ORGANIZED PHYSICAL ACTIVITY AS A MEANS OF THE QUALITY OF LIFE IMPROVEMENT IN OLDER ADULT WOMEN IN SLOVAKIA FROM THE PERSPECTIVE OF ADULT EDUCATION THEORY

^aMARTINA LENHARDTOVÁ, ^bLENKA TLUČÁKOVÁ, ^cIVANA PIROHOVÁ, ^dKATARÍNA MAYER, ^eGIZELA BRUTOVSKÁ

University of Presov in Presov, Faculty of Humanities and Natural Sciences, Ul. 17 novembra č. 1, Prešov, Slovakia Email:^amartina.lenhardtova@unipo.sk,

^blenka.tlucakova@unipo.sk,^civana.pirohova@unipo.sk, ^dkatarina.mayer@unipo.sk, ^egizela.brutovska@tuke.sk

This paper is the outcome of the project solving VEGA nr. 1/0706/17 The relationship between physical activity and obesity in older adult women financed by the resources of Ministry of Education, Science, Research and Sport of the Slovak Republic.

Abstract: The presented study is a result of the qualitative research with the aim to reveal the impact of organized physical activities with a recreational character on the quality of life improvement in older adult women in Slovakia. Participants of the research, were students at the University of the Third Age. Using the semi-structured interviews, we identified subjective meanings that the older adult women, engaged in the education process, ascribed to organized physical activities in relation to the quality of their own lives, from the perspective of adult education. Besides the analysis of problems associated with the education process itself, conclusion also contains proposals pertaining to direction of an education process of organized physical activities of older adults in Slovakia and hence improve the quality of their lives.

Keywords: organized physical activity, quality of life, older adult, adult education theory.

1 Introduction

Quality of life¹ of older adults in Slovakia is very low. Slovakia ranks 25th out of 28 European countries in Active Ageing Index². One of the possibilities of changing the current situation are organized physical activities³.

Numerous researches of both domestic and foreign provenance show that older adults purposefully influence conditions of their own ageing and the quality of their lives by choosing an organized physical activity (Chrisler & Palatino 2016; Talbott & Roberson Jr. 2011; Dionigi, Horton, & Bellamy 2011; Klusmann, Evers, Schwartzer, & Heuser 2012; Taylor et al. 2004; Hsu, Lu, & Lin 2014; Boulton-Lewis & Buys 2015; Bond, Corner 2004; Stilec 2004; Nemcek 2011; Pelclova, Gaba, Tlucaková, & Pospiech 2012; Pelclova et al. 2009; Gaba, Pridalova, Pelclova, Riegerova, & Tlucakova 2010). The paradox is, that despite these findings, organized physical activities for older adults in Slovakia are still lacking. Among other things, it is closely related to problems associated with designing exercise programs (Fialova & Fiala 2004).

Mentioned researches mostly draw on knowledge from the field of sport educology. However, there is a lack of research into the impact of physical activities on quality of life of older adults from the perspective of adult education theory. Our research opens a possibility to contribute to the development of sport geragogics.

An object of our interest is a person in education process, an older adult who educates himself and exercises, and hence influences the quality of his life. It is a person who is active, curious and autonomous and as such regarded as a co-author of his own development. The research was based on personalistic approach to education. In the centre of our research, intersecting the field of andragogy and sport educology, are education constructs presenting concrete principles, general requirements of an education process, determining its effectivity.

Among the common principles are the general didactic principles such as the principle of intuition, the principle of conscious and active participation, the principle of accessibility, etc). Group of older adults as a target group of education is homogenous in the interests, goals, health condition and other specifics; and that requires refined and proficient educator. Didactic principles of dialogue education, as presented by Vella (2002) are perceived as requirements that education of older adults needs to meet. In that kind of education an older adult enters into his or her own development as a co-author. These principles are as follows: Needs Assessment, Safety, Sound Relationships, Sequence/Reinforcement, Praxis, Respect for Learners, Ideas/Feeling/Action, Immediacy, Clear Roles & Role Development, Teamwork& Small groups, Engagement, Accountability. (p. 4)

The research investigation analysed in the presented study was aimed at identification and analysis of variables which reveal subjective perception of organized physical activities of older adult women, involved in education process, in context of education constructs, and that all in relation to the quality of life. Given the scope of the research, the study presents analysis of only the most significant findings.

2 Methodology

Main research goals were: At first to identify and analyse subjective meanings that the older adult women, engaged in the education process, ascribed to organized physical activities in relation to the quality of their own lives, from the perspective of adult education. Secondly to reveal and describe problems in education process of organized physical activities of older adult women in context of education constructs.

Main research questions were:

RQ1: How do older adult women interpret the principles of dialogue education?

RQ2: How these interpretations are reflected in particular dimensions of quality of life of older adult women?

To select participants we applied extreme case sampling since the presented example is an atypical example of an educational organized physical activity in the Slovak Republic. Older adult women studying at the University of the Third Age in Presov participated in the research. They have had an opportunity to attend a program aimed at organized physical activities under the professional supervision of erudite sport educators. The basic criteria used to select participants were: age over 60, involvement in the study program Physical Education and Sport conducted by the Faculty of Sport of Presov University in Presov, and the willingness to cooperate. The study program Physical Education and Sport takes four semesters. In each semester there are 8 theoretical and 9 practical classes. Physical performance is diagnosed at the beginning of the semester and then again at the end of the semester, together with the final assessment. Since 9 practical classes in one semester are not sufficient for development of functional physical fitness of an individual, a special program called ProSenior was designed. Students of the University of the Third Age, as well as other older adults could attend it twice a week. The sample comprised 5 older adult women who participated in this program for three or more years and attended the University of the Third Age in the study program of Physical Education and Sport. It was an exhaustive sample comprising all available persons. Namely, our participants were Mrs Klara - aged 74, widowed at the age of 40, she has two children, education: complete secondary

¹ The quality of life means, in accordance with the definition presented by the World Health Organization, individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

² Active Ageing Index is a tool to measure the untapped potential of older people for active and healthy ageing across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities as well as their capacity to actively age.
³ Organized physical activities are purposeful physical activities practised regularly

³ Organized physical activities are purposeful physical activities practised regularly and described by the units of time, distance, intensity, frequency, commonly having own rules. Performing organized physical activities requires a suitable place, equipment and clothing (Ettinger, Wrighht, & Blair 2007).

education, participation in ProSenior program: 5 years; Mrs Magda – aged 64, married with 2 children, education: Secondary School of Economics, participation in ProSenior program: 3 years; Mrs Tamara – aged 65, married with 2 children, education: complete secondary education, participation in ProSenior program: 2.5 years; Mrs Maria – aged 60, widow, 2 children, education: certified economist, participation in ProSenior program: 3 years; Mrs Helena – aged 64, married with 3 children, education: complete secondary education, participation in ProSenior program: 3 years.

Semi-structured interviews carried out in participant's homes and in public spaces were used to collect data. Both options helped the participants to be more open and willing to answer the asked questions. In most cases, the meetings took place after the exercises, personally attended by the researchers, which allowed more personal relationship between the participants and the researchers. At the same time, the researchers got involved in a direct participant observation. Interviews were recorded on a digital audio recorder. Overall, five interviews were conducted.

Analysis of empirical data was carried out in three-stage coding process (Strauss & Corbin 1998) based on principles of a grounded theory. Initially, we used the technique of open coding resulting in the set of indicators to which the more general meaning – the code was assigned. Established codes were then categorized. Parallel to open coding, axial coding took place, followed by selective coding. During the analysis of data, numerous set categories from the theory of adult education were used, but new categories were also established. During the phase of selective coding our attention was focused on identification of a central category, around which the basic analytical story was organized.

Drawing on Svaricek et al. (2007), Silverman (2005), and Plichtova (2002) we used direct quotations to increase credibility, validity and authenticity. We mapped the course of the whole research so that the research audit could be performed. To maintain the ethical standards we obtained an informed consent in which the participants were informed about the nature of the research and about possible consequences of their involvement in it. The participants were assured of confidentiality and anonymity and confirmed the understanding by their signatures. Prior to the depth interviews, an informed consent was also obtained from a guarantor of the study program.

3 Results

We bear in mind, in line with Vella (2002), that there are no two people who would perceive the world in the same way. Therefore, it is necessary to take into account that people joining the same program come with different experience and expectations.

The overall situation of participants shape the decision-making about what to teach and how to teach it. Statements presented by the older adult women indicate a need of individual approach from the side of an instructor. Based on complex diagnostics of the exercisers, instructor can design an individual plan of exercises to be performed at home, together with recommended dietary regimen and specify short and long-term goals. Subsequently an instructor can perform measurement of success rate.

In general, sense of care and concern has beneficial effects on older adult's psychological wellbeing. An individual approach includes consultations which strengthen mutual relationships and security even more and, at the same time, motivates an individual more to perform physical activities. Broadly speaking, it is possible to assume that the approach to exercise and stability of a group, with regard to a number of participants, depends on how successful is the motivation of an individual.

Apart from the exogenous factors, an approach of older adult women to exercise is also determined by their inner motivation, closely related to their value orientation and the overall perception of their quality of life. To know the interrelatedness of indicators applied to describe the quality of life of individuals can help an instructor to design a curriculum and adopt an individual approach. We established following key categories: strict daily routine, freedom to redistribute leisure time, need of social interactions, being able to establish priorities and living in the present. We are selecting for this article as follow:

Strict daily routine

Mrs Klara (74 years old) interprets the quality of her life through strict daily routine. She needs to have her free time filled with organized activities. In her own words, she does everything not to shut herself in her home. We can say that for her any kind of activity, it does not have to be a physical one, is like a drug. Her motto is: to move is to live. It appears that she lives her life well when she manages all the activities she had planned before. Strict daily routine creates some kind of stereotype that leads to feeling of security and hence satisfaction. Her involvement in ProSenior program is primarily motivated by her need to have a strict daily routine and organized free time. She explains: "just not to have any time to spare, not to shut herself in her house". The major benefit of her exercising is in the psychological wellbeing, described as good mood, enthusiasm and positive thinking. Maintaining good health state and losing weight comes second. It is because Mrs Klara enjoys good health, she does not take any medication, which is down to good genes, as she puts it.

Freedom to redistribute leisure time

The main category in the analytical story of Mrs Tamara (65 years old) is freedom to redistribute her leisure time. It implies that Mrs Tamara does not have to lead a hasty life and she can set aside time for herself. Mrs Tamara's perception of quality of life is determined by her own upbringing (family of a priest); life experience, both positive and negative, and her former occupation (a nurse). Health, both physical and mental, always comes first. Health affects free redistribution of leisure time, but we can assume that it works vice versa too, since the respondent chooses activities supporting health. Mrs Tamara's free time is filled with all different activities and her family. The activities she mentions are reading, gardening, doing crosswords, taking care of her grandchildren, hiking, the University, exercise in her village, walking her dog, exercise at home and in ProSenior program, PC, and relax. She sees physical activity as the best remedy. It is for a respondent a source of energy and a determinant of sound mind. Family is where she finds the meaning of life. Quality of life is associated with the warmth of home, mutual communication and trust among the family members. For Mrs Tamara home means place where she feels safe. Her family strongly determines the freedom to redistribute her leisure time by certain obligation to help each other within the family. This obligation results from healthy family ties and a certain upbringing style.

Need of social interactions

Mrs Magda (64 years old) is happy with her life when her friends are near. Her leitmotif could be "live life to the fullest and take it as it comes". When she says "live life to the fullest" she means experience joy; think positively; perform organized physical activities; walk in the nature; attend cultural events and meet her friends. Mrs Magda looks forward to every meeting with her friends and claims that "sometimes friends are more than a family".

"I must always be in touch with people and simply have fun with them, joke around, and not I, I cannot do this or that. I'm looking forward the meeting, to be in touch with these people, we'll tell jokes again, we'll talk about our experiences, I can't live without it. I don't know that, I, for instance, haven't been working for ages, I'm retired but I go to my old work sometimes and I speak to the people there about their news and I tell them my news. I couldn't shut these people out, yeah and we're already talking about where to go next, yeah, whether we'll continue out studies, yeah, but we will meet each other again, simply I can't be like this: the school has finished we won't be meeting again, so.. And this pleases me a lot, that you meet these people. I can't imagine myself living in isolation, but only like this" (Magda, 64 years old).

Fear of isolation and a need for social interactions brought her to the following activities: hiking, swimming, meetings with colleagues, physical activity in ProSenior program, the University. Her statement "to take life as it comes" relates to the satisfaction with the course of her life. Mrs Magda enjoys every meeting, she tries to help everyone. Comfort associated with the course of life comes from her phlegmatic nature, as she herself puts it. She tries not to bother anyone and takes everything with humour. Organized physical activities have been a part of her life since the early childhood. She considers herself a "go-getter" and she cannot do without exercising. In case of Mrs Tamara, we specified a physical activity as a remedy, whereas for Mrs Magda it is exercising for the sake of exercising. Although we realize that psychological comfort is closely related to it, in this case it is especially about physical comfort.

Being able to establish priorities

An ability to prioritize depends on recognition of one's value orientation system. For Mrs Helena (64 years old) family comes first, followed by the circle of friends, orientation to active lifestyle and material security. Her value orientation regulates her actions. Sound family relationships based on mutual understanding, trust and tolerance create a family environment. That, and also health of all family members lead to satisfaction or dissatisfaction with one's own life. A circle of friends brings Mrs Helena opportunities of conversations with added value. She finds pleasure in meeting people and finds interest in news from their lives and new topics. In this way she compensates for a conversation with the partner. Meeting all kinds of people with their own problems broadens one's horizons and enables us to look at our own troubles from a different perspective. Her experience has taught her that the person with an ability to empathize shows more composure and is more likely to respect and tolerate others. Meeting other people also contributes to an active lifestyle, together with the University study, exercise and hiking. Organized activities allow older adults to lead eventful life and encourage the feeling of being needed. Exercising fills Mrs Helena's life with joy and keeps her health at the satisfying level. As soon as she unexpectedly stops participating in organized physical activities, for one reason or another, it reflects on her physical and psychological wellbeing. Mrs Helena interprets physical activity as serious illness prevention. Knowing benefits that organized physical activities offer, should motivate individuals to get involved even more, while they still can.

Living in the present

A prominent figure in our group of five older adult women is Mrs Maria (60 years old). She plays a role of an informal leader of the group. In the ProSenior program she takes initiative and organizes various activities that fall under both non-formal and informal education. The key category defining her perception of quality of life was described as living in the present. Mrs Maria likes organizing and leading her life as she wishes. In everyday life, the freedom of decision-making is very essential for her. She perceives the absolute certainty of her existence through feelings. She follows her feelings; they show her which activities to choose. She does not set long-term goals and claims that: "people should only do what they are capable of and what they want". With regard to the quality of life, very important seems an ability to adapt to living conditions and all sorts of situations. To that she adds that is done for one's own benefit. For Mrs Maria, similarly to Mrs Klara, physical activity is like a drug and it is perceived as a compensation for a loss of her husband. She keeps herself occupied by various activities and her time goes by faster. Her needs of self-realization and recognition are fulfilled when she gets involved in a wide range of activities. She offers a few reasons why she participates in the ProSenior program, for instance, feeling well, feeling good in the company of the fellow older adults who are fun to be around. In that context we can refer to a physical activity as to a source of joy.

4 Outcomes

Summarising the above stated facts, we can assert that organized physical activities play an important role in enhancing the older adults' quality of life. It becomes apparent that many of our findings correspond with the findings of Stathi, Fox, and McKenna (2002). Analysis pertaining to the quality of life of older adult women presented in this study enables us to distinguish five different categories of quality of life on one hand, and five different meanings given to physical activity, on the other hand. Individualized differentiation of the concept of physical activity results from the life stories of older adult women, from their current health state and value orientation systems. Knowing the relational frame of categories defining the quality of life and perception of physical activity, allows us to specify primary motivation for participation in these activities (see Table 1).

Table 1 Individualized differentiation of the concept of physical activity and relational frames with the quality of life and motivation for participation in physical activity

Meaning of physical activity	Motivation for participation in physical activity
Physical activity as life	Need to have a strict daily routine
Physical activity as a remedy	Maintaining and improving health condition
Physical activity for the sake of physical activity	Fellow participants, team
Physical activity as prevention	Maintaining good health state
Physical activity as a source of joy	Good feeling, team
	Physical activity as life Physical activity as a remedy Physical activity for the sake of physical activity Physical activity Physical activity as prevention Physical activity as a source of

Source: own elaboration

Recognising these associations might help instructors to increase the efficiency of education process, since these findings can be applied mainly in principles of security, healthy relationships, praxis, ideas – feelings – activities.

When formulating conclusions we need to take into consideration a scope of researched topic and the surplus of information. That is the reason why we present only the most significant findings or main hypothesis.

Education is optimized through an analysis of needs. Important is to know what older adult women want or need to know, and which direction is the education process going in order to bring some progress. We found out that their satisfaction with education process will increase when these elements are included: elements of yoga; Five Tibetan exercises; team building exercises; swimming; timed exercises more often; going on trips together; organizing activities with an involvement of their partners; lectures on how diet influences physical activity and also they would like to remove aerobics from the curriculum. The more of the given indicators of content are applied in practice, the higher efficiency of exercise, with respect to social, physical and psychological quality of life dimensions, can be achieved.

Individual approach of an instructor affects the motivation of an individual. The success rate of individual's motivation to physical activity conditions his or her approach to exercise, as well as to the group stability, when numbers of exercisers are concerned. In this context we can turn to the instructor to give more individual consultations.

In education, we regard very important a link between the principles of security, healthy relationships and clear demarcation of roles and that is because the subjects of education process are their common indicators. The other principles of dialogue education are differentiated with regard to mentioned relations.

We merged the principles of security and healthy relationships into one, since their common indicator is, firstly, a group of participating exercisers and secondly because healthy relationships affect the principle of security and vice versa. We are convinced that there is a relation between the principle of security and the principle of healthy relationships. We can say that the principle of security is differentiated with respect to stereotypes, trust and the group of exercisers. We assume that there is a relation between the relationships towards the instructor and also relationships of the instructor towards the exercisers. Furthermore, the group of exercisers is specified by the friendly team, same age (group of women of the same age) and the role of a confidant. We can reason that the more the stereotype is fed by indicators (gym settings, the way an exercise unit is run, periodicity, and instructor), the more the principle of security will be met.

We assume that there is a relation between conducting a dialogue and education environment. Further to the assumption, we speculate that an increasing interest in dialogue on the side of educators results in growing efficiency of education and also a growing interest of older adults to participate in education process.

When creation and selection of didactic methods and forms of education process, are concerned, we can state that exercise is differentiated with regard to the shape of the participants.

Older adult women remember new things easier when the educator is emphatic, uses a suitable language code, examples from praxis, and when they see applicability of newly acquired knowledge in everyday life. They master exercises easier when they repeat them regularly, when exercises are accompanied by music or when exercises in question are presented in an experiential way.

Linking theory to practice can be seen in the contribution of exercise. Older adult women see the benefits of exercise in better functional fitness, good feeling, self-confidence, relax, team, strengthening of psyche and rejuvenating effect.

5 Discussion and Conclusions

Analysing interpretations of older adult women pertaining to quality of their lives, we came to the conclusion that the relational frames cannot be synthesised since the participant's former lives directly influence the quality of their lives in the senium. Therefore, we deal with the quality of life separately using the key categories: strict daily routine, freedom to redistribute leisure time, need of social interactions, being able to establish priorities and living in the present. Identifying indicators of quality of life of the exercisers reinforces all principles of dialogue education which results in making the education process more effective.

Given the concrete education reality, it is possible to formulate several recommendations with respect to education theory:

- in agreement with Medekova (2011), a necessary prerequisite for doing physical activity in older age is corresponding level of understanding of its impact, contribution and benefits. Therefore, we recommend more frequent individual consultations for an exerciser in order to reveal the purpose of their exercise;
- the analysis showed stronger motivation to achieve goals on the side of an instructor, compared the one of the participants. On that account we suggest introducing so called team meetings which could bring the team together. Team meetings provide a space for dialogue but also a great opportunity to praise or plan further activities;
- older adult women demonstrate a strong need to bring the team together and that is why we recommend to organize more team building events, such as competitions, trips, veteraniady (sporting events for older adults), discussions or even conferences. The participants radiate energy, vitality, optimism and it would be a pity not to use their power to promote organized physical activities to those who do not exercise yet;

- when creating a content of exercise units we recommend to take into account above mentioned indicators arising from the analysis of needs;
- when study material is concerned, we support a notion of Nemcek et al. (2011) and we recommend to create various publications providing a strict methodology of selected exercises that older adult women can perform every day. We add that a great supplement could be practical advice referring to the influence of food on exercise. Authors should not omit medical exercises, workouts, stretching and relaxation exercises. Such material would be of use for an instructor too since it could utilized during consultations to compile an individual exercise program for a particular individual;
- older adult women could raise to the challenge and contribute to textbooks creation because only they know what is significant and age appropriate, in other words, they can identify their education needs and that is the reason why we recommend their involvement;
- older adult women like to educate themselves, they are functionally literate and they oftentimes search for various information on the Internet. That is why we recommend the instructor to refer the participants to various magazines, articles, publications dealing with benefits of physical activities to the quality of their lives. In addition, the instructor could inform them about the trends in other countries e.g. how older adults exercise there (as a comparison) and so on. Instructor could also provide them with various products (DVD, monographs). This kind of activity can strengthen healthy relationships and arouse even more interest in physical activity.

Implementing of these recommendations could contribute to an increase of: quality of education process, professional and social competence of an instructor, number of those interested in exercise, awareness of organized physical activities, number of course materials.

Proposals of recommendations can be also beneficial in the area of preparation of future instructor of older adults. Here we find important to state that the implementation of the given recommendations depends on exogenic and endogenic determinants of education. Since our proposals pertain only to organization of various events and creation of study materials, we find economic, social and political factors important.

From the presented result we can draw a conclusion that organized physical activities considerably influence physical, social and developmental wellbeing of older adults, especially when the principles of security, healthy relationships and clearly defined roles are applied. Sustainable development of the quality of life in the senium can be achieved by organized physical activities and autodidacticism while taking into an account their needs reflecting the reality of their lives.

Information obtained in the research can be further used to make work with older adults more effectively with regard to design of various programmes organized, for instance, at the universities of the third age, in day centres and other institutions of non-formal education.

Literature:

1. BOND, J., CORNER, L.: Quality of life and older people. Berkshire, England: Open university, 2004. ISBN 0-335-20872-X.

2. BOULTON-LEWIS, G. M., BUYS, L.: Learning choices, older Australians and active ageing. In Educational Gerontology,2015,41,pp.757-766.

doi:10.1080/03601277.2015.1039455 ISSN 0360-1277.

3. DIONIGI, R. A., HORTON, S., BELLAMY, J.: Meanings of aging among older Canadian women of varying physical activity levels. In Leisure Sciences, 2011, 35, pp. 402–419. doi:10.1080/01490400.2011.606779 ISSN 0149-0400.

4. ETTINGER, W. H., WRIGHHT, B. S., BLAIR, S. N.: Fit po 50. Aktivnim zivotem k dobre kondici a zdravi [Fit after 50.

Active life for good shape and health]. Praha: Grada Publishing, 2007. 243 pp. ISBN 978-80-247-2203-0.

5. FIALOVA, D., FIALA, Z.: Pohybove aktivity vybrane skupiny senior [Physical activities selected group of older people]. In JILEK, M., RYBA, J. (Eds.): Optimalni pusobeni telesne zataze a vyzivy. Hradec Kralove: Gaudeamus, 2004, pp. 152 – 156. ISBN 80-7041-666-1.

6. GABA, A., PRIDALOVA, M., PELCLOVA, J., RIEGEROVA, J., TLUCAKOVA, L.: Analyza tělesného slozeni a pohybove aktivity u ceskych a slovenskych zen [Analysis of body composition and physical activity in Czech and Slovak women]. In Medicina sportiva bohemica and slovaca, 2010, 19, pp. 152-159. ISSN 1210 – 5481.

7. HSU, Y., LU, F. J. H., LIN, L. L.: Physical Self-Concept, Possible selves, and Well- Being Among Older Adults in Taiwan. In Educational Gerontology, 2014, 40, pp. 666-675. doi:10.1080/03601277.2013.871868 ISSN 0360-1277.

8. CHRISLER, J., PALANTINO, B.: Stronger Than You Think: Older Women and Physical Activity. In Women & Therapy, 2016, 39, pp.157-170. doi:10.1080/02703149.2016.1116328 ISSN 0270 – 3149.

10. KLUSMANN, V., EVERS, A., SCHVARTZER, R., HEUSER, I.: Views on aging and emotional benefits of physical activity: Effects of an exercise intervention in older women. In Psychology of Sport and Exercise, 2012, 13, pp. 236–242. doi:10.1016/j. psychsport.2011.11.001 ISSN 1469 – 0292.

11. MEDEKOVA, H.: Vybrane aspekty pohybovej aktivity seniorov [Selected aspects of physical activity of seniors]. In NEMCEK, D. (Ed.): Kvalita zivota seniorov a pohybova aktivita ako jej sucast. Bratislava: Michal Vasko, 2011, pp. 140–147.

12. NEMCEK, D. et al.: Kvalita zivota seniorov a pohybova aktivita ako jej sucast [The Quality of life of older people and physical activity as a part of it]. Bratislava: Michal Vasko, 2011, pp. 6-74.

13. PELCLOVA, J. et al.: Vztah medzi doporucenimi vztahujicimi se k mnozstvi pohybove aktivity a vybranymi ukazateli zdravi u zen navstevujicich univerzitu tretiho veku [The relationship between the recommendations relating to the amount of locomotor activity and selected indicators of health of women attending the University of the Third Age]. In Telesna kultura, 2009, 2, pp. 65-79. ISSN 1211 – 6521.

14. PELCLOVÁ, J., GABA, A., TLUCAKOVA, L., POSPIECH, D.: Association between physical aktivity (PA) quidelines and body composition variables in middle-aged and older women. In Archives of Gerontology and Geriatrics, 2012, 2, pp. 14-20. ISSN 0167 – 4943.

15. PLICHTOVA, J.: Metody socialnej psychologie zblizka. Kvalitativne a kvantitativne skumanie socialnych reprezentacii [Methods of social psychology at close range. Qualitatively and quantitatively studied of social representations]. Bratislava: Media, 2002. 350 pp. ISBN 80-967525-5-3.

16. SILVERMAN, D.: Ako robit kvalitativny vyskum [How do qualitative research]. Bratislava: Ikar, 2005. 327 pp. ISBN 80-551-0904-4.

17. STATHI, A., FOX, K. R., McKENNA, J.:Physical Activity and Dimensions of Subjective Well-Being in Older Adults. In Journal of Aging and Physical Activity, 2002, 10, pp. 76-92. ISSN 1063-8652.

18. ŠTILEC, M.: Program aktivniho stylu zivota pro seniory [The program of active lifestyle for seniors]. Praha: Portal, 2004. 136 pp. ISBN 80-7178-920-8.

19. STRAUSS, A., CORBIN, J.: Basics of qualitative research : Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage, 1998. 312 pp.

20. SVARIČEK, R. et al.: Kvalitativni výzkum v pedagogickych vedach [Qualitative Research in Educational Sciences]. Praha: Portal, 2007. 377 pp. ISBN 978-80-7367-313-0.

21. TALBOTT, J., ROBERSON, D. N. Jr.: Physical Activity of Older People: An Investigation of a Retirement Center in Olomouc, Czech Republic. In Activities, Adaptation & Aging, 2011, 35, pp. 79 - 97. doi:10.1080/01924788.2011.572270 ISSN 0192-4788.

22. TAYLOR, A. H. et al.: Physical activity and older adults: a review of health benefits and the effectiveness of interventions.

In Journal of Sports Sciences, 2004, 22, pp. 703-725. doi:10.1080/02640410410001712421 ISSN 0264-0414. 23. VELLA, J.: Learning to Listen, Learning to Teach. The Power of Dialogue in Educating Adults. San Francisco: Jossey – Bass, 2002. 263 pp. ISBN 0-7978-5967-7.

Primary Paper Section: A

Secondary Paper Section: AM