SEMINARE vol. 39 \* 2018, no. 4, p. 177-190 DOI: http://doi.org/10.21852/sem.2018.4.14

Agnieszka Bołdak<sup>1</sup>, Przemysław Płoskonka<sup>2</sup>, Karolina Gołębieska<sup>3</sup> Józef Piłsudski University of Physical Education in Warsaw

KJARTAN BOLLASON⁴ Hólar University College, Iceland

# THE ROLE OF RECREATIONAL ACTIVITY IN CREATING SUCCESSFUL AGING

#### Abstract

In recent years we have observed rapid aging of societies. An important role in maintaining high quality of life as regards seniors is played by proper medical care as well as physical and mental activity. The aim of the present research was to determine the role of participating in organized forms of recreational activity in the process of successful aging. The conducted research was based on a questionnaire and it involved 64 participants of a recreational and sports event, Seniorada, addressed to seniors and their relatives. The findings have shown that recreational events play an important role in the process of integrating the seniors' environment, promoting entertainment and physical activity and, moreover, they help the elderly acquire new skills and improve well-being.

Keywords: recreational activity, physical recreation, successful aging

<sup>&</sup>lt;sup>1</sup> Agnieszka Bołdak, PhD, Józef Piłsudski University of Physical Education in Warsaw, Department of Tourism and Recreation. Scientific interests related to the broadly understood psychology of physical activity and the influence of psychosocial factors on health. E-mail: agnieszka. boldak@gmail.com.

<sup>&</sup>lt;sup>2</sup> Przemysław Płoskonka, PhD, Józef Piłsudski University of Physical Education in Warsaw, Department of Tourism and Recreation. Scientific interests related to selected forms of outdoor adventure recreation, qualified tourism, adventure education and outdoor education. E-mail: przemyslawploskonka@gmail.com.

<sup>&</sup>lt;sup>3</sup> Karolina Gołębieska, MA, Józef Piłsudski University of Physical Education in Warsaw, Department of Tourism and Recreation. Research interests related to the local tourism policy, qualified tourism and the impact on promoting healthy lifestyle and physical activity. E-mail: karolina.golebieska@gmail.com.

<sup>&</sup>lt;sup>4</sup> Kjartan Bollason, MA, Hólar University College, Faculty of Rural Tourism. Scientific and research interests are mainly focused on broadly understood ecological education and various forms of outdoor tourism and recreation of various age groups. E-mail: kjartan@holar.is.

#### ROLA AKTYWNOŚCI REKREACYJNEJ W KREOWANIU POMYŚLNEGO STARZENIA SIĘ

#### Abstrakt

W ostatnich latach obserwuje się szybkie starzenie się społeczeństw. Istotną rolę w utrzymaniu wysokiej jakości życia seniorów pełni zarówno odpowiednia opieka medyczna jak i aktywność fizyczna i umysłowa. Celem badań było określenie roli uczestnictwa w zorganizowanych formach aktywności rekreacyjnej w procesie pomyślnego starzenia się. Zbadano 64 osoby – uczestników Seniorady – imprezy rekreacyjno-sportowej skierowanej do seniorów oraz ich bliskich. Do celów badań wykorzystano kwestionariusz ankiety. Wyniki badań wykazały, że imprezy pełnią ważną rolę w procesie integracji środowiska seniorów, sprzyjają rozrywce, aktywności fizycznej, zdobywaniu nowych umiejętności oraz poprawie samopoczucia.

Słowa kluczowe: aktywność rekreacyjna, rekreacja ruchowa, pomyślne starzenie się

#### INTRODUCTION

Rapid economic development that has taken place in recent decades and which has resulted in improved nutrition standards, increased coverage of basic health care and elimination of many infectious diseases has brought about population growth and increased percentage of people reaching an advanced age. Consequently, societies have undergone the process of rapid aging. Pursuant to the UN research, the world's population in 1950 included about 200 million people aged 60 and over. By 1975, their number increased to 350 million. It is forecasted that, by 2050 that number can reach 2 billion. This trend is particularly noticeable in developing countries, where the number of elderly people may increase by as much as 400% in the next 50 years.

In the face of the changing age structure of societies, including the Polish society, it is necessary to counteract and prevent discrimination and exclusion of elderly people from social life. The UN, has laid down a basic set of principles as regards acting for the benefit of the elderly. The crucial guidelines include: maintaining independence and dignity by the elderly as well as the right to proper care, self-fulfillment and participation in social life. The UN document refers also to sharing the knowledge and experience of elderly people with younger generations as well as to opening up for them possibilities of working as volunteers in positions consistent with their interests and predispositions. Elderly people have the right to care provided by their families and communities as well as to preventive medical care, moreover, they must be helped in maintaining or regaining optimal levels of physical, mental and emotional activity. Such persons are also entitled to rehabilitation, social and mental activation, as well as to educational, cultural, spiritual and recreational resources of societies (UN 2017).

In a letter to the participants of the Second World Assembly of Societies devoted to the problems of population aging, Pope John Paul II writes about the need and obligation to consider the elderly in the light of their human dignity, which does not diminish with the passing years nor with the deterioration of their mental and physical condition. Society's task is to overcome the prevailing stereotypes, "which judge a person's worth on the basis of youth, efficiency, physical vigour or perfect health. Experience shows that when this positive view breaks down older people are quickly marginalized and condemned to a loneliness which is a kind of social death" (John Paul II 2002).

In the face of the above, it is necessary to modify the social policy towards the elderly in order to guarantee them a dignified life during retirement, as well as to change the image of older people in society. An important, though not yet sufficiently popular in Poland way to improve the quality of the elderly's life<sup>5</sup> is to encourage them to undertake systematic physical activity (Kolanowski, Fick and Buettner 2009).

#### 1. Successful Ageing and Recreation

Aging is understood as a process beginning in childhood, while old age is considered a stage or a state in human life. Biological aging is defined as a process of progressive, regressive and irreversible changes in the tissues and organs of the body, determined by genetic factors and modified by coexisting diseases, lifestyle and environmental factors. This leads to a decrease in the physiological adaptability, increased susceptibility to diseases, and finally to death (Duda 2012). Optimal modification of aging factors allows to maintain the body's homeostasis and enables successful aging (Błędowski 2012). The term successful aging was first used by Robert Havighurst and Ruth Albrecht in 1953 (Halicki 2005). In the end of the twentieth century, it became one of the basic gerontological categories and it is now defined as aging with a low risk of developing chronic diseases (cardiovascular disease, diabetes, cancer) and subsequent infirmity, with high mental and physical fitness and sustained life activity (Laskowska-Szcześniak and Kozak-Szkopek 2013). The literature on the subject of successful aging mostly focuses on initiatives that promote autonomy and independence in the lives of elderly people.

Apart from proper medical care, an important factor in the process of preventing diseases and maintaining active live is recreational activity (Rottermund, Knapik and Szyszka 2015). It seems to perform a special role as it provides a basis for functional capacity of the elderly, and thus influences their health and independence (Petsche 2014, Novek et al., 2013). It cannot be levelled with other types of activities undertaken in leisure time<sup>6</sup>, because what is indispensable

<sup>&</sup>lt;sup>5</sup> Quality of life is a person's feeling with respect to their position in life in defined cultural conditions and against the background of the adopted system of values in which a particular person operates, with the determination of their interests, standards, achievements and, what is very important, expectations. Behaviors can be assessed on the basis of observation and interview with old people and/or by using a research tool. Questionnaires are most often used. WHOQoL-100 i WHOQoL-BREF (Rottermund, Knapik and Szyszka 2015).

<sup>&</sup>lt;sup>6</sup> Leisure time is generally understood as time devoid of duties, devoted to any freely chosen activities (Gosik 2015). Bywalec and Rudnicki (2002) define it as a total amount of time in the scale of a day, week, year or life, reduced by the time of work and the time of satisfying the necessary physiological needs, i.e., in a broad sense, time outside of work.

must not be equated with what is desirable. According to specialists in the field of gerontology, people giving up physical activity are much more often prone to processes accelerating aging than seniors who lead an active lifestyle (Kozdroń 2006). Therefore, physical activity plays an extremely important role in delaying aging processes and protecting health. It also allows older people to remain selfreliant and independent from their families or social organizations. Improving physical activity is one of the most important and effective ways of preventing and eliminating health problems in old age (Baranowska 2013, Kozdroń and Leś 2014).

There is a clear relationship between leisure activities and the quality of life. Many researchers point to a significant impact of active forms of spending free time on maintaining good mental and physical health (Gosik 2015; Singh and Kiran 2013), therefore, organization of free time is an important element of rehabilitation and care for sick, disabled and elderly people. As illustrated by research, physical activity is not a popular way of spending free time by older people in Poland (Rodzina.senior.pl 2017). The majority, namely, 60% of respondents (people between 60 and 80 years of age) watch television in their free time. At the same time only 16% go on trips, 4% walk and 1% practice sports. Organization of leisure time for seniors should aim at creating conditions that would allow them have the sense of fulfillment and integration in the society. Internal motivation of seniors and their readiness to participate in recreation is an important factor here. It is worth remembering the existing psychological patterns that accelerate integration processes with society. Adopting an individual approach is an important condition of selecting activities adequate for seniors, those which could prevent them from concentrating too much on their problems or pain. Combining alternatively physical and mental activity whose intensity will increase according with the improvement of the senior's general condition is also a practical and effective action. When working with an elderly person (providing it is financially possible), it is worth investing in special devices and utensils that facilitate mobility, communication or orientation. Individual seniors' condition (sight, hearing, mobility) as well as individual needs must be taken into account and the equipment must be chosen accordingly. Knowing about the poor health condition of elderly people, it is necessary to organize activities in such a way as to adapt their length and the intervals between them appropriately. There is a variety of offers as regards rehabilitation activities and new ones are still appearing (Dabrowski 2006).

# 2. Research Method

## 2.1. Subject and Aim of Research

The conducted research investigated the phenomenon of successful aging and its relation to the undertaken recreational activity. It aimed at determining

the role of participating in organized forms of recreational activity in the process of successful aging. The authors formulated the following research questions:

- Does participation in organized recreational events influence integration in the seniors' environment?

- With whom do seniors most often participate in organized recreational events?

- Does participation in events have an impact on the strengthening of family ties?

- What are the main motives for the participation of seniors in organized recreational events?

- Does participation in Seniorada according to the respondents allow them to acquire new skills?

- Does participation in organized forms of recreational activity improve the respondents' well-being?

2.2. Research Participants, Research Tools and Procedure

The test group comprised 64 people - participants of the Warsaw edition of Seniorada, a recreational and sports event addressed to seniors, and their relatives. The study involved 50 women and 18 men aged 68 on the average.

The diagnostic poll method and participant observation was used in the research. The main technique was a survey and the tool was a self-elaborated questionnaire containing closed questions on various aspects of participation in an organized form of recreational activity and a data sheet with respondents' particulars. The questions were evaluated on a five-point Likert scale.

The research was carried out in June 2017, during the Warsaw edition of the recreational event - Seniorada, which took place at the University of Physical Education in Warsaw. Targeted selection was used - people who expressed their willingness to participate in the survey, completed a survey during the event or immediately after the event.

## 3. Research Findings

The following section presents the research findings obtained on the basis of the completed surveys. Figure 1 illustrates the respondents' answers with regard to the impact of the event on their integration in the seniors' environment. Over half of respondents expressed the opinion that the impact of the analyzed event on the level of their integration in the environment of people of similar age was very good and good. The second most popular answer chosen by respondents was that the impact was satisfactory. No respondent chose "negative" with reference to Seniorada's impact on their social integration.

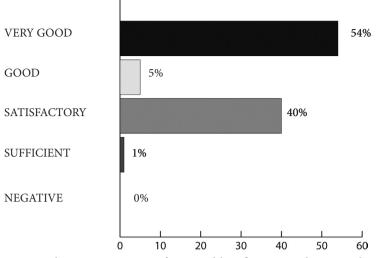


Fig. 1. Subjective assessment of Seniorada's influence on the respondents' integration in the environment of seniors.

Figure 2 portrays the percentage of people with whom the surveyed seniors most often take part in recreational and sports events. Over half of respondents replied that they most often took part in such events with friends, almost 1/4th of respondents selected husband/wife/partner, a comparable number of seniors indicated the Pensioner's Association or children and the smallest group said they took part in such events alone.

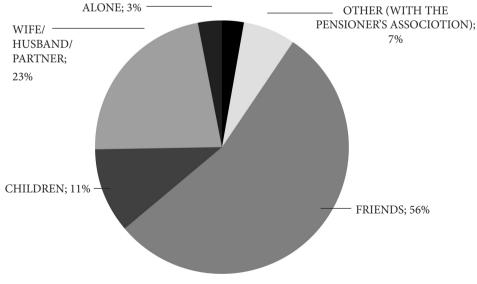


Fig. 2. People with whom seniors most often take part in recreational and sports events.

Figure 3 refers to the question whether participation in Seniorada influenced the strengthening of family ties. On the basis of the research it can be concluded that for more than half of respondents, participation in a recreational event was not associated with the improvement of family relationships. One third of them declared that Seniorada had a positive impact on this aspect of their life.

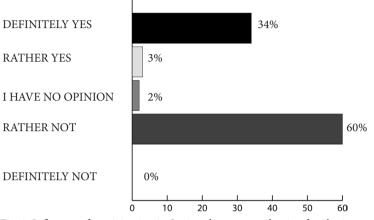


Fig. 3. Influence of participation in Seniorada on strengthening family ties.

Figure 4 shows what motivation prompted the respondents to participate in the recreational event. The majority of them replied that important factors in making the decision to participate in Seniorada included: improvement of/maintaining health, entertainment, seeking new experiences, seeking contact with nature, making new acquaintances, meeting people of the same age, opportunity to test themselves. More than half of respondents replied that spending time with their family was also a very important factor.

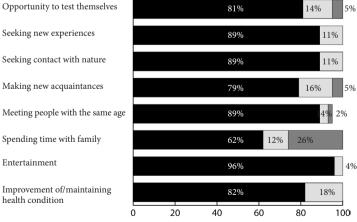


Fig. 4. Motivation behind participation in Seniorada.

The next figure presents the respondents' opinions on the impact that participation in Seniorada exerted on their gaining new skills (Fig. 5). Over half of respondents declared that participation a recreational event of that type allowed them to acquire new skills. Slightly over 1/3 of respondents did not consider such participation as a way for this type of development.

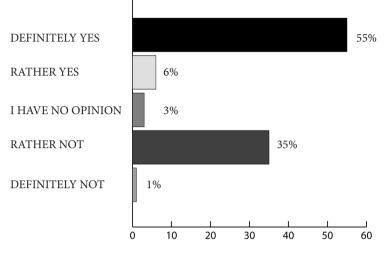


Fig. 5. Influence of participation in Seniorada on gaining new skills.

Figure 6 presents the percentage results regarding the impact of participation in the event on the well-being of the respondents. Over 3/4 of respondents replied that participation in Seniorada improved their mood, the rest declared lack of direct correlation between their participation in the event and their mental state.

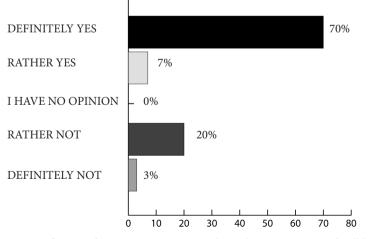


Fig. 6. Influence of participation in Seniorada on the improvement of well-being.

#### Conclusion

Aging of the human body is a natural process, and one of the most important challenges facing seniors is to maintain an adequate level of health. The key element which may contribute to successful aging and counteract the process is popularizing participation of elderly people in various forms of recreation (Kozdroń and Leś 2014). Appropriately selected physical activity is the most effective among the known ways of delaying aging processes. It is a factor of health preservation and, what is crucial in the case of the elderly, of mobility and extending the period of functional activity in everyday life (Kozdroń 2014).

The main purpose of the research presented in this article was to determine the importance of older people's participation in organized forms of recreational activity in the process of successful aging. The first research question concerned the impact of participation in organized forms of recreational activity such as Seniorada on strengthening social ties in the seniors' environment. The results of the conducted research have shown that such forms play an important role in making new acquaintances and in enhancing integration in the analyzed group. Perhaps, this is due to the fact that seniors feel a special need to spend time with people of similar age. This type of event has the advantage of bringing together a large group of seniors in one place. Time spent together allows seniors to break away from their daily duties, exchange information and experiences, relax and play together in a group of people in which they meet with mutual acceptance and support. This is confirmed in the responses provided by respondents who declared that they most often participate in organized forms of activity in the company of friends and life partners. It is worth noting that a large group of seniors did not consider participation in Seniorada as having a significant impact on the tightening of their family ties. This may be due to the fact that some of them spend more time with their children or grandchildren on a daily basis, and such an event is a great opportunity to meet friends with whom they have no regular contact.

Another question referred to the motives inspiring the elderly who take part in organized forms of activity. The research has shown that entertainment is the most important reason for such participation. This proves that seniors need to have a break from everyday life, to enjoy the fun and convivial atmosphere that prevails during such events. The seniors also pointed to the artistic aspect of the event, namely, stage performances and the possibility of singing and dancing together. Another important motive for participation was a desire to spend time with friends. Once again, the conclusion is that participation in such events as Seniorada provides the elderly with a chance to integrate with people of comparable age, having similar interests, which can certainly result in diminishing the sense of loneliness and social isolation.

Seniors also eagerly take up new challenges and prove themselves in new competitions, which are proposed during each edition. Thus, the event gives

them a great chance to spend leisure time in a creative, interesting way, since the organizers offer in their program a lot of attractions of a varied level of difficulty so that everyone can find something for themselves. This is confirmed by the results of research referring to the role of participating in the event in acquiring new skills by seniors. An important element here is, moreover, contact with nature. Senioradas are open-air events taking place at the Academy of Physical Education, near the Bielański forest. Thanks to that, the participants have a chance to spend time outdoors, which is especially valuable for people who do not have such an opportunity on a daily basis.

Lastly, the seniors were asked if participation in organized recreational and sports events improved their well-being. Most of respondents stated that those types of activities positively influenced their mental state. This highlights the important role played by various forms of recreational activity in health care both at the physical and mental level, which in turn is inductive to successful aging.

The results of the presented research prompted the authors to consider possible recommendations regarding forms of spending free time. The following is a list of forms of recreational activity advised for seniors, which, depending on their preferences and possibilities, may contribute to the process of successful aging.

# A. Physical Activity, Tourism as Therapy

Physical activity positively affects both mental and physical condition of seniors. It is believed that tourism is easier for seniors than sport, and therefore it should be considered the first step towards systematic physical activity. In the face of growing numbers of people with psychosomatic diseases, adaptation crisis or disabilities, the role of tourism seems very important. It has a huge impact on improving the health of elderly people and, in the first place, counteracts hypokinesia (decreased bodily movement). Motor limitations lead to stress and depression, loss of self-confidence, while tourism provides an opportunity to counteract those types of negative phenomena. In order to use the benefits of tourism effectively, it is necessary to observe several principles, namely: the type of tourism must be selected depending on seniors' health condition, it must take into account their personal needs, financial possibilities and place of residence; neither tourists nor the environment should not be exposed to dangers; the program should include sightseeing; luggage weight (backpacks, etc.) should be adapted to the capabilities of older people. Seniors' striving to undertake active forms of spending free time contributes to their social adaptation, as opposed to passive forms of entertainment which lead to the general weakening of vital forces and increase social isolation (Kozdroń 2014; Singh and Kiran 2014).

#### B. Bibliotherapy

It is a form aimed at mental development. Seniors read books and discuss them together. This therapeutic activity often includes organization of literary evenings, meetings with book authors, speed reading trainings and competitions. Literary philanthropists clubs and poetry clubs are created. Bibliotherapy has an impact on the shaping of seniors' identities, extending compensation opportunities, making interesting acquaintances with people sharing similar worldviews as well as on developing speech skills (especially in people with speech disorders). In literary examples seniors can find something positive that could make them happy. Literature provides opportunities that even the best and most experienced psychologist will not be able to give, namely, to learn to analyze and control their behavior and their reactions. Reading specially selected literature allows people to relieve tension and provides pleasure (Lach 2014; Borecka 2001).

# C. Art Therapy

Art therapy comprises a variety of therapeutic activities performed with the help of broadly understood forms of art such as painting, sculpture, graphics and drawing. An important element in this type of activity is that the workshops participants do not need to have any particular artistic talents or creative experience in a given field. Their main goal does not consist in creating the best possible art object, but in using the creative process as a valuable and unique communication channel. Art classes can play a number of extremely important functions, such as stimulating the participants' activity, developing their inventiveness and prompting them to creative activity. They can also provide them with sensory stimulation or help them release and deal with any negative emotions. In addition to mental activation, which is considered one of the necessary conditions for healthy aging, art classes can contribute to the improvement of manual fitness, which decreases with age (Cylkowska-Nowak, Strzelecki and Tobis 2013; Tobis, Kropińska and Cylkowska-Nowak 2011; Rzemieniak 2000).

# D. Music Therapy

Music therapy consists in the application of music and its elements (mainly sound and rhythm) in order to eliminate the symptoms of illness, introduce changes in individual functioning and improve people's contact with the environment. Music therapy for the elderly is a sphere of arterapeutic impact, which provides an opportunity to work with both healthy and sick people as well as with their social environment in specifically organized sessions. Music therapy is divided into active and receptive. The first consists in performing activities that require physical participation of seniors, such as movement accompanied by music, singing or playing instruments. In turn, the receptive music therapy mainly consists in listening to a certain type of music aimed at relaxation and rest.

Music, thanks to its properties, is an important therapeutic tool. It helps seniors maintain an optimal level of functioning in all areas of psychosocial life. It also allows them to adopt an active attitude to the inevitable process of aging and its natural consequences. As a result, music therapy contributes to stimulating personal development and is essential for improving the quality of the elderly's life (Cylkowska-Nowak, Strzelecki and Tobis 2013; Brudek, Kierpal and Gamrowska 2015).

# E. Garden Therapy

Garden therapy (horticultural therapy) is a process in which plants, gardening and the inherent relationship of man with nature are used as tools in therapeutic and rehabilitation activities. Works related to the cultivation of plants and garden care have a positive effect on the physical and mental condition of people performing them, as well as on their cognitive abilities and social relations. Therapeutic gardens allow both passive and active contact with nature. Gardening activities improve the functioning of the circulatory system, increase muscle strength and bone density, improve motor coordination and balance, stimulate the senses, reduce stress, anxiety and aggression. They constitute, therefore, a great therapeutic and rehabilitation tool that can improve the quality of life of older people, enabling them to rehabilitate in a safe and friendly environment of plants (Latkowska 2016).

#### **References:**

- Baranowska, Aneta. 2013. "Starzenie się społeczeństwa i związane z tym konsekwencje – perspektywa socjologiczna." In *Społeczny wymiar życia i aktywności osób starszych*, edited by Aneta Baranowska, Elżbieta Kościńska and Małgorzata Wasilewska-Ostrowska, 45-57. Toruń: Wydawnictwo Edukacyjne Akapit.
- Błędowski, Piotr. 2012. "Starzenie się jako problem społeczny. Perspektywy demograficznego starzenia się ludności Polski do roku 2035." In *Aspekty medyczne, psychologiczne, socjologiczne i ekonomiczne starzenia się ludzi w Polsce*, edited by Małgorzata Mossakowska, Andrzej Więcek and Piotr Błędowski, 11-23. Poznań: Termedia Wydawnictwa Medyczne.
- Borecka, Irena. 2001. *Biblioterapia. Teoria i praktyka. Poradnik.* Warszawa: Wy-dawnictwo SBP.
- Brudek, Andrzej, Piotr Kierpal and Anna Gamrowska 2015. "Muzykoterapia jako forma wspierania rozwoju w okresie późnej dorosłości." In *Oblicza starości we współczesnym świecie*, Vol. 1: *Perspektywa psychologiczno-medyczna*, edited by Paweł Brudek, Stanisława Steuden, Izabella Januszewska and Anna Gamrowska, 241-255. Lublin: Wydawnictwo KUL.
- Bywalec, Czesław and Leszek Rudnicki. 2002. Konsumpcja. Warszawa: PWE.
- Cylkowska-Nowak, Mirosława, Wojciech Strzelecki and Sławomir Tobis. 2013. "Muzykoterapia pacjenta starszego jako wspomaganie oddziaływania konwencjonalnej medycyny." *Gerontologia Polska* 4:138-142.
- Dąbrowski, Andrzej. 2006. Zarys teorii rekreacji ruchowej. Warszawa: DrukTur.

- Duda, Krzysztof. 2012. "Proces starzenia się." In *Fizjologia starzenia się. Profilaktyka i rehabilitacja*, edited by Anna Marchewka, Zbigniew Dąbrowski and Jerzy Żołądź, 1-31. Kraków: Wydawnictwo Naukowe PWN.
- Gosik, Blanka. 2015. "Formy spędzania czasu wolnego starszych osób w województwie łódzkim." In *Jakość życia ludzi starych – wybrane problemy*, edited by Anna Janiszewska, 137-149. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Halicki, Jerzy. 2005. "Pomyślne starzenie jako jedna z kluczowych kategorii późnej dorosłości." In *Człowiek dorosły istota (nie)znana?*, edited by Elżbieta Dubas, 165-173. Łódź-Płock: Wydawnictwo Naukowe Novum.
- Jan Paweł II. 2002. List papieski do uczestników II Światowego Zgromadzenia poświęconego problemom starzenia się ludności "Ludzie starsi w życiu społeczeństwa."
- Kolanowski, Ann, Donna Fick and Linda Buettner. 2009. "Recreational Activities to Reduce Behavioural Symptoms in Dementia." *Geriatrics and Aging* 12: 37-42.
- Kozdroń, Ewa. 2014. "Aktywność rekreacyjna w procesie pomyślnego starzenia się." Zeszyty Naukowe WSKFiT 9: 75-84.
- Kozdroń, Ewa and Anna Leś. 2014. *Aktywność ruchowa w wychowaniu ku starości*. Warszawa: E-Wydawnictwo Narodowego Centrum Badania Kondycji Fizycznej.
- Kozdroń, Ewa. 2006. "Rekreacja ruchowa osób 'Trzeciego wieku." In Zarys teorii rekreacji ruchowej, edited by Andrzej Dąbrowski, 108-134. Warszawa: Druk-Tur.
- Lach, Monika. 2014. "Biblioterapia w pracy nauczyciela". Zeszyty Naukowe Uniwersytetu Rzeszowskiego 86: 131-142.
- Latkowska, Monika. 2017. "Hortiterapia w leczeniu i rehabilitacji osób w podeszłym wieku." In *Hortiterapia jako element wspomagający leczenie tradycyjne*, edited by Agnieszka Krzymińska, Poznań: Rhytmos.
- Laskowska-Szcześniak, Maria and Elżbieta Kozak-Szkopek. 2013. "Uwarunkowania pomyślnego starzenia." *Forum Medycyny Rodzinnej* 7 (6): 287-294.
- Novek, Sheila et al. 2013. *Exploring the Impacts of Senior Centres on Older Adults*. Winnipeg: Centre on Aging, University of Mannitoba.
- ONZ. 2002. *Międzynarodowa Strategia Działania w Kwestii Starzenia Się Społeczeństw*. Accessed on: 01.12.2017. http://www.unic.un.org.pl/ageing/wstep.php.
- Petsche, Lisa. 2014. *How recreation benefits seniors*. El Paso inc. Accessed on: 01.12.2017. http://www.elpasoinc.com/elpasoplus/health/how-recreation-benefits-seniors/article\_937ecf3a-8ebb-11e3-9cae-0017a43b2370.html.
- Rodzina.senior.pl. *Dziadkowie i wnuki relacje i przesłania*. Accessed on: 01.12.2017. http://www.rodzina.senior.pl/88,0,Dziadkowie-i-wnuki-8211-re-lacje-i-przeslania,2846.html.
- Rottermund, Jerzy, Andrzej Knapik and Michał Szyszka. 2015. "Aktywność fizyczna a jakość życia osób starszych." Społeczeństwo i Rodzina 42: 78-98.
- Rzemieniak, Monika. 2000. "Proces twórczy jako terapia przez sztukę." Pisma Lubelskiego Samorządowego Centrum Doskonalenia Nauczycieli AD REM 3:1-3.

- Singh, Bhawana and U.V. Kiran.2013. "Psychological well-being during old age." Advance Research Journal of Social Science 4: 170-174.
- Singh, Bhawana and U.V. Kiran. 2014. "Recreational Activities for Senior Citizens." Journal of Humanities and Social Science 4: 24-30.
- Tobis, Sławomir, Sylwia Kropińska and Mirosława Cylkowska-Nowak. 2011. "Arteterapia jako forma terapii zajęciowej w aktywizacji osób starszych." *Geriatria* 5:194-198.