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# Selected determinants of seniors' lifestyle


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## ABSTRACT

Bendikova, E., & Bartikklaus, P. (2015). Selected Determinants of Seniors' Lifestyle. *J. Hum. Sport Exerc.*, 10(3), pp.805-814. The article presents partial results which reflect seniors' lifestyle and which are focused on selected determinants (especially sports activities). These determinants are the key factors of the quality of seniors' life. The respondents of our research were the retirees from the town of Liptovsky Mikulás. We used a questionnaire to obtain the primary indicators of quality of life and lifestyle of seniors. Our findings significantly show that exercise and sports activities play an important role in terms of maintaining social contacts, health and independence, the values that are particularly specific for life of seniors from different points of view. The article is a part of the grant research task VEGA no. 1/0376/14 Physical activity intervention for the prevention of health of the population of Slovakia. **Key words:** SENIORS, SPORTS ACTIVITIES, LIFESTYLE.

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## INTRODUCTION

Every human being is sociable and socialization in the society and social groups has many forms and fulfills different tasks under the influence of various socialization factors. Differences result from different social status and belonging to different social, economic, ethnic, religious and other groups which are connected with numerous social inclusions and exclusions throughout human life. Social inclusion is a process which ensures that those who are at risk of poverty and social exclusion (marginalization) can get opportunities and necessary resources so that they can fully participate in economic, social and cultural life and have a living standard and welfare regarded as common in the society in which they live. The basic principle of inclusion is to evaluate the differences of the human community. Some authors regard inclusion as moral necessity without categorization (Bendíková & Labudová, 2012). In this connection, it is necessary to point out the lifestyle of seniors and importance of sports activities for social inclusion as well as understanding of the quality of life which is a multidimensional concept including a lot of aspects of life reality.

Quality of life is a value which presents a motivation factor for people. It is the way how individuals perceive their position in cultural and value systems of the society in which they live, in relation to their aims, expectations, interests and lifestyle (Labudová, 2012). The most important criterion of the quality of seniors' life is a diversity of needs and ways of their satisfaction. Although seniors feel the necessity to be active and useful, their retirement and a shortage of social contacts result in limited activities and less communication. And especially cultural, sports and educational activities in post-productive age help seniors feel self-esteem and satisfaction, integrate into the society, develop their mental and physical health, experience new life situations and understand the life in our ever-changing world (Vasilová, 2010; Kostencka, Šmiglewska & Szark-Eckard, 2012). What is more, one of the factors of the quality of seniors' life is health and maintaining of social contacts which are different in senior age in comparison to youth and middle age (Diener, 1985; Blahutková & Dvořáková, 2005). An increasing age, health problems and social isolation all result in gradual resignation and loss of seniors' life optimism.

Health is a category protection of which is anchored in the constitution. Development of health education focused on seniors is supported by international documents Health for Everybody in the 21<sup>st</sup> Century (Article 5 Healthy Ageing) and the documents from the UN World Assembly on Ageing. Based on its decision from September 14, 2011, the European Council declared 2012 as the European Year of Active Ageing and Solidarity between Generations. Ageing is a dynamic, natural and biologically determined heterochronic process in which body functions, its adaptability and resistance to illnesses decrease (Šimonek, 2000; 2005). These illnesses are characterized by individual variability (Kováč, 2003) which causes great heterogeneity of senior population (Štílec, 2004; Uhlíř, 2008), which will further increase.

This tendency can be proved by demographic data of the Slovak Statistical Office which show increase in population aged over 65 years. Within past 10 years the proportion of people aged 65 and higher has increased by 1%, and their number has increased three and a half times in the past 50 years. According to prognoses, this increase will be faster in the future. Besides this, the demographic development shows the phenomenon of double ageing. This term means that the number of elderly people increases most dramatically in the highest age categories (for example, by 2015 the number of people aged over 65 will have doubled and the number of centenarians will have increased by 18 times), as Poledníková (2006) states. One of the reasons of our population's ageing is prolongation of life expectancy. In 2010, the average life expectancy for men was 71.6 years and for women 78.8 years. In Slovakia, there are more

than 900 thousand citizens aged 60 and higher, which is 17% of its population. The group of seniors is becoming noticeably over-feminized, with 61% of senior women.

Impairment of kinetic abilities in senior age is undoubtedly connected with morphological and functional changes in the central nervous system (Langmeier, 1998). According to Kasa (2005), the older age is characterized by dramatic changes in the muscular system, resulting in slower movements and inability to perform several activities simultaneously. Moreover, the movements are rigid, non-rhythmical and muscle-bound. The speed and elasticity of movements noticeably decreases.

One of the factors affecting prolongation of active life in older age are sports activities but also activities which are not traditional but have a psychomotoric character focused on maintaining the physical power and fitness (Blahutková, 2006; Kopřivová, 2001; Zadarko, Barabasz & Penar Zadarko, 2009; Zadarko, Barabasz & Junger, 2010; Nemček, 2011). Hošek (2000) considers sports activities as some of the basic tools of socialization of people in senior age. Despite a lot of knowledge about positive effects of sports activities done in older age, (Blahutková & Dvořáková, 2005; Labudová & Tóthová, 2006) in Slovakia there is a prevalence of inactive seniors who do not do sports regularly (Gajdoš, 2000).

Sports activities accompany people since they are born and throughout their life their focus, aims, tasks and load change and adapt to health conditions, interests and material conditions of people (Barengo et al. 2000; Lee & Paffenbarger, 2001; Kortas, Bielawa, Cieslicka, Prusik & Prusik, 2013; Prusik, Iermakov, Okninski & Zukow, 2013; Wasilewicz et al. 2013).

Importance of sports activities increases as people grow old. After they are 30 (30 to 45 years old), involution processes start to appear. Kinetic abilities (particularly speed and speed-power abilities) naturally decrease and lack of sports activities can simulate this decrease as well. Aerobic capacity decreases by approximately 7.6% with men and 5.3% with women. This is caused by lower maximum pulse frequency (Wenger, 2003). Uhlíř (2008) states that the muscle strength decreases by 15% every ten years after the person is 50 years old and by 30% every ten years after we reach the age of 70. This is caused by a smaller number of muscle fibers, which is more striking with women. However, sports activities focused on development of strength abilities can slow this decrease thanks to muscle hypertrophy and engagement of a higher number of kinetic elements of the muscle (by 14%).

In this age, functions and mobility of the musculoskeletal system decrease, and therefore the risk of injuries increases (Nemček, 2010). Women sustain more injuries (falls) than men because they suffer from muscular system diseases more often, their ratio of muscles to their overall body weight is lower and they are generally more active doing household chores (Balková, 2005). Seniors' physical and mental agility is not affected only by ageing. It might be weakened also by sedentary lifestyle (Roslawski, 2005). Women's kinetic abilities start to worsen earlier and faster than men's abilities, particularly when their movement is limited (Šimonek, 2000). Decreased kinetic ability is accompanied by an increased number of diseases and lower adaptation abilities. This is also connected with the fact that as people grow old their basal metabolic rate is slower and, as their sports activities are reduced, their body weight increases (Bendiková & Labudová, 2012). Labudová (2012) states that in the post-productive age (over 55 years) sports activities should be done three to four times a week, approximately six to eight hours.

According to Uhlíř (2009), the recommended sports activities for seniors include: a) sensory enhancement exercises, b) balance enhancement exercises, c) walking and standing-up drills, d) exercises focused on maintaining physiological extent in joints – spine enhancement exercises, e) aerobic exercises, f) strength

training, g) exercises focused on muscle imbalance and correct body posture, h) exercise focused on prevention or enhancement of health problems.

Free time as one phenomenon of active retirement plays a key role in terms of self-realization. The way how seniors spend their free time is connected also with motivation which determines people's aims, orientation and activities. Besides this, motivation makes people act according to their aspirations. Seniors do not do sports and recreational activities spontaneously without any motives (Ewiaková, 2003).

The aim of this article is to point out and widen the knowledge concerning active lifestyle of seniors and their social inclusion by means of sports activities. We supposed that one of the reasons why seniors do sports activities is their desire to maintain social relationships – contacts and health.

## MATERIAL AND METHODS

According to the aim and extent of our materials, the research group was comprised of 86 pairs of seniors (according to WHO) who lived in the town of Liptovský Mikuláš and whose average age was 66.2. All the members of the group were retired people who did not work and who lived in their own houses or flats. The research was performed in the second half of October, 2010. To obtain the data, we used the questioning method – questionnaire - (Kováč, 2003; Bednárík, 2005), which was based on the research needs and which focused on three primary levels of quality of life and lifestyle of seniors: 1. Basal – existential level, 2. Mezzo – individual and specific level (civilization). 3. Meta – elite (cultural and spiritual) level. We processed the qualitative and quantitative data by means of percentage frequency analysis and chi-square statistic (for 1%,  $p < 0,01$  and 5 %,  $p < 0,05$  of significance level). We used these methods to evaluate the significance of differences in answers to questions in the questionnaire. At the same time, we processed the data in graphs; we used the logical analysis and synthesis methods as well as mental operations.

## RESULTS

Following the partial aim and tasks, we present the part of our results which will be subject to further more exact study and processing. The results cannot be generalized. It is necessary to understand them as orientation data in terms of seniors' lifestyle with the focus on their integration into social life, which is connected with their mental and psychical health.

The results show that 65% of married couples are quite satisfied with the way they live their life ( $\chi^2 = 8,842$ ;  $p < 0,01$ ), 19% of couples were mostly satisfied and 16 % of couples are not fully content. Closeness with family and relatives plays an important role. 35% of senior couples stated that their relatives live close to them and they are the ones they can rely on when solving their problems. Besides this, 17% of women claim that they can share their problems also with their friends, and 48% of women talk about their problems regularly with their husbands and the men do the same.

The research results show that most of the married couples consider the feeling that they are not alone as the most important. 89% of seniors (both men and women) stated that during the economic crisis their most essential value is an authentic contact with their relatives as well as feeling useful, having somebody to live for and not staying lonely.

The things they worry most about in the future are loneliness (women -  $\chi^2 = 8,778$ ; men -  $\chi^2 = 9,987$ ;  $p < 0,01$ ), fear of social exclusion and health problems (women -  $\chi^2 = 9,569$ ; men -  $\chi^2 = 11,561$ ;  $p < 0,01$ ).

Requirements of sports activities increase as people grow old and their focus, frequency and load change as well. In terms of contents, sports activities of health and mental relaxation character focused on maintaining social contacts and health play an important role ( $\chi^2 = 10,879$ ;  $p < 0,01$ ). Seniors also prefer walking and hiking, which is connected with the place where they live. Considering the frequency of sports activities, the results show that 22% of women and 37% of men do sports regularly once a week, 20% of women and 46% of men do sports activities two times per week, which means a significant difference for men ( $\chi^2 = 7,121$ ,  $p < 0,01$ ). Furthermore, 15% of women and 36% of men do sports three and more times per week, which again means a significant difference for men ( $\chi^2 = 6,024$ ,  $p < 0,01$ ), who are into many recreational activities).

The structure of sports activities our respondents are into proves the above-mentioned facts (Table 1). Both men (49.8%) and women (42.9%) enjoy cycling as their hobby but also as the means of transport. What is more, they like gardening and working around their houses with the aim of making their environment better and nicer. We also recorded some significant differences between sexes concerning going for walks, where women had better results ( $\chi^2 = 8,654$ ;  $p < 0,01$ ). The same results came with picking forest fruits ( $\chi^2 = 7,885$ ;  $p < 0,01$ ). Moreover, we found out that while the women enjoy participation in different sports and fitness programmes ( $\chi^2 = 9,441$ ;  $p < 0,01$ ), the men play table tennis.

Table 1. Structure of seniors' spare-time activities (n = 86).

Activities/Sex	men	women
cycling	49.80%	42.90%
going to walks	15.60%	48.60%
hiking	41.50%	32.80%
gardening	33.70%	29.20%
jogging	28.90%	17.90%
swimming	41.90%	33.70%
forest fruit picking	19.80%	42.90%
table tennis	54.90%	3.90%
dancing	9.80%	48.90%
yoga	12.60%	17.90%
others	7.80%	12.50%

The fact that both sexes like jogging is also worth mentioning (women 12,3% and men 13,9 %). Table 2 shows that there is a difference between women and men when it comes to the way how they do sports activities; there was a significant difference and the results were better for men ( $\chi^2 = 7,943$ ;  $p < 0,01$ ). These figures confirm reality and fear of social contact.

Table 2. The way how seniors do sports activities (n = 86).

Way / Sex	men	women
organized	62%	42%
disorganized	38%	58%

$\chi^2 = 7,943$ ;  $p < 0,01$

The next thing we found out is that the women do not do sports regularly because they take care of their grandchildren. Moreover, 15% of couples said that they prefer hiking and walking due to their financial situation and the fact that these activities are not financially demanding.

The men's main motives for doing sports are pleasure (59.8%), opportunity to make friends and maintaining of their health. The women seek social contact, health improvement and feeling good. These findings show that health and social contacts are also the reasons for doing sports activities (Table 3). Regular exercise and frequency of sports activities are often impeded by lack of motivation and health problems, especially diseases of cardiovascular, metabolic and muscular systems, which the seniors mentioned in the questionnaire.

Table 3. Seniors' motives for doing sports activities (n = 86).

Motives/Sex	men	women
social contacts	55.30%	68.50%
pleasure /mental relaxation	59.80%	42.20%
improvement of physical fitness	45.90%	41.80%
reduction of body weight	13.90%	15.60%
relaxation	33.10%	38.80%
desire to exercise	29.20%	35.50%
health aspects	56.50%	57.60%

In terms of emotions, the women find aesthetic experiences a very important part of sports activities. Aesthetic feeling and perception of movement and exercise makes the women experience and change exercise in a practical way. Aesthetic experiences are important for the women's kinetic, moral and will development. What is more, they present the basis for aesthetic perception, philosophy of beauty and creative application of exercise.

One of the dominant life values for seniors is self-sufficiency and related social interaction as well as living an active life and an opportunity to achieve their goals. For the most of married senior couples (91 %, Chi = 12, 987;  $p < 0,01$ ), these values are more important than material values (money), with a significant difference at 1% significance level (12, 662;  $p < 0,01$ ). Other essential and primary values are social contact (Chi = 12, 898;  $p < 0,01$ ), health and peaceful family (social) atmosphere. Furthermore, the seniors regard their families and especially their grandchildren as the values bringing energy. The women typically want to be close to their children and grandchildren and they also desire to have good intergenerational relationships and an opportunity to meet their friends and not to be alone. The women stated that social contacts with their friends help them to reduce their fixation to their family members and also their inappropriate expectations. This makes others see their values, independence and more active way of life (Chi = 11, 312;  $p < 0,01$ ). The men stated the same, but not in such a high percentage (Chi = 7, 312;  $p < 0,01$ ).

When people retire, their desire for self-fulfillment is still very important and they usually demonstrate it in contact with people at social events. Seniors enjoy visiting cultural performances (cinema and theatre). They try hard to develop their cultural and artistic interests. For example, many seniors still love reading. What changes is their focus on fiction, which they find relaxing. Almost two thirds of the seniors who prefer reading read one or two books per month on average. Sometimes cultural events designed for seniors do not have a special name. The reason for this is that seniors do not like to be identified with their age or they

simply do not want to socialize just on the basis of their age. That is why these activities are referred to as activities "for adults". But a lot of elderly people will enjoy them thanks to their timing and focus.

Self-fulfillment in the form of self-education, for example in the field of IT technologies and foreign languages, is a very interesting trend in life of seniors and the way they spend their spare time. This means that education can enhance the quality of life not only in adult but also in senior age. In Slovakia but also in other countries such education is provided by universities of the third age. 25% of women and 18% of men from our group attend the University of the third age. Besides this, 22% of married couples state that they are planning to begin studies at this university.

Obtaining and processing information help seniors maintain and develop their cognitive functions and activities until a very old age. Furthermore, besides knowledge third age universities provide social inclusion or even social support. They are a kind prevention from social isolation. Moreover, women claim that studies satisfy them also emotionally because they can achieve the goals that they have not achieved so far. Besides this, 86% of married couples stated that they use a mobile phone and 25% of women and 46% of men ( $\chi^2 = 5,987; p < 0,05$ ) can work with a computer. 47% of them even use the Internet ( $\chi^2 = 6,709; p < 0,01$ ). We consider this a very positive trend.

## DISCUSSION

Both men and women ( $M, W - \chi^2 = 67,987; p < 0,01$ ) stated that life in old age depends on how they are able to cope with new conditions and limitations in life as well as on dealing with personal problems and their own identification with new roles and opportunities. There is no doubt that the situations seniors have to deal with are often stressful. Nowadays it is also caused by the fact that the society is focused strongly on youth, endurance, effectiveness and it rarely appreciates values which are typical for older stages of our life, such as experience, life wisdom, self-awareness and so on. In this connection Hošek (2000) states that it is necessary to look for a salutogenetic attitude which is focused more on health and comfort – the values that help strengthen our health, cope with stress and deal with problems more easily.

Furthermore, we found out that feeling isolated can develop into mental problems, nervousness and tension (women –  $\chi^2 = 7,845; p < 0,01$ ; men –  $\chi^2 = 9,989; p < 0,01$ ). Blahušová (1995) claims that mental health affects people's subjective feeling and perception of health. Social inclusion focused on sports activities in seniors' lifestyle can help eliminate or alleviate social isolation and negative feelings.

The structure of free-time activities the seniors from our research group do corresponds with the findings obtained by Medeková (2011) which prove prevalence of receptive activities concerning women in contrast to men. The women are significantly ( $p < 0,01$ ) interested in handicrafts and needlework, watching TV, chatting with their friends in contrast to the men.

We found out that 28% of women do psychomotoric exercises within sports programmes they participate in (these exercises included simple games, exercises with different tools, contact elements and music therapy elements, including relaxation techniques), which are focused on experiencing movement. Furthermore, Blahutková (2006) states that health is closely connected to psychomotorics, particularly when looking for individual attitudes towards quality of life. Psychomotorics is one of the factors which support health in the following areas: perception of one's own fitness (self - efficacy), coping with stressful life situations (optimism, self-confidence), social support, mental hygiene (self-education, adaptation, autoregulation).



Women prefer aesthetic forms of exercise accompanied by music and focused on building up body culture and exhibition of kinetic skills, in correspondence with Ewiaková (2003). This is an emotional component (motive) and it is a specific and significant stimulating value of exercise.

Retirement and related changes in lifestyle result in one or two preferred activities, so-called basal activities, where 25% of all the seniors of both sexes would like to continue their professional activities, even in reduced extent. Therefore, we can assume that financial problems are a more likely reason for wanting to go on working than interest in work itself. Even though material values (money) do not play such an important role in life of seniors, they are still necessary for survival and self-care. Lack of money in this age is related to leaving a job which used to be the main source of income. Nowadays, decrease of income in retirement age by approximately 30-40% makes life for seniors very demanding and it has been going on in Slovakia for more than ten years (Bednárík, 2005). Dúbrava (2006) states that women in this age use more pharmacotherapy than men and costs for medicines are the highest of health care costs in comparison to other age groups. These costs belong to other household and food expenses. What is more, seniors (both men and women) seek and appreciate availability of clinics and health centers with practitioners and specialists.

As far as getting information and news about what is going on in Slovakia and abroad is concerned, our findings confirm the findings of Aleksandrowicz (2008), according to which 92 % of seniors consider reading newspapers and watching TV as the basic source of information and contact with current events. Furthermore, the respondents' answers showed us that seniors visit cultural events especially because of entertainment, spending free time as well as the need for communication and socialization. These activities increase their self-confidence and provide them with motivation to live active life, communicate and seek further education. Cultural organizations can become places where seniors may spend their free time because they offer more than just entertainment. Chomová (2012) claims that programmes and activities the main target group of which would be seniors are still out of attention for many cultural organizations. Most of these organizations offer seniors lower entrance fees. However, only minimum special events for the elderly are being organized. Lack of such events specially prepared for seniors does not necessarily mean that this group of people is neglected, though.

When giving an open answer, our respondents stated that culture, free-time activities and education play an irreplaceable role in life of elderly people. Culture and cultural spare-time activities can destroy barriers between the society and seniors who are becoming increasingly isolated. Therefore, cultural institutions and organizations should focus their programmes on active ageing and intergenerational solidarity in order to improve overall attitude towards the elderly. Several researches are in support of this idea (Michal & Tokosova, 2012; Wiech et al., 2013; Stankiewicz, Majchrowski & Zukow, 2013). These researches and studies point out the fact that educational activities bring about life satisfaction, integration of seniors into the society and improvement of their mental and physical health.

## CONCLUSIONS

Lifestyle of contemporary seniors results from primary needs such as health, diet, living conditions, taking care of grandchildren and exercise as well as sports activities done with the aim of meeting the peers. This shows that the most of contemporary seniors are afraid of social exclusion and loneliness. As we found out, sociological aspect of sports activities both men and women do in their old age can strengthen and support more active roles they can have in the society, which helps them to change their sedentary lifestyle and improve social integration. Sports activities and exercise done in groups enhance their social and

intercultural interaction. These activities are also focused on making new friends, spreading the social network, finding new roles and supporting intergenerational activities which help to change stereotype perception of ageing.

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