AGEING SOCIETY IN THE DEVELOPED WORLD: RECONSIDERING IN THE APPROACHES EDUCATION

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The article provides the analysis of the demographic situation dynamics in developed countries. Scientific-and-technological advance and socio-economic development have led to the significant change in characteristics and intensity of demographic process. It is recognized worldwide that the beginning of the 21st century is the time of global changes.

The analysis of the demographic forecast to 2050 shows that the percentage of the world's population aged 60 years and over is expected to be about 21% – at the level of Europe presently; the percentage of the people aged 65+ will rise to 16% of the total population. The ratio of older people in developed regions is expected to grow to 31.2% – almost the third of the population; for Europe the ratio of the elderly aged 60 and over is predicted to reach 32.8% which means one in three persons will be over 60 years old. It is pointed out that ageing population: a) has influenced a change in the structure of population; the birth rates decrease and the consequence of rising human life expectancy has caused a change in the structure of life course; b) signifies a decrease in the percentage of the children and young people and an increase in the percentage of persons aged 65+; c) affects all aspects of the society including education, social and cultural activities. The increase of old age dependency ratio influences the labor market and the economic development at all. This article provides evidence that it is worthwhile to reconsider the traditional approach to the elderly needs. The growing age group of elderly people needs to be ensured the adaptation to rapid economic and social change. The state policy needs rethinking in the approaches to human potential, recognizing seniors as a valuable part of social and even economic resources, as this cohort is going to win a significant place in

demographical and social structure. It is important to provide the opportunity for the elderly to be active participants of country development process, including education and labor market. Encouraging people of the third age to educational activity may be an effective resource for social, economic and intellectual growth of the country and this idea should become one of the strategic directions of the state policy. It is also emphasized that higher education sector should redefine its role in human capital formation by retraining older people, teaching new life skills to cope with late-life problems, and offering opportunities for personal enrichment through learning of culture and arts. For this sector it is strategically important to adapt new educational philosophy and make changes in the policy, fundamental structure, financing, and curriculum.

Key words: ageing of the population, demographic shift, elderly, old-age dependency ratio, older adults' education, the third age.

Несприятливі тенденції в демографічних процесах, зокрема стрімке старіння населення, створюють суспільству багато викликів політичного, економічного та соціального характеру. Згідно демографічних прогнозів ООН до 2050 р. третину всього населення у світі складатимуть люди похилого віку. Найвиразніше тенденція ДО старіння суспільства спостерігається у розвинених країнах світу, що пояснюється підвищенням якості і, відповідно, тривалості життя, високим рівнем соціального захисту, а також низькою народжуваністю. Одне з основних завдань суспільства – забезпечення соціальної адаптації та реадаптації людей людського похилого віку, збереження потенціалу. Людина, знаходиться поза суспільним і культурним життям, втрачає мотиваційну сферу, а відтак і якість життя. Теоретичні і практичні дослідження доводять, що освіта у похилому віці – ефективний адаптаційний механізм, спосіб подальшого розвитку і самореалізації особистості, тому існує нагальна потреба переосмислення ролі освіти людей похилого віку для "активного старіння" суспільства.

Ключові слова: демографічна криза, люди похилого віку, освіта людей похилого віку, старіння населення, третій вік.

Неблагоприятные тенденции в демографических процессах, частности стремительное старение населения, создают обществу много политического, экономического и социального вызовов Согласно прогнозам ООН, до 2050 г. третью часть населения мира будут занимать люди пожилого возраста. Такая демографическая тенденция более характерна для стран с высоким уровнем экономического развития. Одна из основных задач общества - обеспечение социальной адаптации и реадаптации пожилых людей, сохранения человеческого потенциала. Человек, который находится вне общественной и культурной жизни, теряет мотивационную сферу, а значит и качество жизни. Теоретические и практические исследования доказывают, что образование в пожилом возрасте - эффективный адаптационный механизм, способ дальнейшего развития и самореализации личности, поэтому нужны новые подходы к роли образования людей пожилого возраста для "активного старения" общества.

Ключевые слова: демографический кризис, люди пожилого возраста, образование пожилых, старение населения, третий возраст.

The beginning of the 21st century may be defined as the time of global change. Scientific-and-technological advance and socio-economic development have led to the significant changes in characteristics and intensity of demographic process. This has given rise to the complex and contradictory matter of grave consequences, which have to be assessed uppermost from the position of long-range planning. These days there is no ignoring a demographic factor in a long-range social and economic planning as it can complicate substantially the solving of many problems the society will face in the future.

The demographic ageing of world population, especially in more developed countries, is one of the crucial issues in the recent demographic, social,

economic, and political science *literature* [2], [4], [6], [8], [10], [11], [15], [18]. The academic development of social gerontology has occurred since 1940th in North America and more recently in the United Kingdom (Warnes, 1989). Generally speaking, during the last two or three decades, there has been a substantial increase in the field of social gerontology. Human geographers, gerontologists and social workers have contributed to this investigation, focused on four key areas: elderly as an increasing demographic cohort and a significant social force [3], [8],[15]; person-environment-community relationship [6], [9], [17], [20]; active and successful ageing [2], [3], [18]; educational opportunities for the elderly (educational gerontology) [1], [4], [7], [21].

This *article has for an object* to observe current demographic situation and show the dynamic of its changes; to analyze the prognosis and projection toward population ageing in more developed regions; to specify the reasons for encouraging older people to education.

Rapid growth of elderly population in most European countries and in Northern America has been influenced by the fact that the "baby-boomer cohort" enters their senior years, and this process draws attention of academic literature, research, political and popular press. It is emphasized that that populations in advanced regions show far and away the shift towards the elderly generation and are being fundamentally restructured in terms of age composition [6]. In historical terms ageing societies are recognized to be a new unprecedented and continuing phenomenon which advanced countries have not met before. P. Laslett has defined this process as the "secular shift in ageing" [8], which mean that the elderly is turning into a prominent social force that will definitely influence social, economical, cultural and educational development of the countries.

According to the researches on social and demographic issues, socioeconomic and demographic processes are considered to be an interrelated system in which socio-economic process is signified to be the determinative one. But then, the demographic processes, especially their changes, affect substantially on socio-economic development. Therefore, it is necessary to explore the patterns and consequences of the demographical changes which have taken place recently. The influence of demographic factors on socio-economic development is especially appreciable in the crucial period of society's progress. This point refers, first of all, to such a complex phenomenon as ageing population and its aftereffects.

While considering this social phenomenon, it is necessary, firstly, to give its definition; secondly, to find out the reasons of its origins in the past, present and in perspective. It is also important to answer if this phenomenon would be developing as a permanent or temporary demographic situation. According to a variety of research and the statistic data, a demographic revolution has been occurring worldwide. It is the revolution from a demographic regime of high fertility and relatively low mortality to a regime of low fertility and low mortality, especially in developed regions, which results in slow growing population and its ageing. Many appreciable investigations on demographic changes prove the 21st century to be a turning point in the age structure of the world population and the prognosis show that elderly cohort is increasing dramatically.

As it is interpreted in a dictionary, *population ageing* is the increase in the number and proportion of older people in society. Population ageing has three possible causes: migration, longer life expectancy (decrease in death rate) and decrease in birth rate [14]. It is necessary to note that most commonly accepted measure of population ageing is by evaluation of the percentage of people aged 60 and over in the total population structure. The vital senility threshold, according to the demographists of UN (United Nations Organization), makes 7% of all 65-year old people and over, in comparison with the total population, or 12% of all 60-year old people and over, according to Polish demographist E. Rosset [16]. The concept of "a person of older age" is quit ambiguous, so it is necessary to give the definition of older age. As it has been defined, "old age consists of ages nearing or surpassing the life expectancy of human beings, and

thus the end of the human life cycle" [20]. Terms for old people include, *old people* (worldwide usage), *seniors* (American usage), *senior citizens* (British and American usage), and the *elderly*. In the social sciences the term *older adults* is more common. The official definition given in Oxford Dictionary is as following – "the later part of life; the period of life after youth and middle age..., usually with reference to deterioration" [14].

There is no any universal definition of when old age starts but the UN has agreed and it is commonly accepted that 60+ may by indentified as a guide for working definition of old age. However, the WHO (World Health Organization) considers 50 to be set as the beginning of old age. At the same time, WHO recognizes that when it comes to defining old age it is very important to take into consideration not only the age (years) a person has reached, but a social aspect as well – loss of previous roles and attain of the new ones, ability or inability to make active contribution to society. In the majority of more developed regions, chronological time plays a permanent role. The age of 60 or 65 years, roughly equivalent to retirement ages, is recognized to be the beginning of old age [21].

In social and educational gerontology a Four Age Framework has been used for the interpreting of life course:

- − The First Age − a time for growing up, Preparation.
- The Second Age a time to establish ourselves, Achievement.
- The Third Age − a time to change course, Fulfillment.
- The Four Age a time for integration, Completion [15].

It is essential to note that in 1991 P. Lasslett introduced the "stage" method into British civic life, developing the concept from French idea:

- the First Age of socialization;
- the Second Age of work and child rising;
- the Third Age of independent post work [10, p.12].

This three-part format is commonly accepted in most researches on social and educational gerontology, and the term "third age" is used for the age of 50 –

75, especially when viewed in social aspect, as an opportunity for travel, further education etc.

According to UN demographic studies, life expectancy at birth, especially in Europe, has shown an increase of 20 years in the first half of the century and now makes 68 years old. And this increase is expected to rise by 10 more years until 2050. People live the longest lives in Scandinavian countries and in Australia (over 80), West European countries, Japan, New Zealand, and Canada (over 78), in the USA (76). In East European countries the average figure is 74, in Poland – 71 and in Ukraine – 69 [5].

Social, economic and cultural changes of the 20th century facilitated the rise of living standards, the improving of medical care that influenced upon significant increase of life expectancy. The increasing old-age population ratio occurs at the demographic level in many countries. The vital senility threshold was first overdrawn by France (1870), then by Great Britain (1931), Germany (1937), the USA (1940), and Poland (1967), (Rocznik Demograficzny, 2010) [20]. In the table bellow we can watch the dynamic of significant increase in population and dramatic ageing of the population (facts and prognosis for the century) during 1950 – 2050. In 1950, the world's population reached 2.5 billion people, and people aged 20 and younger made 44% of the total population. Approximately 8% was 60 years of age and older and only 3% formed people aged 70 and over [2]. The following table shows that more developed regions (Europe, Northern America, Japan, Australia and New Zealand) had significantly higher percentage of the elderly in their populations, than less developed regions had (11.7% compared to 6.4%).

Table 1. Population Distribution by Age Groups, 1950 and 2050

Geographic area	Popula- tion, thousand	1950 % of total population			2050 % of total population						
	Total	0-19	20-59	60+	70+	80+	0-19	20-59	60+	70+	80+
World total	2.523.878	43.9	48.0	8.1	2.9	0.5	27.4	51.9	20.7	10.4	3.4
More	812.687	35.7	52.6	11.7	4.8	1.0	22.6	46.2	31.2	18.6	8.0
developed regions											
Less	1.711.191	47.8	45.8	6.4	2.1	0.3	28.0	52.7	19.2	9.2	2.8
developed regions											
Europe	547.318	34.6	53.3	12.1	5.1	1.1	21.6	45.6	32.8	19.2	7.9
Northern America	171.617	34.4	53.2	12.4	4.8	1.1	24.7	47.9	27.4	16.1	7.4
Australia/	10.127	33.8	53.6	12.6	4.9	1.1	24.5	47.8	27.7	16.6	7.1

New Zealand

Sours: UN Population Division

The forecast to 2050 shows that the percentage of the world's population aged 60 years and over is expected to be about 21% – at the level of Europe presently; the percentage of the people aged 65+ will rise to 16% of the total population. The ratio of older people in developed regions is expected to grow to 31.2% - almost the third of the population; for Europe the ratio of the elderly aged 60 and over is predicted to reach 32.8% which means one in three persons will be over 60 years old [5]. The elderly population in the USA is expected to comprise 27.4% of the nation's total population, indicating that the United States will experience much less extreme population ageing compared to the majority of developed regions. As it is seen from the table, the advanced countries are moving toward having very old (70+/80+) population, while developing countries are moving toward old (60+) population.

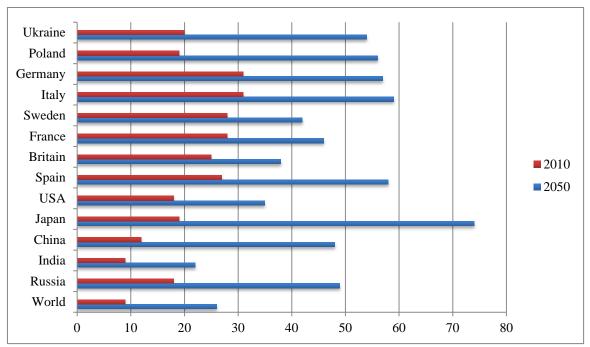
The researches on demography and social studies have concluded that on the one hand, increase in longevity is "... one of the most amazing demographic facts in modern history" (Sadler) [15], people live longer and more active lives than ever before; on the other hand, ageing population:

- has influenced a change in the structure of population; the birth rates decrease and the consequence of rising human life expectancy has caused a change in the structure of life course;
- signifies a decrease in the percentage of the children and young people
 and an increase in the percentage of persons aged 65 and over;
- affects all aspects of the society including education, social and cultural activities.

According to "The Economist", continued increases in longevity will ensure that the old-age dependency ratio, which measures the number of elderly people as a share of those working age, will rise sharply in most countries over the next 40 years, according to the European Commission. The chart bellow shows the biggest absolute increase will be in Japan, where the ratios of 35.1% in 2010, already the world's highest, will more than double, to 73.8%, by 2050.

At that point, the number of pensioners in China will be equivalent to 38.8% of its labor force, up from 11.6% in 2010. The European Union, which had 84.6 million elderly people last year, will have 148.4 million in 2050. And the ratio for the world as a whole will reach 25, 4%, up from 11.7% in 2010 [12].

Chart 1. Old-age dependency ratio: number of people aged 65 and over as % of labor force aged 15-64), forecasts.



Source: Old-age dependency ratios // www.economist.com

It is worthwhile emphasizing that all European countries are among the fifty demographically oldest countries of the world. As many researches point out, the percentage of people at older age 65 – 80 plays a major role from the perspective of socio-economic politics. We have to notice that the number of people aged 80 and over will increase in 2035 over two times from now and will make 2.574 thousand; two thirds of the elderly will live in urban areas [2, p. 20].

Table . Elderly-dependency ratio. Prognosis for 2035.

Geographic area	Percentage of the elderly in the total population (2035)
More developed regions	39
Less developed regions	17
USA	35
Canada	39
Australia	36
New Zealand	35
United Kingdom	39
Europe	39
Northern Europe	38
Southern Europe	46

Western Europe	47
Eastern Europe	30
Ukraine	29

Source: UN World Population Prospects: The 2012 Revision

As Ukraine is situated in Eastern Europe, we are interested in overall demographic characteristics of this region as well as their prognosis. Analysis of demographic survey and the global foresight literature on this issue has found out that population of Eastern Europe is predicted to decline over the next 25 years. The decline in fertility, the decrease in mortality and a life span extension, migration (high rate of youth outflows) – are at the bottom of this demographic shift. There are also some socio-cultural factors which have affected the situation – the popularization of proactive lifestyle, raising the quality of medical service, higher standards of social care of the elderly, and education in later life. For example, in Poland, that may roughly represents overall demographics of East European region, the fraction of people aged 60 and over makes 17.4% in the total structure of its population. It is prognosticated that this percentage will increase by about 10% by 2025, and reach 35.6% in the half of the century [20, p. 10].

Table 3. Changes in the number of people aged 65+ in Poland in the years 2010-2035 (in thousands).

2010	2015	2020	2025	2030	2035	
22.1	776.0	1 024.1	890.5	351.3	162.2	
G GTTG 4000						

Source: GUS, 2009

Table 4. Number of people at the age 65+ falling on 1000 people at the age of 0-14 in Poland.

Total		Urbar	areas	Rural areas	
2020	2035	2020	2035	2020	2035
1 179	1 851	1 345	1 986	957	1 669

Source: GUS, 2009

Table 5. Old age dependency ratio in Poland in the years 2000 – 2050. UN prognosis.

Year	% of the population of 60+	% of the population of 65+	Demographic dependency ratio (persons 65+ per 100 persons aged 15-65)
2000	16.6	12.1	17.6100
2010	18.8	13.0	18.0102
2020	24.8	17.4	26.0148
2030	27.2	21.4	33.3189
2040	31.3	23.3	37.3212
2050	35.6	27.9	50.0281

Source: A. Kanios, 2012, p.11.

It should be taken into consideration that an average duration of life in Europe in 2060 will reach 82 years for men and 88 years for women [20, p.149].

The participation of advanced old age (80 and over) in general structure is a significant indicator of population ageing. The data of the old age population and its projection show two general old age features: feminization of old age (the prevailing number of women over the number of men in this age category) and extension of the advanced old age cohort (people aged 80 and over).

Ukraine is among the leading countries as regards the decrease in population. During 1996 – 2011 its population size decreased by 5.7 million people [5]. Both reduction of the population and change in the demographic structure have led to the population ageing and to decrease in the number of people who could potentially be economically active fraction in the total population. As economically active cohort of population forms a country's labor market its size changes influences the rate of economical growth.

The age structure of Ukraine population has shown a regressive type of regeneration: there are 6.5 million people aged 0-14 and 11.3 million retired people. At the same time the percentage of people aged 65+ makes 15.3%. According to UN classification, if the share of people 65+ exceeds 7% of the country's total population, it is regarded as demographically old nation [16, p.175]. Thus, the population of Ukraine is estimated to be very old.

Table 6. Age structure of Ukraine, 2013.

Ukraine	0-14 (%)	15-64 (%)	65 and over (%)	
	13.9	70.6	15.6	

Source: www.indexmungi.com

The determining factors which affect the demographical situation and population ageing in Ukraine may be specified as the followings:

- a drop in the birth rates and the fact that people get married latter in life
 which causes a decrease in the number of older people;
- a relatively high death rate, especially among the people of the middle age, high abortion rate and infant mortality;
- some social and economic reasons low level of medical care, low income of people, especially of middle class, social vulnerability;

migration of the population, the outflow of economically active cohort –
 youth and people of middle age.

The increase of old age dependency ratio influences the labor market and the economic development at all. The main effects of the reduction of economically active population as well as the population ageing are the following:

- Reduction in the number of working people against unemployed population that is dependent on the income of employed citizens. In 2013 the number of employed persons amounted to 20324.2 thousand people which made 44% of the total population. And this number is tending to decline, which means that the burden on this category of population will increase.
- The growth of the mean age of population. In 2004 in Ukraine the average age of the population was 39.1, in 2013 this figure increased to 40.1 years as compared with mean age 39.9 in Europe [12].
- The imbalance between supply and demand of labor on various economic activities and professions.

Those facts seem to be essential from the point of view of not only demographers but also economists, gerontologists, educators and social workers.

Obviously, western industrialized societies are ageing dramatically. P. Laslett claimed that "...the structural ageing of the population – primarily as a result of declining fertility rates and increased life expectancies through time – represents one of the most propound sources of social structural change experienced since the middle of this century" [8, p. 142]. In terms of social composition, seniors represent a significant fraction of population. Thus, the growing age group of elderly people needs to be ensured the adaptation to rapid economic and social change. For each country it is important to contribute to overcoming the problems of social isolation of this category of people. On the other hand this cohort should be developed into a powerful force, in terms of human potential – intellectual, economic and cultural. Their impact is now being

felt in that regions and debated within economic, social, cultural, and particularly, public policy contexts.

When following more developed countries, the state policy of Ukraine needs rethinking in the approaches to human potential, recognizing seniors as a valuable part of social and even economic resources, as this cohort is going to win a significant place in demographical and social structure. In short, the ageing of the population will result a great deal of societal change.

According to W. Sadler, if we follow the usual decrement model of aging, the extra time could be spent experiencing decline, degeneration, disabilities, disease, and dependency that have defined usual aging up until now. People positively changing their lives after fifty are pushing scientists to redefine the second half of life and aging [15]. "People in older age want to feel useful; they also need to be aware that they still are an integral part of the society and that they have their own place in the family and the local environment" [20, p. 23]. People live longer and healthier lives; they retire earlier. Many have a great deal of disposable time and wealth to pursue active and successful retirement lifestyles. Such engagement also benefits society. The possibility to stay active has never been more promising than it is now [13, p. 255] taking into consideration the fact of life course prolongation and extended ageing, defined as the third and fourth ages.

The Third Age (50 to 75 years) has usually denoted a time of retirement. Researchers have discovered that the Third Age presents us with new possibilities in the life course which are of great importance to both individuals and society, stimulating the development of lifelong learning programs. People in their 50s are changing course to move towards new life peaks. This new trajectory in their life course is often called second growth, a process of renewal that transforms aging in the Third Age – a season in search of purpose, an era for extended self-realization (Freedman) [3]. In fact, lifestyle is a key social demand associated with retirement.

According to the study of the place of an older person as compared to other age groups (provided by B. Szatur-Jaworska, P. Bledowski and M. Dziegilewska), the following factors were selected which have an impact on the place of an older generation in the social stratification: education, the length of work experience, a position in the family, profession, old age stereotype, health condition, current income, resources, retirement benefit system, the condition of public finances, and social redistribution principles. The review having been held in Poland has shown that pensioners suffer to great degree from poverty, while retired persons suffer to a lesser degree. Older persons living on welfare benefits are in the worst situation [17].

It is important to provide the opportunity for the elderly to be active participants of country development process, including education and labor market. Encouraging people of the third age to educational activity may be an effective resource for social, economic and intellectual growth of the country and this idea should become one of the strategic directions of the state policy. When it comes to addressing older adults' needs, the dominant paradigm has been "to do things *for* them" based on understanding of ageing as a growing helplessness [13, p. 256], but as the elderly population is rising rapidly their new needs for self-care require new strategies of "doing things with them".

Many prominent researches believe that how people age is determined not so much by their genes but by the way they live that includes an opportunity for second growth, and is closely associated with lifelong learning. According to D. Garvin, people, whose lives illustrate growth, have been committed learners. They have been learning more about themselves, about opportunities and challenges, exploring new areas, and gaining new skills [4]. Their learning has not been just mental stimulation with an accumulation of information. Strategic learning includes gathering information, interpreting it, and then applying learning to new behaviors – the way they work and live [15].

It follows that a socially adopted person being on a pension, is a socially active person who acts under his/her own steam, who leads his/her life, making

full use of his/her personal and professional experience and intellectual potential. The opportunities for gaining extra competence by people of the third age and developing their motivation for learning activity can be guaranteed by both non-governmental organizations and private educational sector, providing education in various disciplines as well as popularizing and promoting of different forms of intellectual, psychological and physics activity, adequate to the age, overall efficiency and interests of the people. Both international knowledge and special features of national gerontological education should be taken into consideration to create the effective educational conceptions and models of learning in retirement in the near future. Coming of an ageing society demands further changes. Gains in the productivity in the future will depend in critical ways on the retraining of older adults to adapt to the economy. "The challenge to education for an ageing society is an emphasis on lifelong learning among late-life groups. To respond to the new demographic and economic realities, educational institutions will have to develop new roles in recycling human resources in later life" [11, p. 191]. Higher education should redefine its role in human capital formation by retraining older people, teaching new life skills to cope with late-life problems, and offering opportunities for personal enrichment through learning of culture and arts. As it is expected by the year 2035, ¼ of the total population will be people aged over 65, so higher education will definitely no longer be a prerogative of declining cohort of young people. For this sector it is strategically important to adapt new educational philosophy and make changes in the policy, fundamental structure, financing, and curriculum.

Demographic change of the contemporary world requires a new policy for ageing and old people. In advanced countries optimistic, happy or active ageing has been discussed o lot modern solutions are focused on the implementation of various assistance forms and support for older people, but at the same time, older adults education should be tied to self-help opportunity [21].

Analysis of the educational activity of the elderly in Ukraine has proven that the development in this area is too slow; modern legislative basis has not been worked out yet; the opportunities of social partnership are not used. In both developed and developing countries elderly people are not of great value in the modern society. In other words, people of the old age are suffering from depreciation and isolation. This fact reflects some negative stereotypes of elderly people among the people of young generation. But for the last 15-20 years some significant changes have taken place in most developed countries, which have principally influenced the system of social welfare of old age people, state social policy, and changing of the deep-seated attitude to old-agers.

Since older people adaptation is realized harder under present-day conditions of social-economic and technical development, we need to consider education as a successful adopting and developing mechanism, which is mutually advantageous and helpful for both the individuals and the society. It helps the old age generation of people to save themselves from social isolation and turn themselves for socially active and creative members of society.

References:

- Azarina M. Universities of the Third Age in Russia and in Poland: commons and differences // Rocznik Instytutu Polsko-Rosyjskiego. 2012. Nr. 1 (2). P.147-157.
- 2. Elderly Care in Selected European Countries / ed. by F. Gokdagan and others. Lodz: WSINF, 2012. 244 p.
- 3. Freedman M. Prime Time. New York: Public Affairs/ Perseus, 1999.
- 4. Garvin D. Learning in Action. Boston: Harvard Business School Press, 2000.
- 5. Global Sherpa: Internationalisation, Global Development and World Rankings from a Positive, Comparetive Perspective, http://globalsherpa.org/global development and world rankings/
- 6. Handbook of Aging and the Social Sciences / edited by R. H. Binstok, L K. George. San Diego: Academic Press 5th Ed. 2001. 514 p.

- 7. Kerka S. Universities of the Third Age: Learning in Retirement // Trends and Issues Alert. 1999. No. 2.
- 8. Lasslett P. A fresh map of life. The emergence of the third age. Cambridge, MA: Harvard University, 1991. p. 140–158.
- 9. Lasslett P. Das Dritte Alter. Historische Soziologie des Alterns. Weinheim, 1995.
- 10. Midwinter E. How many people are there in the third age? // Ageing and Society. 2005. No. 25. P. 9–18.
- 11. Moody H. R. Abundance of Life. Human Development Policies for an Ageing Society. New York: CUP. 1988. 380 p.
- 12. Old-age dependency ratios // www.economist.com
- 13. Ostlund B. The revival of research circles: meeting the needs of modern aging and the third age // Educational Gerontology. 2008. No. 34. p. 255–266.
- 14. Oxford Dictionary of Contemporary English, 2003
- 15. Sadler W. Changing life options: uncovering the reaches of the third age, http://thirdagecenter.com/Changing life options pdf.
- 16. Rosset E. Ludzie starzy. Studium demograficzne. Warszawa: PWE, 1967.
- 17. Szatur-Jaworska B., Bledowski P. and Dziegilewska M. Podstawy gerontologii spolecznej. Warszawa: ASPRA-JR, 2006. 324 p.
- 18. Swindell R. An International Prospective on the Third Age / R. Swindell, J. Thompson // Educational Gerontology. 1995. No.21 (5). P. 429-447.
- 19. Treas J. Older Americans in the 1990s and beyond // Population Bulletin. Washington, D.C., 1995. No. 2.
- Working Together in an Ageing Society / ed. by P. Clarke, M. Jarosz,
 A. Wloszczak-Szubzda. Age UK Milton Keynes, 2012. 240 p.
- 21. Зых А. Непрерывное образование в контексте геронтологической теории. Развитие и главные идеи педагогики старения и старости, http://lifelongeducation.ru/index.php/ru/literatura