provide access to non-formal education and informal

education. This activity is carried out by a diverse group of stakeholders, non-governmental organisations, institutions, and companies with the profile of education and training, and some cultural institutions (libraries, community centers) to the most organised and most widely generalised form, which is the movement of Universities of the Third Age (UTA). However, the estimated number of all participating in these activities seniors is a very small percentage of the total number of elderly people in Poland. People who use this type of activity are mainly older people with higher or secondary education. Thus, the offer of UTA is often not addressed or does not reach other elderly. Additionally, it is possible to notice the significant feminisation among participants in educational activities and the disproportion of access to educational activities in the countryside and in small cities^{5,6}.

In Poland, a large part of the care sector is provided by informal carers. Palliative private care or outside the formal labour market is not currently monitored. Carers are usually not trained to be caregivers to an elderly person or in terms of ergonomic working conditions⁶.

References

Council of Ministers. (2018) Uchwała nr 161 Rady Ministrów z dnia 26 października 2018 r. w sprawie przyjęcia dokumentu Polityka społeczna wobec osób starszych 2030. Bezpieczeństwo – Uczestnictwo – Solidarność [Resolution No. 161 of October 26, 2018 on the Social Policy Towards Older Persons 2030. “Safety - Participation – Solidarity”, MP 2018, item 1169. <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WMP20180001169/O/M20181169.pdf>

Council of Ministers. (2022) Uchwała Nr 113 Rady Ministrów z 24 maja 2022 r. w sprawie ustanowienia Krajowego Programu Działań na Rzecz Równego Traktowania na Lata 2022-2030 [Resolution no. 113 of 24 May 2022 on the National Action Programme for Equal Treatment for 2022-2030]. MP 2022, item 640. <https://www.infor.pl/akt-prawny/MPO.2022.186.0000640,uchwala-nr-113-rady-ministrow-w-sprawie-ustanowienia-krajowego-programu-dzialan-na-rzecz-rownego-traktowania-na-lata-20222030.html>

Czerniawska, O. (2007) ‘Szkice z andragogiki i gerontologii [Andragogy and gerontology: Selected aspects]’, Łódź: Wyższa Szkoła Humanistyczno-Ekonomiczna.

Duszczyk, M., Lesińska, M. and Matuszczyk, K. (2019) ‘Upolitycznienie problemu starzenia się społeczeństwa w Polsce’, *Teoria i praktyka, Wydawnictwa Uniwersytetu Warszawskiego, Warsaw, 10*.

EUROSTAT. (2020) Ageing Europe - statistics on population developments. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ageing_Europe_-_statistics_on_population_developments#Older_people_.E2.80.94_population_overview

Gierszewski, D. and Kluzowicz, J. (2021) ‘The role of the University of the Third Age in meeting the needs of older adult learners in Poland’, *Gerontology & Geriatrics Education, 42(3)*, pp. 437-451.

GUS (Główny Urząd Statystyczny). <https://stat.gov.pl/en/topics/older-people/older-people/the-situation-of-older-people-in-poland-in-2021,1,4.html>

Informacja o sytuacji osób starszych za rok 2016, Warszawa 2017 r. https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/6002/1/2/1/informacja_o_sytuacji_osob_starszych_w_2017.pdf

Istance, D. (2015) ‘Learning in retirement and old age: An agenda for the 21st century. *European Journal of Education*’, 50(2), pp. 225-238.

Jachimowicz, D. and Nalepa, W. (2012) *Tworzenie uniwersytetu trzeciego wieku – Krok po kroku [Organising a third age university - step by step]*. Wydawnictwo OFSUTW

Kazak J., van Hoof J., Świąder M. and Szewrański S. (2017) ‘Real Estate for the Ageing Society – the Perspective of a New Market’, *Real Estate Management and Valuation, 25(4)*, pp. 13-24.

Kobylarek, A., Błaszczński, K., Ślósarz, L., Madej, M., Carmo, A., Hlad, Ľ., Králik, R., Akimjak, A., Judák, V., Maturkanič, P. and Biryukova, Y. (2022) ‘The quality of life among university of the third age students in Poland, Ukraine and Belarus’, *Sustainability, 14(4)*, pp.2049.

MFSP. (2021) National report – POLAND, Information on the actions taken for the benefit of elderly people as part of the fourth review appraisal cycle of the implementation of the Madrid International Plan of Action on Ageing its Regional Implementation Strategy (MIPAA/RIS) 2017 – 2021. <https://unece.org/sites/default/files/2021-10/mipaa20-report-poland.pdf>

MFLSP. (2019) Ministerstwo Rodziny, Pracy i Polityki Społecznej. Informacja o sytuacji osób starszych w Polsce za rok 2018 [Ministry of Family Labour and Social Policy Information on the Situation of Older Persons in Poland for 2018]. <https://www.gov.pl/web/rodzina/informacja-o-sytuacji-osob-starszych-w-polsce-za-rok-2018>

Michalewska-Pawlak, M. and Klimowicz, M. (2021) 'The impact of the Government Program for Social Participation of Senior Citizens (ASOS) on social activation of the elderly in Poland: Findings from a qualitative study', *Studia z Polityki Publicznej*, 8(1(29)), pp. 9-25.

Mikołajczyk, B. (2023) 'Addressing ageism in Polish ageing policy—critical remarks', *Research on Ageing and Social Policy*, 11(1), pp. 1-28.

Perek-Białas, J., Sagan, I., Stronkowski, P. and Szukalski, P. (2017) 'Regional approaches to demographic change in Poland', *Demographic transition, labour markets and regional resilience*, pp. 29-72.

Plisko, R. and Rutkowski, J. (2018), 'PIH34-PROGRAM 75+-FREE MEDICINES FOR THE ELDERLY', *Value in Health*, 21(S1-S481), p. S218.

Ruzik-Sierdzińska, A., Perek-Białas, J. and Turek, K. (2013) 'Did the transition to a market economy and EU membership have an impact on active ageing policy in Poland?', In *The Making of Ageing Policy* (pp. 124-147). Edward Elgar Publishing.

Szwarc, H. (1993) 'Polish Third Age Universities', *Gerontology & Geriatrics Education*, 13(1–2), pp. 157–162. doi:10.1300/J021v13n01_11

Wiktorska-Święcka, A., Klimowicz, M., Michalewska-Pawlak, M. and Moroń, D. (2017) 'Inwestycje społeczne jako nowy paradygmat polityk publicznych w Unii Europejskiej', Warszawa: Wydawnictwo Naukowe Scholar. DOI: 10.7366/9788373839298.

Zaidi, A., Gasior, K., Hofmarcher, M. M., Lelkes, O., Marin, B., Rodrigues, R., Schmidt, A., Vanhuyse P. and Zolyomi, E. (2013) 'Active ageing index 2012. Concept, methodology and final results', *Research Memorandum/Methodology Report, European Centre Vienna*.

Zalega, T. (2018a) 'Environmental Awareness, Green Consumerism and Environmentally Conscious Consumer Behaviour of Polish Seniors', Research Report. *Problemy Zarządzania*, 16(3 (75)), pp. 114-131.

Zalega, T. (2018b) 'Sustainable consumption in consumer behaviour of Polish seniors (report from own research)', *Acta Scientiarum Polonorum. Oeconomia*, 17(1), pp. 131-139.

