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PREFACE

LEVELS OF RESENTMENT IN THE UNIVERSITY OF THE THIRD AGE

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ABSTRACT

Resentment has a particular place in the University of the Third Age. Here, the activities of the organization come up against the developing personalities of the elderly and crises of personality, which intensify the phenomenon. Temporary resentment can in unfavourable circumstances temporary resentment can escalate into permanent resentment, which is more difficult to alleviate. The task of the manager is to uncover this phenomenon at a relatively early stage, and to take appropriate preventative measures in the form of long-lasting negotiation of tasks and suitable system of sharing rewards.

Key words: resentment, U3A, negative ageing, management of emotions, NGO, psychological contract

The University of the Third Age is a distinctive organization, the management of which poses an enormous challenge for the director. Here, apart from the usual problems which arise in any organization, additional problems need to be dealt with related to the specifics of ageing. Among the issues connected to ageing which make the task of management difficult, the greatest challenge is posed by emotional dysregulation, related to specific emotional reactions. Among these are typical mood swings - 'the yo-yo effect' - and the experiencing of resentment. Very often the one is connected with the other, and both are characteristic of adverse ageing and are related to the psychological costs which people must bear as they get older.

The second important aspect of the management of the University of the Third Age is the fact that generally we are dealing with non-governmental organizations. These operate on a non-profit basis, supported by voluntary work by the elderly, who are also characteristic. Here we are very often dealing with involvement in voluntary work based on emotional benefits. Obviously, the involvement of many elderly people arises primarily from acquired virtues, among which social work is ranked fairly highly, although this is not always the case. Thanks to such activities, a large percentage of the volunteers rediscover their place in society through a network of social and emotional relationships. Many of them are quite simply looking for

appreciation. However, insofar as younger people do something out of a sense of help and support, for elderly people emotional benefits are just as important as altruistic motives among the young. This emotional dimension often becomes much more important, especially when emotional needs are unsatisfied for reason of loneliness, loss, or trauma following the death of a loved one. The literature of psychology and pedagogy shows that while on the one hand such an increase in emotional needs can be caused by specific - so-called critical - life events, on the other hand age itself (meaning the ageing process) is also a factor in increasing the need for affiliation and acceptance, with which the need to be appreciated is closely connected.

Thus, the director of the University of the Third Age finds himself in a fairly specific situation - managing an organization of which the formation, strength and effectiveness is decided by the involvement of elderly volunteers with special emotional needs and at a specific stage in their life.

A crisis can very easily arise among elderly volunteers, especially those actively engaged on behalf of society, and then we are dealing with emotional exhaustion, the symptoms of which are similar to professional burnout. My observation of these characteristics indicate a fairly meagre description of the phenomenon of resentment in scientific literature. Psychology shows that a characteristic trait of small children, unable to achieve a goal, is to justify themselves by explaining that it was't worth the effort anyway - a kind of recompense for their disappointment. This mechanism can be better explained in adult life by the philosophy of exaggerating our defeats and blaming others for our own failure. This typically leads to rebellion against authority, spitefulness, obstinacy and a desire for revenge, which in turn leads to destructive behaviour. In the best case scenario, it leads to retreat, inactivity and suffering in silence. In the worst scenario we may have to deal with acts of aggression and destruction. There follows an attempt to rationalize failure in the shape of unrealised needs by presenting oneself in the role of victim, who needs sympathy and who is constantly under-appreciated by others. As a consequence, those harbouring resentment either seek revenge or present themselves as the eternal victim whose requirements can never be satisfied.

Resentment is a state of mind which should be recognised as an aberration requiring therapy. It is a phenomenon in which emotions disrupt the ability for logical reasoning and make objective assessment of a given situation impossible. Those burning with resentment will seek revenge at any cost. If they don't have a sufficient influence on reality, they sabotage the actions of others, look for support from others in a similar situation and who harbour resentment to the same degree as themselves. If they are managers or team leaders, the situation becomes more complicated, because their desire for revenge and search for an atonement which cannot be attained is destructive for the group or organization.

During ten years of being the director of the University of the Third Age, I have had the opportunity to observe various types of behaviour connected with the resentment experienced by the elderly on various levels, and manifesting itself in many different ways.

The first stage is **temporary resentment**, which appears as a result of emotional disturbances shortly after experiencing failure, and is closely connected with the

event which triggered the resentment. This resentment can be appeased relatively easily by offering some kind of reward which is usually expected to take a specific form, as a kind of 'payment' for a particular service. This level of resentment does not usually create any significant problem in inter-personal relationships, nor should it be an obstacle in managing a group of elderly people, such as is found in the University of the Third Age. Sometimes, however, it might be the symptom of a deeper problem and the presence of permanent resentment.

Temporary resentment can easily turn into **permanent resentment**, if the signs indicating its existence are ignored, and the need for recognition is denied. It appears, however, that there must be additional factors which come into play in reaching and prolonging this level of resentment. On the basis of personal observation, I can tentatively assume that there is some kind of pattern, which to a certain extent can be verified. Presenting oneself in the role of victim evokes shame, embarrassment and consternation amongst our peers, which is sufficient gratification for showing our regret, humiliation, and sense of injustice. Such people are masters in setting emotional traps, not only for their colleagues, but primarily for their superiors. Attempts at easing the situation, comforting or emotional support usually end in the end of the conversation. Thus, people who seethe with resentment give others the sense that they are so offended and humiliated that nothing can right the hurt and injustice with which they have been treated. The more frequently and intensively the effects of helplessness and hopelessness are reflected in colleagues and superiors, the more frequently this regret and humiliation is shown. Thus, people who harbour resentment become the scourge of those around them, exhibitionistically parading their wounds and evoking emotions of regret and guilt among others. The more psychologically sophisticated of them also evoke a sense of manipulation and helplessness, because every compromise appears to be inappropriate, and nothing remains but to fall into a psychological trap. This hopeless situation is easily illustrated by transactional analysis. It is impossible to enter into a discussion or sympathise with such people, and we are unable to sufficiently recompense them for their imagined suffering. We are thus left with performing the role of the victim of other victims.

Permanent resentment cannot be alleviated, much like a festering wound into which psychological salt is constantly rubbed. Those who harbour resentment make it the centre of their daily life. One might also suspect that resentment can be a well-defined and safe (for the ego) explanation of their own situation. Those subject to this mechanism do not need to seek the reason for their failure within themselves, because they have a ready list of reasons for their misfortune. This is far better than taking responsibility for their situation in life, and confronting the truth that they themselves, and nobody else, are responsible for their mistakes.

In the case of the elderly, undoubtedly the retirement crisis, the stress of old age, and unfavourable conditions also play a part in prolonging resentment. The typical symptoms of an unsuccessful ageing process are also characteristic of resentment - a conviction of entitlement, aggression, a sense of hurt, constant complaining, and passivity. The ego of the elderly can be more sensitive, and thus more susceptible to resentment.

We are also faced with a specific situation in the case of elderly volunteers working in non-governmental organisations, which is conducive to promoting and maintaining resentment. Young people working as volunteers do not expect any special gratification - they just want to do good for others out of a sense of duty. From the very beginning, the unwritten rules of the psychological contract are unambiguous and unquestionable. They work for others for their own satisfaction, without expectations of medals or glory. This is not so obvious among the elderly, who are often experiencing the crisis of ageing. Very often we have to deal with imprecise expectations of some kind of reward for fulfilling their duties. To a great extent this situation is imprecise, and the resulting expectations of the workers themselves are unclear. This places the manager in a very unpleasant and generally unexpected situation.

The most important question for the manager is how to cope with the resentment of elderly volunteers who may be experiencing the crisis of ageing or other traumatic moments in their lives. It is impossible to ignore the problem, because it will only accumulate and increase, and temporary resentment will eventually become permanent, and so reach a level which is difficult to resolve. Then we have to expect elderly volunteers leaving the organization and a decrease in its effectiveness. On the other hand, it is not really worth supporting people who are seething with resentment. Minor slights and imagined hurts turn into mountains and oceans which are impossible to overcome. In turn, it can be difficult to satisfy completely their complaints if we don't really know what the complaints are and we don't know their precise expectations.

The best strategies I have used so far in resolving the problem of resentment depend on lengthy conversations to discover the essence of the problem, and to establish the possible form of further co-operation. As in the case of motivating people who are exceptionally unmotivated, the best method is to take it in small steps. We start with small tasks and then gradually move to more difficult and responsible tasks, not forgetting to praise and reward in the broadest sense. For those harbouring resentment it is not really about material reward, but rather an expression of acceptance in the form of praise and a meaningful place in the social structure.

It is important to recognise the problem and be aware of the possible consequences. Initial conversations with seniors harbouring resentment should be aimed at making them aware of the character of the phenomenon, and to make a preliminary assessment of the kind of resentment we are dealing with. We should bear in mind the emotional and moral atmosphere which is particularly important in the education of adults - appropriate conditions conducive to deeper thought, time to make constructive decisions and participate in new activities, and a gradual increase in difficulty. Care and delicacy in approaching the problem is recommended, otherwise an eruption of emotions and an escalation of the problem ensues. Above all, it should be remembered that resentment is a result of the domination of negative emotions over rationality. In this situation, reason comes into play only when emotions subside, and this sometimes requires a lot of patience, understanding and empathy. If reconciliation is unsuccessful, both sides lose, because the manager cannot give in to emotion and loses an effective worker, and the elderly volunteer probably loses the possibility of cementing their position in the group as a reasonable and responsible individual.

ETHICS

SAPERE AUDE. ABOUT THE CONTRIBUTION OF ELDERLY PEOPLE TO CULTURAL LIFE

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ABSTRACT

Nicolaus Copernicus is shown as an ideal of senior students. He represents all the intellectual qualities that we connect with the spiritual movement of the Enlightenment. This movement has led to the unfolding of the sciences with all its good and bad consequences, to the appearance of natural rights and religious tolerance. The modern concepts of education, civil rights and the development of a critical general public are not conceivable without the ideas of the Enlightenment. But the idea of Enlightenment showed clearly two different faces during its development: One is showing the enlightenment of human beings and concerns the environment they are part of, whereas the other is showing the enlightenment about themselves. Both will be commented on. Without doubt we are in need of a new Enlightenment. It should teach us to trust our own spiritual capabilities, to look for a critical exchange with other minded people and other cultures, to create communities of free-thinking people and to create protected public spaces for critical thinking.

Key words: Nicolaus Copernicus, Immanuel Kant, different aspects of enlightenment, contribution of elderly people towards our common culture, intellectual honesty and courage

When asked about the contribution of elderly people to cultural life, my thoughts go spontaneously to Nicolaus Copernicus, the great Pole and European. He represents the long process towards the achievement of old age: he only started to write down the results of his research when he was 60 years old. They were published in 1543, just after he died at the age of 70. His name stands above all for independent thinking and continuous search for the truth. Against the everyday appearance and the firm teachings of the philosophical and theological authorities of his time he developed the ideas of the heliocentric system that are nowadays so familiar to us. The name Copernicus stands for the courage to defend the recognised truth against internal and external opposition. His name also stands for universal education: he was a scholar of

law and a natural scientist, a medical practitioner, a cartographer and an artist. This scholar and practitioner represents all the intellectual qualities that we connect with the spiritual movement of the Enlightenment: especially intellectual honesty and courage. Therefore I would like to talk about the Enlightenment's spiritual ideas, which have Copernicus as one of their forefathers and I would like to refer to the connecting theme of these ideas to explain the central contribution that elderly people can give to the development of our spiritual cultural life.

The word Enlightenment nowadays is connected with the desire to abolish conservative teachings which only rely on authority and the reorganisation of daily life based on views and insights that are based on the law of reason. The Enlightenment has become the key word for a spiritual and social movement of reforms. People have referred to the term of reason as the universal judgement and the spiritual fight that has been fought mainly directed against prejudices and superstition.

The ideas of the Enlightenment have led to the unfolding of the sciences, the appearance of natural rights and religious tolerance. The modern concepts of education, civil rights and the development of a critical general public are not conceivable without the ideas of the Enlightenment. But the idea of Enlightenment has shown more and more clearly two different faces during its development: One is showing the enlightenment of human beings concerning the environment they are part of and the other is showing the enlightenment about themselves.

ENLIGHTENMENT CONCERNING NATURE

The enlightenment concerning nature is the most common known aspect. It is forever connected to the names of the Pole Nicolaus Copernicus (1473-1543), but also to the name of the German Johannes Kepler (1571-1630) and the Italian Galileo Galilei (1561-1642) and the ideas of modern progress, natural sciences and the civilian technical development, whose forefather is the English Francis Bacon 1561-1626. The enlightenment concerning nature shall liberate from superstition, from dogmatic prejudices and the blindly accepted ideas of nature, which hinder the progress of mankind. It shall take away the blindfold from the eyes, which prevents us from seeing the world how it is. According to Copernicus: Who should not be led to admiration of the omniscient architect through observation and the spiritual contact with the heavenly order of the world edifice which is led by divine wisdom!

Whereas people in the Middle Ages believed that the sun rotated around the earth, the knowledgeable person today knows that the earth rotates around itself and around the sun and that it represents only a tiny part in the galaxy of our Milky Way which spreads out into the cosmos together with billions of other galaxies. And it is not a distant merciful god who created mankind and

the earth, as people in the old times believed, but the power of the evolution that is part of our existence which created the elements and living cells from star dust and indivisible first particles which themselves developed into plant cells and living creatures. The human himself is not a dual being and not made out of dead bodies and living spiritual souls as Descartes and people in the area of rationalism believed, but a human being who is capable of action and recognition, a rational being who has the power of reason and thinking given by evolution. The Enlightenment therefore freed people from the intolerable prejudices of geocentric thinking, the belief in the story of the creation and the cartesian dualism. It prepared the ground for astrophysics, the theory of evolution and modern brain research.

All this happened under the maxim to free the life of humans from the restraints of nature and the tribulations of daily work and instead to conquer nature and make it work as a servant for themselves. Nature should not rule humans but humans should rule nature. The slave of nature should become its master. The idea of progress which is connected with the Enlightenment promised a paradise on earth, a world without work and tribulations. It promised a development to a higher, better, healthier life, from a poor life full of tribulations to a perfect life. And who should doubt that quite a few things have changed in this direction under the aegis of progress and Enlightenment. Whereas the Enlightenment concerning nature was only possible because of the pioneering inventions of the compass, gunpowder and printing press, nowadays it is followed by new forms of domination of nature by radar, nuclear power and digital media. Who of the beneficiaries of civil progress would want to live without electricity, washing machines, electric cookers, cars, television, computers or the help of modern medicine? But should this mean that our life has come nearer our promised time of paradise? Not at all.

Normally we describe the time between 1650 to 1800 as the time of Enlightenment. It is the age of Vicos, Voltaire, Lomonossow, Lessing and Kant. In the two centuries that followed, humankind experienced a nearly unimaginable demographic development from one billion to 7 billion people, global warming with unpredictable consequences for all continents, a gigantic destruction of the environment and an uncontrollable pollution of the world's oceans. In the two world wars Europe, the continent where the ideas of progress and Enlightenment started, became the scene of the most horrible struggles and death camps of all humankind with more than 70 million victims of war

Many modern thinkers therefore have declared the project of Enlightenment as unsuccessful. In Germany the criticism is mainly connected to the names of Horkheimer and Adorno and their book: *Dialectic of Enlightenment*; in France it is the later published book of Albert Camus *The Rebel*. Criticism is directed at the fact that Enlightenment only leads to a technical perfection of instruments and weapons but not to an optimal way of living and thinking. We are only enlightened about the secrets of nature but not about the conditions of human life. We have learnt to cram our world with nuclear powered and

remote controlled systems but we did not ensure that the social and political development of human beings became the controller of our system. The technical perfection of living together on a more and more crowded planet was more important than the human development, that means to look for ways to secure a peaceful development of mankind. We have put too much confidence in the unavoidability of the ideas of progress and we have not given enough importance to the human being as the real representative of Enlightenment.

ENLIGHTENMENT OF PEOPLE ABOUT THEMSELVES

Therefore I will now bring to your attention the neglected other face of Enlightenment that belongs to the person who enlightens about himself. This face has been drawn in particular by the other great thinker of Enlightenment, Immanuel Kant. His fundamental explanation of this term which was accepted in the following period of time can be found in a short script which he wrote in 1784 in Königsberg-Krolewiec, now Kaliningrad, as an answer to the question "What is Enlightenment?" .

"Enlightenment", says Kant, "is the escape of humans from their self inflicted immaturity . Immaturity is the failure to use your intellect without the guidance of others. This immaturity is self inflicted if the reason for this lies not in a lack of intellect but in the indecision and the courage to use your own intellect. Sapere aude! Have courage, to use your own intellect ! This is the motto of Enlightenment" (Kant, 1784, p. 35).

In these sentences the thoughts of Enlightenment are not any more directed at the objective nature but in the first place at the subjective capabilities of intellect and reason of the rational person. A different world of Enlightenment is therefore opening. Here, instead of the two ideas of Enlightenment and progress, the two ideas of Enlightenment and humanity are leading. Normally we struggle to gain knowledge about ourselves and about things in front of our eyes. And still, since ancient times, it is the perfect example for high wisdom to gain knowledge about yourself. "Discover yourself", "Become the one you are", were words that every visitor to the temple of Delphi could read, chiseled in stone, at the entrance to the temple. What path do we have to take to come towards our own enlightenment?

SAPERE AUDE

In order to guide us this way, Kant uses an old Latin aphorism that brings together the word courage with the word thinking: "Have the courage to think for yourself". Sometimes it is easier to say: "Think for yourself". But this simple translation can easily lead to misunderstandings. What does the Latin word *sapere* mean?

Sapere has the meaning: "to taste", "smell", "sniff", "scent", "foresee". It is the root from where *sapientia* (wisdom) and *sapiens* (wise man) derive. The wise man can judge the situation he is in. He is alert, attentive, takes notice of what is happening around him, understands the signs and correlations between his life and the world. He is aware and understands the appearances which he is confronted with. According to neurologists the cerebrum of humans has developed from the organ of smell. The wise man can sniff out what is important for his core of existence. A human is not wise if he understands everything and everyone, he is not an omniscient but somebody who has a feeling for what is central and of a deeper meaning for him. His "reason" is the organ he uses to "take in" the world and help him to find his way and to act according to its inner rules.

In the Enlightenment *sapere aude* does not therefore simply mean: Have the courage to think in a logical or sociological way, but: Have the courage to understand your situation as unvarnished as it is presented to you. Find out yourself about things that concern you and act following the principles of reason. It is the fundamental principle of the Enlightenment that the laws of the cosmos and the laws of reason are the same. If you follow this principle you cannot go wrong. If you think for yourself you are in accordance with the spiritual laws which guide all self-thinking individuals.

These laws connect humans more than anything else. Because the feelings, cultures, languages and religions of mankind are very different as we all know; but the thoughts and the intellectual elemental pattern, which develop during our adolescence, are for everybody the same, no matter what language or culture we belong to. Without them communication across language barriers is absolutely unthinkable.

On the other hand you could argue that people are normally selfish and the proposition "Think for yourself" could be understood as: "Think in your own small place for yourself". But the opposite of this is meant by the fundamental ideas of the Enlightenment. "Think for yourself" does not mean "Give people with a different opinion no attention" but the opposite: "Think for yourself" leads necessarily to the consideration of others because the other person we have a dialogue with is in other words the assistant of the birth of our own thinking and he is the corrective we need to examine our own thoughts critically. Everybody needs somebody else in order to free himself of his own prejudices. And everybody needs others in order to examine his own moral convictions.

Another misunderstanding would be to interpret "Think for yourself in the sense of "Keep your thoughts for yourself. If you tell others you will expose yourself and put yourself unnecessarily in danger". This opinion is also in contradiction to the ideas of Enlightenment. It is an essential part of Enlightenment to make use of your good sense *in public*. A critical examination and cleansing of our thoughts is only possible if we expose them to the public eye. By this is meant the general public and people of a different opinion. "To think

for yourself, the public and criticism" are the undisputable principles of the Enlightenment.

The aphorism of "To think for yourself" has also a second part. "Aude. Be courageous!" Why is courage part of thinking? Kant mentions laziness and cowardice as the main causes of self inflicted dependence. It is so easy to be dependent and to rely on experts. When I have a book, a doctor or a clergy man, I am relieved from the effort to find a solution myself for my questions and difficulties. Kant thinks that by far the biggest number of people finds thinking for themselves too tiring and too dangerous and that we therefore prefer to live as an dependant person with a guardian. The dependence has become unwillingly our second nature. For the individual person it takes more effort to free himself from dependency than for a community where members instruct each other.

In order to achieve this kind of Enlightenment only one condition is necessary: namely political freedom, in other words the freedom that allows us to make public use of our common sense in all areas. Furthermore you need courage, the courage to expose yourself and to appear in public. It interprets the general use of common sense as follows: to be able to express your own thoughts freely and without fear of reprisals in front of the whole intellectual community, so that everybody is able to examine them. No class and no generation have the right to dictate to a lower or other class what to think. Everybody has the right to examine the facts himself. If the authorities are in need of a rule in order to scrutinize a law they imposed on people, the rule should follow the answer to the question if people would have imposed such a law themselves.

The importance of Enlightenment for Kant is manifested in his opinion that the denial of Enlightenment means "to violate the holy human rights and trample on them". If not even the people are allowed to take their own decisions, then even less a state authority should be allowed to decide for the people. For the law making reputation of any authority is based on the fact that it combines the entire will of the people in its own. When he was asked, he continued, whether we lived already in an enlightened period of time he would answer: No, not yet, but we live nevertheless in an age of Enlightenment, which means in an age where people make enlightenment about themselves one of their duties.

It is obvious that this second side of Enlightenment has been undeveloped in the last two centuries. There were not many countries in which the creation of an independent public opinion was allowed. Until today the number of societies and countries in which citizens were able to develop an independent culture and come to an agreement with each other about the objectives of living together in a human way is not very high. In opposition are not only security and political interests but also above all economic interests (e.g. of the owners of media). Every authority is scared of losing power to an independent and critical general public and prefers to invest in external security instead of a joint

search for a sensible solution to the problems. If this increased external security is not joined by a likewise increased internal spiritual strength which has developed from an exchange of ideas and discussion, then the result will be a hardening towards the outside and an impoverishment on the inside which will lead to the danger of new forms of totalitarianism and dictatorship.

Without doubt we are in need of a new Enlightenment. It should teach us to trust our own spiritual capabilities, to make the effort of thinking, to look for a critical exchange with other minded people and other cultures, to create communities of free thinking people and to create protected public spaces for critical thinking. Only a worldwide community of critical thinking people can succeed to save our planet from ruin. We all know that thoughts without action do not lead to anything, but action without thinking will end in a disaster which we have witnessed all too often.

I do not mean by this that injustice, suffering, and death could be abolished from the world. The heavenly world, Arcadia, we look for is a utopia, as we know. We learn everywhere, that the world, as it is, has no meaning, unless people take action. But you can act against self inflicted dependency, madness, superstition and against violence in the name of madness. Therefore we are in need of enlightenment about ourselves. We are in need of intellectual incorruptibility and clarity. We are in need of courage to examine the insights that we have come to during our lifetime and stand by them. We are in need of an educated and experienced pressure group which has the interests of the general public in mind. Would this not be the most important factor that elderly people could contribute towards our common culture?

Even if none of us can reach the greatness of Nicolaus Copernicus or Immanuel Kant, we are all given the capabilities of looking for the truth and of using our common sense truthfully and courageously.

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OLDER PEOPLE IN THE INFORMATION SOCIETY

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ABSTRACT:

This paper focuses on the situation of older people in the information society. In the theoretical part of article phenomena of ageing population and information society are described. This paper includes results of a qualitative research. The data was collected with the use of the biographical method. The method for data processing was qualitative content analysis. In the research, two older and educationally active people took part.

Results of research show how older people understand the information society and what risks and opportunities they notice in this new reality. Narratives of the respondents indicate that education is of crucial importance for participation in the information society. Older people who take part in the lifelong learning cope better with the new reality than people who do not learn.

Drawing on the results of the research, we can point out areas of education which should be development. Moreover, it is visible that educational activity of older people is very important in adaptation to the information society. Narratives of seniors indicate reasons for the lack of educational activity in other seniors. Accordingly, it can be specified what actions should be undertaken to prevent the exclusion of older people in this new reality.

Key words: Information Society, seniors, older people, ageing society.

INTRODUCTION

Contemporary times are characterized by the rapid pace of change caused by the development of information technology. Therefore, ageing populations are facing a modern phenomenon called "The Information society" and education is its main pillar. The dynamic of change in the information society is causing knowledge and skills to become outdated. Therefore, continuous updating of knowledge is necessary. Modern man needs to be prepared for lifelong learning because education is a way which allows us to adapt to this changing reality.

Keeping up with changes of the information society is a challenge for modern man. The present reality is not stable or predictable, so familiar patterns of behaviour do not work well in new situations. The Information society is also called a society of young people, because the people who grew up surrounded by new technologies are more eager to keep up with the changes.

Older people, on the other hand, face another reality, given that they grew up in completely different times. The lack of key skills in the information society can be a reason for social marginalization. This issue is important, because parallel with changes associated with the creation of the information society, we are dealing with a progressive ageing of the population in developed countries. In connection with the growing number of seniors in the community, the problem of marginalization of this group of people in information society is the new reality. Solving this problem is one of the priorities of European Union and, for this reason, it is worth researching how seniors perceive the information society. This paper undertakes this issue.

THE PHENOMENON OF AGEING POPULATION

The progressive aging of the population is a fact that applies to industrial countries. The number people aged over sixty years old has risen from 8% in 1950 to 12% in 2013. Moreover, in 2050 people of older age will rise to 2 billion, which is 20% of all population (World Population Ageing, 2013, p. 11). Therefore, the problem of ageing population is one of the most important in the modern world.

When thinking about ageing population it is important to highlight demography. A comparison between the death rate and reproduction is also key because the survival of the species hangs on this. Halting repeated disasters of mortality between the XVI and XVII century, and a significant lengthening of the human life span caused the spectre of doom to be averted (Stuart-Hamilton, 2006, pp. 13-14).

The theory of demographic transition is fundamental to the understanding of the process of population ageing. According to the theory, demographic transition is the replacing of a population with radical, lasting and irreversible drop in mortality and rise in fertility by a population with a low intensity of this process (Coldwell, 2006, pp. 307-309). Western European countries first reached a state in which reproductive success is free from the risks associated with uncontrolled mortality. It was expected that the reduction of mortality to a biological minimum and reaching the state of simple replacement of generations would be sustainable. However, despite the biological and social stability, modern societies are far from reproductive success (Okólski, 1997, pp. 25-55).

United Nations considers a society old when people over 60 years old represent 7% of all population. The age of a society is determined as follows (Nowak-Starz, Markowska, Zboina, & Grzywina, 2009, pp.17-19):

- the young society - less than 4% of people aged over 65 years in the overall structure of this society;
- the mature society - 4 to 7% ;
- more than 7% of this society exceeds the threshold of old age demographics;
- more than 10% this society, which exceeds the threshold of advanced age demographic.

In Poland, according to the Central Statistical Office (GUS), in 2014 the number of residents aged 65 and above accounted for 14.7% of the population (*Rocznik Demograficzny*, 2015, p. 58). According to the criteria set by the UN, it is clear that Poland has exceeded the threshold of advanced age demographic. Therefore, action should be taken to care for the elderly, because they are exposed to marginalization, especially in the information society.

INFORMATION SOCIETY

The information society is defined as the risk society. Risk accompanies man forever, because "risk is an indispensable feature of practical and cognitive activities" (Kozielecki, 1987, p. 132). However, the rapid development of technology transforms the physical and spiritual world for mankind. The dynamic of change happens so quickly that it is often defined as potential danger. In opinion of Piotr Sztompka, the phenomenon of risk in the information society has a different quality than before, because "first of all, in the forefront risk is not in the context of the natural environment, but the environment or technical civilization, created by man. We live in a world of "manufactured risk" that is the price of civilization and technical progress" (Sztompka, 2002, pp. 576-577). Therefore, the postindustrial society is accompanied by fear of what it entails. The sense of fear and insecurity is thus an inseparable part of contemporary reality.

Literature often points out the risks that the information society entails. The risk should be seen both through the prism of globalization, and the personal point of view of each individual, as a member of society. That way, we can talk about challenges of information society; challenges which contain risks (dangers) and possibilities (Łuczak, 2011, p. 400). Sources of challenges include: modernization, development of new technologies and the globalization process. Based on a literature analysis of the new information society (Marcinkiewicz, 2014, pp179-183), we can point out challenges faced man living in the new reality, such as:

- ability to use new technology – this challenge stems from the technical aspect of a society where these skills are essential for the proper functioning of the new society;
- counteraction e-exclusion of older people - people without key skills

in the information society are vulnerable to marginalization and exclusion, so it is necessary to implement educational efforts to counteract this process;

- ability to adapt to the constantly changing conditions of life - due to the fast dynamics of changes in new society;
- the need to constantly improve skills and update of knowledge - continuous learning is necessary to keep up with the rapid obsolescence of knowledge;
- change in the nature of work – work would be flexible, fragmented, often carried out through new technologies (on-line) (see: Castells, 2008, p. 203-334). Work would be adapted to the specific needs of older workers;
- virtuality of the world – it is one of the characteristics of society. Virtual space is an important element of human life, as more and more aspects of his life go online;
- process of the ageing of the population – this is the effect of demographic transition, which causes profound changes in quantitative and structural population;
- a new type of communication – this is the result of the dominance of indirect contacts (internet, mobile) over the direct (face to face).

It should be noted that among the listed challenges within the information society there are both risks and opportunities. Moreover, these characteristics of the information society correspondent to categories distinguished in the empirical part (risks vs. opportunities). It is a base to create research on the understanding of the information society by seniors. It should be noted that the comprehensiveness of technology and the growing importance of information implies the necessity for specialized skills and knowledge. Therefore, in the new reality very important is idea of lifelong learning. This idea has been recognized by the European Union as a pillar of the information society. People who take part in education better cope with challenges of modern reality.

METHODOLOGY OF RESEARCH

The research was conducted in the interpretative paradigm in qualitative strategy. This paradigm postulates understanding subjective aspects of seniors' world. It allows us to show a way of understanding and interpreting of the information society by seniors. The biographical method was used in research, which is focused on the interpretation made through dialogue (Dominicé, 2006, p. 27).

The aim of this research was to get more understanding of how older people interpret the information society. Another aim is to know what challenges of

information society are noticed by seniors. 12 people¹ took part in this research (4 men and 8 women) aged over 60 years old. Each of the individuals was informed about the aim of research and the method used to conduct it.

The method for data processing was a qualitative analysis of content. The first step of research was collecting and preparing the data for research, which was obtained using the biographical method. The next step was to define the unit of analysis in the form of full statements of participants of research. Then, to develop categories and a coding scheme which were used to code all the text, and finally interpret data and conclusions (Kubinowski, 2011, pp. 235-424).

In this study, an open and selective coding was used. The first step of the analysis was to read the empirical data which was used to distinguish categories. Scheme 1 shows the relation between categories. The intentional selection of people to research was used. The main goal of the selection was chosen people over 60 year old who are educationally active. Criteria of the educational activity corresponds to the importance the idea lifelong learning in the modern society.

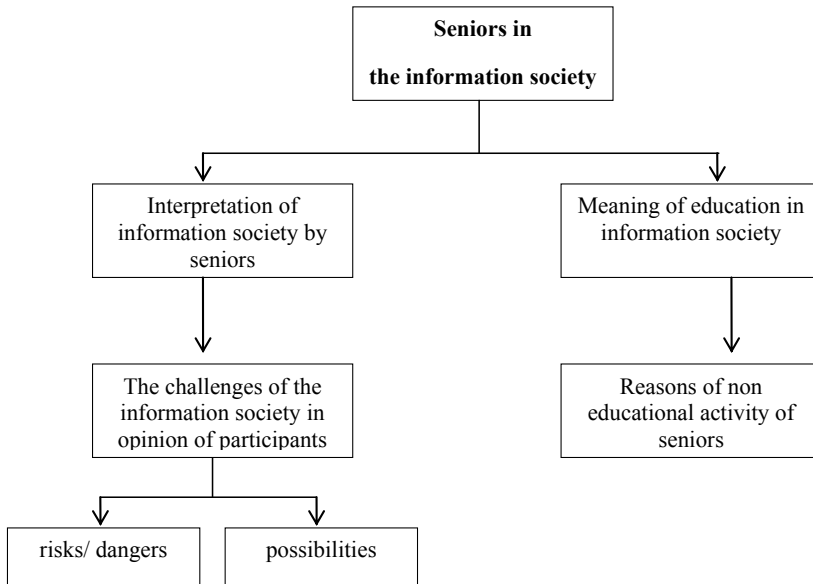


Figure 1. Relation between categories

Sources: author

- 1 Narrator 1: man, 65 years old, teacher, higher education; Narrator 2: woman, 65 years old, language tutor, higher education; Narrator 3: man, 69 years old, IT specialist, higher education; Narrator 4: man, 70 years old, engineer, higher education; Narrator 5: woman, 64 year old, nurse, higher education; Narrator 6: woman, 70 year old, doctor, higher education; Narrator 7: woman, 65 years old, office worker, secondary education; Narrator 8: woman, 66 years old, teacher, higher education; Narrator 9: woman, 69 years old, office worker, higher education; Narrator 10: woman, 62 years old, teacher, higher education; Narrator 11: man, 71 years old, engineer, higher education; Narrator 12: woman, 62 years old, draftsman, secondary education.

INTERPRETATION OF THE INFORMATION SOCIETY BY RESPONDENTS

Scientific articles (Wąsiński, Tomczyk, 2013; Szmigielska, Bąk, Hołda, 2012) and reports (Frąckowicz, 2009) point out that seniors are in the group which is particularly vulnerable to social exclusion. On this basis, it can be concluded that the elderly perceive the new reality as alien and incomprehensible. However, narratives of people who take part in research do not fully confirm this assumption: a positive image of the information society emerges from studied narrative. Participants of this research on information society firstly pointed to its positive aspects, such as the opportunity to travel, helpful and convenient technology, and the ability to learn about other cultures. Comments below show how seniors interpret the information society:

Modern times are very open. This is a big change in the direction of human capabilities, knowledge, freedom of life, freedom of behaviour. We are thinking differently and we can afford it. Despite different cultural constraints, today we can afford to think independently, which to me is of big value. Modernity is the common ideology, which is desirable trend. Development consists of that something is torn out of a canon. And so it is with everything. In painting, the Impressionists was "salon des Refusés". Thus science and the general development are born [Narrator 9].

Information Society reminds me of globalization. Now people are more aware of what is happening in the world. Previously, if I had such awareness, the sooner I might have walked out of that my sense of value. I feel a need to use the new technologies. (...) new technologies have opened a world what interests me. I have my email and facebook, though I'm not on it, I read about it. I regularly read news from different countries, but I don't buy newspapers. I have access to specific articles I want to read online. Everything is available, so I can afford such selectivity. I talk with a son who lives abroad via Skype [Narrator 2].

(...)The world always has been curious, especially now - we have open access to acquire knowledge. This technology allows us to quickly explore the world and wander through distant places using a computer. It is a wonderful thing. No need to get on a plane and visit these places [Narrator 10].

In these narratives the new reality is not identified as a threat. On the contrary, seniors believe that they live in interesting times, where there are many opportunities for development. However, they are critical of the information society because they are aware of risks. Many narrators see new opportunities in the modern world, but they have pragmatic approach and preserve a certain reserve. This pragmatism lies in the fact that seniors benefit from the opportunities of the information society, but to the extent they deem necessary. Participants of research define themselves as "guests" in a virtual reality and thus benefit from some network capabilities (email, Skype, search engines, and e-banking) but they do not "live" in this space. Virtual space and real do not overlap, as is often the case with younger generations. Seniors separate the real life of the network and do not form a network identity, as we can see from the following quotes:

Work by the computer isn't my hobby- I know what I need so I search for it, but computer games or finding new things online isn't interesting for me. I approach it pragmatically. I think that there are programs I would like to learn but I need somebody who can teach me. I need someone who can slowly explain everything to me [Narrator 6].

I use a computer every day. I like reading news from around the world, I also like reading about flowers. I often use Google to search for news. I don't buy newspapers because everything is online. I have a facebook account because I had the ICT course at the University for Seniors. However, the computer didn't want to take my data and I couldn't use my facebook. My girls helped me with it at home. I also have e-mail and I use it regularly [Narrator 7].

Statements set forth above show that seniors are aware possibilities of the modern world and they try to use them. It is an interesting fact, that the virtual space is not part of their world of life. The Internet is for them instrument which should make their life easier. The interpretation of information society by seniors is created based on the contrast rule. Old time (communism time) is compared with present - on this basis is created a positive interpretation of the modern times:

The world is so changed that without being able to use new technologies it is difficult to function. These skills are necessary because they allow us to connect with the world. Besides, we are living the moment of an open Europe and we can travel wherever we want. In the 80s, I went abroad, to the other side of the Iron Curtain. When I was in West Berlin I was shocked because I had a feeling that from the sad and grey world I went to a colorful one. Later when I went to Paris, I was ready for a change- it wasn't such a shock for me. However I saw two different worlds: one was a communist reality and another one the world of western Europe. Nowadays is the same everywhere - I don't see a difference between Poland and France. We have the same shops, clothes, cars etc. We are in Europe and it is beautiful. I'm very glad for this fact [Narrator 10]. Other narrators also had similar opinions [Narrators: 1, 3, 6, 7, 8, 9, 12].

Narratives of seniors showed that the information society is positive according to them. This interpretation is constructed in relation to the past (communist) in which they lived. This fact had a positive impact on the image of the new reality. It is interesting that seniors have a pragmatic approach to the information society - they use its possibilities but only to the extent that is necessary. It is also important to consider the fact that people are aware of the role played by learning to adapt to modern times. Although seniors are positive about the new society, they are not uncritical towards it. Narrators recognize and emphasize the positive aspects of a new reality, but they are also aware of the limitations and even dangers that are associated with it.

THE CHALLENGES OF THE INFORMATION SOCIETY IDENTIFIED BY OLDER PEOPLE

Seniors who took part in this research were reflective - they had their own opinions about the challenges of the information society. As previously noted, participants recognized possibilities of modern society but also risks within it. The fact that opportunities were stressed by seniors more often than risks is also worth considering. Table 1 presents categories relating to the challenges of the information society which was revealed in biographies.

Table 1. Challenges of the information society identified by seniors

	Categories relating to the challenges of the information society	Narratives in which category appears
Opportunities	Travel freedom	1, 5, 6, 8, 12
	The new communication possibilities (skype, e-mail etc.)	2, 3, 7, 8, 9, 12
	Easy access to information and knowledge	2, 4, 5, 7, 8, 9, 10, 11, 12
	Technology which makes life easy	5, 7, 9, 10, 11
	New possibilities of work	1, 5
Risks	The rapid pace of change	1, 3, 12
	Adaptation problems	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
	New technology as danger for privacy	2, 4,
	The need (compulsion) of learning	3, 6, 7, 12
	Indirect communication (using ICT) implies problems in interpersonal relationships	4

Source: own research.

The data presented in the table indicates that seniors analyze the surrounding reality and aptly describe it. They seem aware of the challenges facing modern man. It is interesting that similar categories appear in many narratives. It is also worth noting that the relationship between categories chosen from narratives matched the categories shown in the theoretical part of the article. Common categories for both typologies are:

- Adaptation problems of seniors- it implies the need to take measures to combat e-exclusion;
- The rapid pace of change;
- The need (compulsion) of lifelong learning;
- New type of communication;
- Change of the nature of work.

The category concerning adaptation problems of the elderly appears in all narratives. It is closely linked with the rapid pace of change to which man must adapt, which is presented in the following statements:

I look at the present day and I feel embarrassed, because I cannot keep up with it. This is what happens in this new reality it is great and enormous, but also terrible. For example, cell phones, computers, which allow you to pass information to the other end of the world, indeed they are a great invention - new technology is great. However, I do not keep up with the rush of it all- it surpasses me. Sometimes I lose track of the development of technology. This situation relates primarily to the elderly, because young people cope well with these changes. The ability to use these technologies is needed, but without exaggeration. I am all for moderation in all things, also in technology and development [Narrator 8].

The development of technology is going too fast, it should be gradual. This should be done gradually over 100 years, because people of my age have problems, especially those over 80 years. I know people who are teachers and can not use a calculator (...) [Narrator 1].

Another category is the need of lifelong learning. In relation to older people learning is only possible through keeping up with changes in the information society. The aim of learning is prevention of social marginalization - three participants of research noted this issue. Older people who do not take up learning technologies are exposed to social marginalization. Therefore, educational activity is a factor dividing the seniors on those who participate in the information society and those who are to some extent excluded from it. This division (seniors learner vs. seniors who are not learning) is perceived by many narrators. Therefore, education as a necessary skill in the information society is one of the categories in those studies. This category will be developed further later in this paper.

Participants of research pointed out that the virtual world is a threat to the privacy of modern man. Seniors note that many of people move private life into virtual space, which is not assessed positively by them. Moreover, seniors also draw attention to the threat from terrorism online. It involves blocking of major websites by hackers, stealing personal data of citizens, as well as stealing from banks. These challenges are understood by participants as a kind of threat that must be countered. However, many challenges were identified by them as opportunities.

Easy access to information and knowledge is the common challenge that usually appears in the narratives. Respondents appreciate the power of the Internet and they use it. This category is particularly important in the context of educational activity of the elderly. The ability to easily and quickly access information and knowledge from various sources is helpful in learning. Researched subjects in their narratives often highlighted the new possibilities of communication. The use of e-mail, instant messaging (e.g. Skype) or networking communities allow contact with people all over the world. This is especially important for people whose relatives and friends live far away. The Internet allows them to easily and freely maintain contact. In this context, they can maintain relationships with relatives through the internet. Easy communication over the internet also allows them to meet people who share similar passions or hobbies. However, one of the narrators drew attention to

the negative aspect of this type of communication. In his opinion, too frequent use of indirect communication means that people don't meet each other and they cannot chat 'face to face'.

Seniors emphasized the fact that new technologies make life easier. This statement appears in the narratives in which the interpretation of the information society is created on the principle of contrast and references to the past. They consider that in the past some activities (e.g. washing-up, cleaning, and counting) took more time than now. In this context, the progress of technology greatly improved the quality of life, which was noted. The category on new job opportunities also appeared in the narratives. Seniors had thought of the possibility of part-time work, at home via the internet. They also mentioned the fact that they can travel freely. The older generation appreciates this opportunity, especially since in the past, traveling was very limited, and sometimes impossible. This situation changed as a result of the collapse of communism and the Polish accession to the European Union.

Analysis of narratives of seniors shows that they are aware of the challenges that the information society entails. The frequency of the occurrence of the above categories in narratives show which challenges are the most important in the opinion of senior citizens. The relationship between the challenges of the information society and the need for lifelong learning is a noticeable.

EDUCATION AS A NECESSARY SKILL IN THE INFORMATION SOCIETY

Narrators who took part in the biographical research were educationally active. In the opinion of seniors education is a fundamental element of modern society. However, participants in many narrations created own life stories comparing themselves to other seniors who do not undertake education. Considering the fact that the research was carried out in the interpretative paradigm, the opinion of seniors participating in research about their peers who do not undertake further learning is very interesting in this case. Especially that people who represent certain opinions or observations do it in other perspectives different from the researchers, because they are representatives of that age group. Moreover, the fact that this category appeared in many narratives proves that this is an important aspect of the seniors' world.

No educational activity implies a worse quality of life for these people. Life for these people is considered as more boring and sad: *My friends who are retired generally are reluctant to make the effort to go out and learn something new. Their life is slow and sad because when they stay at home all the time and don't have the opportunity to discover the world - so their world is declining. Therefore learning is now critical* [Narrator 5].

Moreover, educational activity reduces the risk of social exclusion: *A person who learns can move in the world is not lost. She/he is satisfied with her life. I have the*

comparison with my cousin, who has only an elementary school education. He has a good retirement, because he was a dodger all his life. And now when he is retired he does not know what to do, cannot be found - he watches TV all the time. Learning allows a much better life in this world [Narrator 1].

Education requires sacrifices - that's the truth. Older people do not appreciate intellectual development, to thereby predict a variety of life situations, participate in them in a deliberate way [Narrator 9].

A man who does not learn and is not curious vegetates, because curiosity about the world has been forced onto us [Narrator 10].

In the opinion of seniors in modern life ICT skills are very important. People who can not use new technology are excluded from many important aspects of social life. Especially many areas of life which are only accessed through the internet. The following statements of seniors show how important is the ability to use new technologies:

Without technology, you will not be accepted into society. The world has so changed that ICT is necessary for normal life [Narrator 2].

In my opinion, few seniors can handle new technologies and they miss out on a lot of things. I think that age is not a limitation, because if I feel good and I want to keep up, and I feel like it, why should I not try these technological innovations? I feel that I am equal with the young. For seniors keeping up with the changes can be difficult. They restrict themselves to looking for excuses because learning is a difficult challenge [Narrator 5].

I feel the need to use new technologies. It seems to me that man is excluded if he/she does not know how to operate a computer and use the internet. I once had a situation that I asked one of my friends to send me a photo by e-mail. She told me then she did not know how to do it - she was embarrassed that she could not do that (...) [Narrator 2].

Some older people have a problem with the fact that they cannot do some things on their own. They are ashamed about it. For example, I have a friend who has not caught up with the twenty-first century. He is a computer scientist by profession, but worked 30 years ago. He now can not cope with new technologies but he doesn't admit this because he is ashamed. He is backward because he was sluggish to change and now takes it as a discomfort [Narrator 11].

These statements show that a lack of ICT competences affects the mental health of older people - they feel because of this inferior and ashamed of their unawareness. There are many reasons why seniors do not undertake education. Based on the analysis of the narrative it was possible to identify the causes of this phenomenon. Narrators identify the following reasons for the lack of educational activity of other seniors:

- **shame resulting from the lack of knowledge and skills:**

The problem of the elderly is closing themselves off from the virtual world and the lack of communication. And communication is a prerequisite for survival in modern times. The older generation is ashamed to ask, having a problem with communication (...) [Narrator 6].

Older people have a huge problem to learn how to use a computer if they don't have a basic knowledge in this area. For example, my friends pretend that they can use a computer but, in fact, they can not. I know a lot about computers, e-mails etc. and when I ask them about something related to computer I see that they don't know. They pretend that they know but it is not true [Narrator 12].

- **focus on the family:**

People often think that it is the duty of parents to take care of their grandchildren and they also believe that it is ok. I think that this is terrible and so wrong. They explain that in this way the grandparents have contact with their grandchildren, but I think it is evident that they are using them for free care. I think that older people should develop their passions and learn [Narrator 11].

Older people have a mental barrier. Some people are so focused on their family problems that can't - I can't say that they don't want to, but they do not really have time to do anything else. They devote themselves totally to their family [Narrator 8].

- **diseases of old age:**

In my opinion we should teach people to be open to learning. The willingness to study should be something natural- I think that it's the most important. A lot of older people have such openness, but some do not. It could be result of the disease in older age. For example me, when I have a health problem, I begin to be calm and I withdraw from the world, because it is natural because you have to limit the number of external stimuli in order to accumulate the energy to fight the disease [Narrator 9].

- **lack of openness to learn (lack of motivation to learn)**

Some people do not want to learn, they prefer to sit at home and watch TV or sit on the bench. This is their way to vegetate [Narrator 10].

These statements clearly show that even seniors recognize the division between those who participate in social life and those who are marginalized. The basis of this division is educational activity, or the lack thereof. No educational activity that makes the quality of life of seniors is more important. An older person who does not learn, is seen as closed to the world, and his/her existence is reduced to vegetation. Seniors who are not educationally active are perceived by others as fearful and ashamed of their ignorance. It could be a barrier to undertake learning for them. It is worth noting that the narrators also point to external factors of lack of educational activity of seniors, such as: shame resulting from the lack of knowledge and skills; focus on the family; diseases of old age; lack of openness to learn (lack of motivation to learn).

Narrators' opinions about seniors who are passive educationally show how they perceive their peers and point out reasons of their e-exclusion. Moreover, these reflections inspire us to undertake further scientific exploration in this area.

CONCLUSION

Contrary to prevailing belief, not all older people are marginalized in the new reality. Senior citizens positively assess the changes which are the result of the information society and recognize many opportunities for personal development. Therefore, education actually plays an important role, both in the self-development of older people, as well as their adaptation to the information society.

Seniors also proved to be reflective observers of the new reality. The greatest risk identified by the respondents is related to the high pace of change within the the new reality and relates to the adaptation difficulties of older people. The participants of this research are of the opinion that only through continuous learning is it possible to keep up with these changes. In addition to the problems associated with that dynamic change and the need to adapt to this, seniors pointed to the threat of loss of privacy on the Internet or problems with interpersonal communication which takes place via computer or phone. Respondents have noticed a lot of benefits that the information society entails such as: easy and fast access to information and knowledge, freedom to travel, new job opportunities through the Internet, the ability to stay in touch with loved ones, etc.

In this context, we can point to two areas of educational activities that are most significant in the society: using of new technology (ICT), interpersonal skills. It is these areas should be particularly taken into account in designing the educational process directed to the elderly, because they refer to the challenges entailed in the information society. Of course, other competences are important too in the planning of the educational process, however, respondents particularly emphasized the importance of these three areas.

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AN ACTIVE ROLE FOR THE ELDERLY IN THE PROCESS FOR AN INTEGRATED EUROPE

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ABSTRACT

The European project entitled "Integrating adults and the elderly towards a Europe of knowledge", coordinated by the University of Almería, within the actions of "Grundtvig learning partnerships for adult education", has carried out the assessment of an educational program for over 55 years in five countries. The aim of the learning partnership was "to encourage the development of innovative practices in education of older people and their transfer between countries".

Methods: Some of the following teaching tools and methods were used to promote intercultural communication skills: simulation activities, followed by reflective discussion and/or written analysis; guided group activities; local visits to contact people from other countries; ethnographic projects.

Results: The courses provide knowledge and understanding of culture, institutions and different ways of life in diverse communities, and encourage reflection about their own cultural behaviour, practices and attitudes, as well as those of others. Old people enhance communication in their community by means of meetings, in which they talk about their common concerns. This can help the elderly to overcome problems and reduce feelings of loneliness. The courses also help old people acquire new knowledge and skills in a rapidly changing world.

Conclusions: Participants' motivation increased as the sessions were developed, since the contents of the classes agreed with their own interests, with a constant widening of knowledge. Everybody had an active role in the discussions. This training revises some beliefs about ageing, such as the removal of the image of the idle retired person; at the same time, it promotes active retirement, intergenerational relationships and independence, and improves social and personal skills.

Key words: lifelong learning, elderly, intercultural

INTRODUCTION

The elderly population is growing at record rates in Europe (*United Nations, Department of Economic and Social Affairs, 2013*). The technical and medical advances have permitted the increase of life expectancy in all European countries (Garssen, 2006). As a consequence of this increase of life expectancy, retired elderly people have more free time (Montero García & Bedmar Moreno, 2010).

Retirement can have negative consequences, such as reduction of income or loss of social relations, which can produce loneliness and isolation; on the other hand, another consequence of retirement is an increase of free time that allows the person to do activities and to aim for old-new goals which were just infeasible before retirement (Núbia Alvarenga, Kiyam, Bitencourt, & da Silva Wanderley, 2009). Thus, it is necessary to have a defined plan of life for this stage, which allows the elderly to live their lives positively and convert potentially negative situations into positive ones. Also their life experiences with their psychological and social aspects can be lived as a reward and can enrich themselves and those around them. It is certain that leisure and free time activities can be conditioned by the income of the person, which reduces as they get older, and by the environment where they live, but it is always possible to do some activities according to each individual's needs, health condition, education or acquired habits (Padilla, Durand, López-Liria, & Amarante, 2013). Therefore it is essential that mature people know how to plan their free time, and to adapt the different activities to their own characteristics and to each specific situation.

SOCIAL RELATIONSHIPS

Good social relationships at any stage of life are a central element of social integration, and welfare of men and women is determined by good social relations (Diener, & Suh, 2000). Studies with the elderly have shown that the

quality rather than the quantity of social relations increases well-being (Helliwell, & Putnam, 2004). The existence of at least one confidant is very important in adulthood. In addition, positive social relationships are a fundamental resource for social support, for example, when adults are in need of care or help. At the same time, a good social network that provides both emotional and instrumental support, affects both health and the success of socio-medical interventions positively, as social support in addition to its direct effects may also show indirect influence on the sense of a “buffering effect” (Dolan, Peasegood, & White, 2008).

The condition for social competence is self-competence (Gagné, & Deci 2005): to identify one’s own values and motivations; to recognise our ability to use them purposefully; to know our weaknesses and to accept and reduce them; to save our energy.

Only the correct perception of one’s skills and deficiencies will enable the development and implementation of competent guide behaviour (also called skills) in social situations. Examples of relevant skills are the ability to say no; to express wants and needs; to make contacts, to start and end conversations; to openly express positive or negative emotions.

HEALTH STATUS

Considerable research has shown that old adults vary tremendously in their health status and the problems they suffer. As people grow old, acute medical conditions become less frequent while chronic conditions become more prevalent (SAMHSA, 2000). Physical diseases in the elderly may be more difficult to detect, as signs and symptoms may be diminished or absent, delayed in onset or not characteristic of the same disease in a younger person (Nolte, & McKee, 2008).

Above all, it is important to keep in mind that the elderly can do something about their health in old age. For example, a small change in lifestyle, such as exercising more or quitting smoking, may lead to a significant change in health status. Among the preventive measures recommended for the elderly we find physical exercise, although the health concept is multidimensional and includes the biological, psychological and social areas (López-Liria, Padilla-Góngora, Catalan-Matamoros, Rocamora-Pérez, Pérez-de la Cruz, & Fernández-Sánchez, 2015). The statement ‘an organ not in use gets atrophied’ can be also extrapolated to both the psychological and mental aspects. Lack of use in cognitive terms is responsible for learning disability in old age, that is the relevance of training and stimulation to activate and boost mental energy.

MODERN TECHNOLOGY TOOLS

The potential of information technology means a great tool for older people to improve their quality of life. However, the elderly are among the lowest

user rates in both the use of computers and the Internet (File, & Ryan, 2014). It is necessary to promote technological literacy of our elders in order to promote their active social life, including family, friends, leisure activities, and even their own health care. The Internet is a vast source of information, and it offers more possibilities for relationships, so teaching the elderly to use this resource can positively affect their lives.

Nowadays, personal computers are all around us, and they are essential in our work. Age is not an impediment to approach computers to meet personal needs. Quite the contrary, studies show the great benefits of computing for older people in the neurological aspects, both emotional and relational (Zelinski, & Reyes, 2009).

The psycho-activation through the computer is a set of exogenous actions capable of enhancing endogenous capacity of the individual to stimulate their psychic dynamics. Computing is the great unfinished business in the elderly, with huge difficulties in the use and management of computers. Moreover, a large number of current elderly people have only a basic or medium educational level, with no previous contact with computer technology. They still find it difficult to access, due to the high costs of the ultimate technology (*Independent Age*, 2008).

LEISURE AND FREE TIME

After retirement, free time is the most important value of the elderly. It is an opportunity for personal and social development which implies being involved in diverse activities.

There is continuity in the type of activities people do before and after retirement. More than two thirds of people do not initiate new activities ,cultural, artistic or social after retiring. People starting new activities go sightseeing, do handicrafts, practice sport and go to performances. They also watch TV, go to the park and for a walk, listen to the radio, go shopping and read everyday. Fewer go to bars, associations or elderly clubs (Montero García & Bedmar Moreno, 2010; Núbia Alvarenga et al., 2009).

OBJECTIVES

The aim of the learning partnership was “to encourage the development of innovative practices in education of older people and their transfer between countries”.

Specific objectives:

- Understand the importance of social contacts, especially in old age.
- Develop internal and external independence in old age.
- Improve the quality of life and welfare.

- Provide security and increase the autonomy of the elderly.
- Prevent and control chronic diseases.
- Conserve and restore physical, mental and social functions.
- Raise awareness of the reality of the elderly European citizens.
- Promote communication, friendship and interpersonal communication.

METHODS

The European project entitled “Integrating adults and the elderly towards a Europe of knowledge”, coordinated by the University of Almería, within the actions of “Grundtvig learning partnerships for adult education” has carried out the assessment of an educational program for people over 55 years in five countries.

As a whole, each country prepared 18 training sessions (with a duration of 90 minutes each) in one or more samples of their population. This program consisted of five modules with contents on leisure and spare time, social relationships, health, new technologies and culture. Information was obtained about the population needs and the proposals that emerged during the research.

The sample in Spain consisted of 100 seniors from the province of Almería. A prerequisite was that participants should be willing to participate openly in these situations, laying aside the avoidance behaviour.

The aim of the training groups was to improve social skills such as:

- Learning to make requests appropriately, ask for information, make complaints, insist on something, ask a favour from someone, claim something for oneself or others.
- Refusing inappropriate demands or requests, learn to say no, not to try to please everyone, to respect our own needs and learn to tolerate that others may be angry about it. Not to avoid disputes because of fear of conflict, to deny any request, reject a proposal.
- Express and tolerate criticism, learn to accept public comments, learn to speak openly, without doubts, and properly.
- Analyse different examples of active lifestyle, taking into account the importance of personal well-being as useful and capable people in a society that needs solidarity and experience.
- Analyse the importance of active participation as a mechanism of protection and defense against loneliness and depression.
- The health module was developed to provide information in the specific area of health, having included a specialist like a physician or a clinical psychologist among their staff members.
- In the culture module, all the countries provided information about: flags and maps; geographical data; population; languages; history; climate; flora and fauna. The Partners of the Project made a discussion on: What do they know? What do they want to learn? Internalize know-

ledge of each country, establish similarities and differences in cultural issues. Enjoy the cuisine of European Union member countries and present the foods that help longevity, according to the inhabitants of different countries' members.

- Get to know and experience different cultures and customs through other colleagues' experiences.
- Reflect on which of these aspects we have in common, which set us apart, and what should be incorporated or changed in order to improve our quality of life.

Step One: Motivation. We used case analysis on different ways of communication, interpersonal conclusions, proposals and personal commitment. Short stories, personal experiences and interests, audiovisual presentations, case study, etc. The teaching-units were adapted to the elderly's own interests, by expanding, adding or eliminating contents. Preparing the course, finding information, collecting material (magazines, books, Internet, etc.).

Step Two: Deepening insights into the topics. We used oral presentations of the topics, reflection and debate. A short statement with teaching aids (e.g. PowerPoint presentation, further written information given to students). The methodology should be highly participatory and active, based on previous experiences of the participants, based on their everyday reality, aiming to promote positive changes that result in improvement in their interpersonal communication and, consequently, in their quality of life. Video Forum. Group work and panel discussions. Questions/explanations. Role playing. Team work, presentation of more questions and/or of the conclusions in the class. Planning together homework and have a feedback about the applicability of the course. Practising mutual help to be more active, e.g. walking together or in little groups, exercising, healthy eating, etc.

The following teaching tools and methods were proposed as useful to promote intercultural communication skills: Simulation activities, followed by reflective discussion and/or written analysis; Informal face to face interaction in hypothetical contact situations; Guided group activities; Student diary; Questionnaires; Peer teaching; Promote contact with people from other countries; Reports; Oral presentations; Ethnographic projects.

In New Technologies module, we used participatory oral presentations, illustrated with PowerPoint files about the unit contents; small group work; active participation of students on computer skills.

Evaluation. We suggest having both an initial and a final evaluation. This evaluation is intended not to quantify how much new information and concepts our trainees might have learnt, but to get to know the grade of their satisfaction with this new information, their self-esteem increasing, the changes in their life style, the improvement in their quality of life, etc. During the final evaluation, teaching process can be also assessed.

RESULTS

The courses provide knowledge and understanding about culture, institutions and different ways of life in diverse communities, and encourage reflection about their own cultural behaviors, practices and attitudes, as well as those of others. Old people enhance communication in their community, by means of meetings in which they talk about similar concerns. This can help the elderly to overcome problems and reduce feelings of loneliness. The courses also help old people acquire new knowledge and skills in a rapidly changing world.

In our project, the main challenges were to motivate the elderly to use adequately their free time with different leisure activities, and to give them the opportunity to develop skills to 'live the moment', according to their personalities and interests. Having good quality of life and feeling personal control represent key elements for experiencing the retirement positively.

Some of the activities put into practice within the program were as follows: Group work to rehearse social skills in certain situations, such as starting and maintaining conversations with others in different contexts; express opinions, agreement and disagreement; make and accept compliments; express love, affection and appreciation for others; show appropriate facial expressions during peer interaction in different situations; look at the speaker during interaction; show / maintain an appropriate distance / proximity with the other; smile to others in appropriate situations; adopt an appropriate voice volume during disputes.

Concerning the culture module, visits were scheduled to political parties, clubs and institutions where volunteer work was being done (e.g. childcare, hospitals, etc.).

The methodology was dynamic and open. In every session, arose really vivid discussions, showing the different perspectives within the group. During these discussions, the elderly expressed their own experiences. The participants were open towards methodology which was unfamiliar to them: working in small groups, visualizing, etc. Psychomotor exercises were developed in each session. The European diversity was included in almost all modules. Participants discussed diversities and similarities in every field, comparing and finding both positive and negative points. They expressed their needs in a group and discussed their likelihood of being fulfilled. This exchange of opinions contributed significantly to self-reflection.

This training has shown some aspects about ageing, such as the removal of the image of the idle retired person; at the same time it promotes active retirement, intergenerational relationships and independence, and improves social and personal skills.

Fears related to new technologies decreased (they lost their fear to face new technologies). They consolidated relationships. In the area of social relations, they dealt with their life and their past. They learnt to not feel guilty when making use of their time for themselves. The topic "health" was the most

important one. They were encouraged to live in a more healthy way. They got new knowledge and experience; they realized that the university is still open for them, they can come in at any time, they are always welcome.

DISCUSSION

The perception of old people in the classroom has changed during the last decade, from focusing on welfare speech about the needs of the elderly, linked to situations of physical, economic and relational dependency, into a new approach based on entertainment, general culture and formation specialized on some issues related to new technologies, linked to an increasingly heterogeneous reality with different interests, capacities and life situations (Padilla-Góngora, Lopez-Liria, & Martínez-Martínez, 2012).

Active social participation is an important indicator for the quality of life in adulthood, and it seems to decrease in old age. Participation in clubs, groups, initiatives, political parties and organizations of all kinds are understood as a mechanism of social integration, which is mutually related to other integration entities as family, work, neighbourhood and friends. Political participation is considered as a component of basic social integration. Participation needs social competencies, like the preparedness for cooperation, the ability for conflicts, empathy and change of perspectives (*SOLIDAR European Network*, 2014).

Social participation helps to integrate the elderly in society and produces many important contacts. This can prevent isolation and loneliness of the elderly and give the feeling of being needed. To be needed and to have useful activities is especially important for people after retirement, when the children have left home and in the case of loss of partner. Through active participation, either in clubs, volunteering, etc. the elderly can use their potential and experience gained during their life. This also gives them the recognition they need having lost their role as professionals in their former jobs (*National Seniors Council*, 2010).

Many of the once-disabling problems of ageing can be managed through improved health care and the use of assistive devices. Simple but effective changes in the home environment can be made that prevent problems and enable the older person to maintain independence. The person who has had good health habits when younger and who maintains these habits throughout life can expect to age with a sense of well-being and continued enthusiasm for living (Smith, & Gove, 2005). A healthy lifestyle includes getting plenty of appropriate physical activity, such as simple stretches and walking. Research confirms that physical activity prevents problems as people age such as increased weight gain and risk of cardiovascular disease. Activities that increase strength and mobility can also help older adults remain independent. To stay healthy, older adults also need adequate sleep, sufficient fluid intake, nutritious foods, and a healthy and comfortable body weight (*NHS England, & Age UK*, 2015).

The mobile phone is nowadays, par excellence, the connecting link with others, becoming of special relevance to the elderly and mainly those who live alone, providing greater independence and autonomy of the user. Old people sometimes feel dependent for the maintenance and control of their information. Often this is not due to cognitive problems, but the ignorance they have in the task. Old people think it is high time to break this barrier and be updated on these changes that new technologies bring with them (*SOLIDAR European Network*, 2014; Zelinski, & Reyes, 2009).

As other authors remarked previously, we conclude emphasizing how education, through leisure programs, has modified the old conception about "elderly" and this stage is defined through parameters that refer to autonomy, development, relationship, participation and creativity in old people (Montero García & Bedmar Moreno, 2010).

CONCLUSIONS

Participants' motivation increased as the sessions were developed, since the contents of the classes agreed with their own interests, with a constant widening of knowledge. Everybody had an active role in the discussions. This training has shown some aspects about ageing, such as the removal of the image of the idle retired person; at the same time it promotes active retirement, inter-generational relationships and independence, and improves social and personal skills. Active social participation increases social contacts and prevents isolation and loneliness, enriching their lives.

All program modules were carried out. The program has been very rewarding for both participants and teaching staff. The students themselves decided which topics or aspects should be studied in depth. This educational program has improved the quality of life of the elderly by developing their potential to society. They found the program 'too short' (they asked for more sessions) and they asked for its continuation or reedition.

The main advantages about the use of the computer is the social interaction in an environment rich in sensory stimulation, in which is also possible to promote an increasingly more technical approach. All these aspects have to contribute to fostering a quality old age.

The results can be adapted to other regions of Spain. The elderly community would benefit enormously from them. The curriculum can be used by others, which should be experienced and flexible to adapt it to the needs and wishes of their own groups. We propose to implement the CHANCE curriculum into other courses on both regional and national levels.

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TRANSGRESSION

EDUCATIONAL CONTEXT OF TIME FROM THE PERSPECTIVE OF ADULT DEVELOPMENT

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ABSTRACT

The basic assumption is that time, which regulates our existence in the world, is the special medium and that there are “costs (lost opportunities) associated with not investing time wisely” (Zimbardo, & Boyd, 2009, p. 19). The diverse attitudes of certain individuals towards time may be viewed from various perspectives. The author reflects on the time phenomenon from the perspective of learning adults, with regard to three life periods in the process identified in andragogy as maturing to adulthood. In early adulthood time is especially significant as people assume the role of the ones responsible for their professional development and their families. In the second stage – middle adulthood – due to varying evaluations of their achievements, time is treated either as a friend or as an enemy. In this situation undertaking learning activity becomes a springboard, some kind of antidote to the emerging life problems. It may also bring about fundamental disturbances to the psycho-social balance of an adult person, such as change of his living environment. The value of time as a non-renewable good increases significantly in late adulthood, after crossing the threshold of 60. This refers particularly to people who consider old age as an important stage of life. Thus, temporal perspective in each stage of adulthood varies, especially when learning is a regular part of life activities of an adult person.

Key words: educational context of time, early adulthood, middle adulthood, late adulthood, development of adults

THE MEANING OF TIME IN HUMAN EXISTENCE

Time, as the intangible phenomenon shaping the attitude of humans towards the surrounding reality, may on one hand serve as a special good, yet on the other, it may be treated as a curse. We assume that time – as the specific element of our existence in the world, that sets the limits of human life in the conditions of earthly reality – is this particular medium with which “there are costs (lost opportunities) associated”, if it is not invested wisely (Zimbardo, & Boyd, 2009, p. 19). For this reason, objectively speaking, its value cannot be

questioned. Fortunately, we also have our subjective perspective from which we view time and thanks to which we evaluate it so differently. However, the significance of time, revealed in the way our perception of it influences our thinking and actions, seems to be decisive. For some people time – measured with years, months, weeks or even days – is some sort of a pressure, specific psychological stress accumulation of which forces them to fulfill successive tasks. Others may treat time as something that separates one event from another, one important life situation from another. There are also those who realize the importance of time passing by during events or meetings which do not enrich their previous experience nor do they improve their knowledge.

Let us consider the first approach towards time which is perceived as the most valuable element of our specifically understood good. Time pressure may be a positive factor when the awareness of time passing by becomes the stimulator for fulfilling our tasks in a reliable manner. It influences us negatively when the quality of the task we are to complete is lowered by the accompanying rush. Haste itself does not have to always bring poor results, yet the awareness of possible consequences of performing the work in a subjectively shorter time usually hinders us from proper performance. This phenomenon occurs often in academic works and even more frequently in the process of acquiring knowledge by learning adults. In this context, for example, an oral exam is a specific test for internalizing knowledge and understanding it in the time adequate to one's abilities.

Let us look at another way of perceiving time – as a space that separates one important event from another. For people who are immersed in the traditional worldview marked with religiosity, these important events are usually holidays (Christmas, Easter) or family anniversaries that emphasize trust in durability and sacredness of relations. A similar mechanism may occur in case of learning adults for whom time separating e.g. examination periods or exams – is an important or even defining element of their sense of satisfaction or even happiness. If all tasks scheduled for the given period are accomplished successfully, the final exams become the long anticipated fruit of hard work.

Situations when we experience the meaning of time through a loss require a separate discussion. The loss is accompanied by the feeling that hours, even days are spent on doing something that does not bring anything new into our previous psycho-intellectual resources. The subjective sense of time lost, which may accompany us during a social or academic meeting, is often successfully neutralized by the value we assign to the contact with people who for many different reasons are close to us. This is then when we also, on one hand, try to justify our unfortunate choices but on the other we find values where we have not seen them before. The more our present task seems detached from our supreme goal and from what we cherish the most, the more severe is our sense of time wasted. For example, for someone who invested in his scientific career, washing dishes, cleaning the house or gardening may seem a waste of time. However, when one realizes the usefulness of such activities in themselves,

or even more – their usefulness from the perspective of a human body that requires physical exercise – such awareness sheds a completely different light on the whole situation. When rationally fulfilled, the rule of physical activity as an indispensable component of our psycho-intellectual wellbeing, fosters creative thinking of an individual. Thus, obeying this rule may contribute to one's progress e.g. in terms of career.

Here we come to the role of our subconscious supported by thinking that uses previously obtained knowledge. It is our subconscious that allows us to acknowledge that time we are to spend on physical exercises may have the value comparable to the time we reserve for intellectual work. Moreover, from the point of view of intellectual exercise, physical effort becomes particularly meaningful as the factor necessary for ensuring the quality of the first one.

Such different individual approaches to time could be complemented by more references to this phenomenon. One of them is "control over time" which – according to Zimbardo – may be achieved through using our "capacity for psychological change" (Zimbardo, & Boyd, 2009, p. 49).

Psychological research, especially those by Philip Zimbardo and John Boyd, allowed us to identify six perspectives from which we view time: two past, two present and two future (Zimbardo, & Boyd, 2009, p. 51). Without further characteristics thereof, it is worth noticing that these dimensions of viewing time from the past, present and future perspectives do not exhaust their types and configurations. One of them, called the "holistic presence", is worth presentation, especially as we participate in the process of advanced diffusion of cultural patterns (including the influence of African, and Middle and the Far Eastern culture on the Western world). It is this type of time perception that assumes the development of the ability "to live the moment", that is to concentrate fully on the present moment and to include past and future as an expanded state of focus on the present (Zimbardo, & Boyd, 2009, p. 51). This way of viewing time and this attitude towards its potential finds many followers as it allows to gain control over the destructive influence of everyday life lived with the minimum participation of our consciousness (see: Chopra, 1995). However, it requires a higher state of consciousness and it can be achieved as a result of regular meditation practices that are the core of zen philosophy. It seems that in our condition it is also possible, or even necessary, to work on improving our consciousness towards recognizing its controlling role over what we do and how we live (Chopra, 1995, p. 57-61). So this way of viewing time, which is offered by the "holistic presence" frees us from the negative consequences: hedonic attitudes on one hand and fatalism on the other. Thus, it allows us to better find the sense of our life plans and actions.

Let us look at the time phenomenon from the perspective of learning adults, especially adults in their late adulthood. Identifying three known stages of adulthood or – according to Malcolm S. Knowles – developmental stages of adulthood, we can talk about a time aspect specific for early adulthood (20/25 – 35/40), a time aspect in middle adulthood (35/40 – 60/65) and time aspect

characteristic for late adulthood (60/65 and above) (see: Knowles, Holton III, & Swanson, 2009). As both early and middle adulthood are stages in human life that determine the period of late adulthood, I will characterize them briefly pointing out to their educational aspect.

EARLY (YOUNG) ADULTHOOD

Early adulthood can be characterized by close to optimal capacity to absorb knowledge and then apply it. This usually results in intensive learning and studying until at least 30 years of age. This is the “time of using ability of systemic and conscious problem-solving, combined with creative thinking” (Turner, & Helms, 1999, p. 402). Entering early adulthood is at the same time the beginning of new situations which enable us to get to know ourselves and others. This, in turn, fosters the development of a more stabile sense of our identity. In this way young adults participate in the process of multidimensional development of all areas of their personality and allocating themselves within the mechanism of social functioning (Turner, & Helms, 1999, p. 406). Learning helps them to choose their own course in life, with such important moments as: entering into an intimate relationship, marriage and having children. At this stage of life time plays a very special role, when we consider how intensively it is used by all those who desire to enter their adulthood in a responsible and effective manner. Of course, we cannot forget about the differences in “experiencing various aspects of adult life by young individuals” (Bee, 2004, p. 466). It is connected with the costs borne by young adults when they change the order of accepting and adapting to certain roles, e.g. having a child in the teenage years, like early marriage, usually results in negative consequences (Bee, 2004, p. 466). Considering some “normative order” in choosing social roles, sanctified by years of experience, seems to be the particular indicator of responsible adulthood. Here we should refer to the category of “social time” which “predetermines all social activities regardless of the community’s ability to conceptualize this phenomenon (...) It also determines the methods of evaluation and coordination of activities undertaken by the members of this community towards one another (...) and to some extent, it also sets the limits of individual experience of time (e.g. through socially accepted forms of narration, socialization etc.) as well as possible strategies of dealing with this experience” (Jaštal, 2015, p. 73). So this normative order of roles accepted by young adults is legitimised by social time.

No doubt, adulthood understood in such a way is supported by possibly advanced orientation in the meanders of adult life and the main source of it is the knowledge obtained through learning. In this context time seems to be a strong ally in this life stage, however in too many cases administration and use of time are still far from ideal. Where the hedonist lifestyle is continued and the importance of fun dominates in the world of a young adult, the agony

may occur – of the whole period of maturing to social roles that constitute the model of a responsible man. Here we come to a very up-to-date problem of degradation of the learning, studying and self-development ethos which is pursued by some people in their early adulthood. In this case there is a danger of being convinced that we have enough time (common saying – “I have my whole life before me”) and that wasting it does not yield any consequences, as the loss incurred may be compensated for later. But “nothing will allow us to regain time misspent” (Zimbardo, & Boyd, 2009, p. 17).

Thus, it seems that in early adulthood we can talk about two attitudes towards time. On one hand there is the majority of people who are aware of the value of time as their specific asset, that should possibly be well invested; on the opposite pole are all those who do not view time as a particular good. Thus, they do not reflect on how they spend it. Generally speaking, however – due to the variety of roles young adults are forced to play – time “goes fast” uncontrollably and the sense of insufficiency thereof becomes the more severe, the more complex become our tasks and duties associated with certain roles.

LEARNING IN MIDDLE ADULTHOOD

In this perspective, what are the attitudes towards time among people who have reached the second stage of adulthood – its more mature form? Middle adulthood – with consideration given to all possible individual differences – has some characteristics identified by the researchers as specific for this life stage. The difficulty in determining their character is connected with two contrary interpretations of the nature of middle age. Some view it as the time of crisis resulting from the negative self-evaluation, a period of depression marked with the feeling of unhappiness (Turner, & Helms, 1999, p. 480). For many others, for whom – like in the title of the famous book – “Life begins at forty”, time becomes an ally in their development. Therefore, from this point of view it is emphasized that middle age is the time of stabilizing one’s identity through the improved self-knowledge, accepting one’s ego along with the diversity of the surrounding world.

Some psychological research indicates that the beginning of the mature adulthood, that is the 40’s brings about the so called “mid-life crisis” (Oleś, 2000, p. 133-145). According to Daniel J. Levinson it results from the confrontation of an adult person with the range of responsibilities assigned to the middle age. Additionally, there is the “realization of one’s own mortality, recognizing new physical limitations and increased risk of behaviour as well as big changes in most of the social roles” (Bee, 2004, p. 491). It is easy to notice that time passing by, leading to the awareness of, among others, the fact of biological ageing, may become a destructive factor that undermines faith in one’s own abilities and thus, generates this crisis. Taking up some form of education often becomes a specific remedy for adults who entered their mature age. It allows them

to break the routine of everyday professional or family responsibilities. Education or learning helps adult individuals and becomes a lifebuoy, saving from psychosocial downfall. Conscious learning in this period of life also serves as the factor complementing gaps and shortages of middle adulthood; individuals have the chance to strengthen and deepen the value of their life maturity.

According to the research by Guy Avanzin, as well as my partial studies², education and learning during middle adulthood generally foster more effective accomplishing of personal and professional goals. The feeling of making a better use of one's time, that accompanies this situation, creates some sort of comfort. This, in turn, results in adding sense to an adult's existence. One can wonder, whether frequent cases when education affects adult individual's psychosocial balance and forces him to introduce many significant changes in his hitherto life, has value for development and maturing into adulthood? (Avanzini, 1993, p. 45-49). I think that events taking place due to one's education like leaving one's environment or family may be important factors in constructing a more mature personality. In this sense these, sometimes surprising, learning outcomes may be considered as very significant in the process of ongoing maturing into full adulthood.

It is different when participation in the education process leads to such deep changes in one's psyche that this person gives up the model of settling in life and rejects the established ways of socio-affective or socio-professional integration. Does it mean the rejection of the adulthood itself, as stated by G. Avanzini? If such general transformation entails the individual's deep belief that his new self is the real, right dimension of his personality – then it is hard not to notice that this is an important stage of maturing: not to postulated and, thus, falsified adulthood, but to the real one. By paradox, time also gains new perspective and therefore proper investing thereof becomes particularly valuable.

To summarize, we can say that the middle stage of life of learning adults either establishes them in their hitherto existential reality, or contributes to building a new identity and the shape and structure of it lead adults to a completely different life path. In this period individuals usually determine themselves "finally" and choose a relatively steady path for the next periods in their existence. This does not exclude the possibility to change one's life in the last stage of adulthood which brings human beings to the final, that is death.

2 In 2008-2010 I conducted a survey among external students of University of Wrocław, on evaluation of studies from the perspective of their own personal history and life satisfaction. Among the 115 respondents at the age over 40, more than half admitted that studies help them to meet new goals and to break the routine which had slowly become an important barrier to their development. Very few respondents viewed studying as the "necessary evil" because it complicated their vocational and family life. Another type of obstacle was the negative attitude or hostility of institutions' managers towards those subordinates who had taken up their education (some teachers were hiding the fact they were studying before their school Avanzininers).

LATE ADULTHOOD FROM THE PERSPECTIVE OF TIME PASSING BY; THE VALUE OF TIME IN OLD AGE

The value of time as the non-renewable and thus, volatile good increases evidently in the late adulthood. And while after their 60's more and more people live 20, 30 or even 40 more years, the awareness of the fact that this is the last stage of life's pilgrimage strengthens our conviction that the end is inevitable. Despite that, this period creates potential "opportunities of great happiness, satisfaction and fulfillment" (Turner, & Helms, 1999, p. 526). The negative image of the elderly is mostly due to the process of gradual rejection of still functioning in society. In the light of recent research on the ageing phenomenon, we can conclude that the nature of the last stage of life depends on individual viewing and individual attitude towards old age. Some see it as a chance for development and for life with dignity; others treat it as a necessary evil, give up and fulfill the black scenario of their last years of existence. Does it mean the negative patterns of old age must inevitably dominate in these people's lives? "Our consciousness, however – as written by Maciej Kuczyński – is capable of transform these patterns and create the new ones" (Kuczyński, 1997, p. 13).

For man individuals who build their awareness of chances and opportunities provided by the last stage of life, time becomes their special ally. Its specific nature means that older people – seeing the inevitability of the coming end – still strive for self-development as they recognize that such activity is the best way to neutralize the whole range of deficiencies in this phase of their existence. First of all, they must deal with the fact of them retiring and the subsequent change of social roles and modification of the character of their interpersonal relations. In this situation time gains particular importance because it allows seniors to complete the tasks that they did not previously have time to do. Moreover, late adulthood entails the range of specific difficulties and challenges that require the application of adjustment mechanisms, "especially, flexibility and adaptability" (Turner, & Helms, 1999, p. 526). The full awareness of the value of the last stage of life makes these people respect the time they still have at their disposal. Energy released thanks to this attitude allows them to fight with all body deficiencies with a relative success.

The analysis of the human ageing phenomenon from the perspective of the passing time makes us realize that in their last stage of life individuals often try to take stock of their existence. Summing up numerous experiences as well as resulting successes and failures usually ends with the global assessment of one's life. The derivative of the long course of life and evaluation of it is wisdom, understood as "the ability to cope with life, resulting from the life experience, from practical approach to life" [Słownik języka polskiego (Dictionary of the Polish language), 1998, p. 129]. This wisdom can usually be considered as an individual attribute of older adults, as it allows them to overcome many difficult situations. So the perspective of the passing time and

near end of one's life naturally deepens the auto-biographical reflection; and the significance of the latter – from the point of view of axiology of personal identity – is unquestionable.

A very different attitude towards life is presented by people who are afraid of their old age and view it as the unwanted twist of fate. For them time goes very slowly, as the lack of faith in the causal power of activity makes them slaves of the bad, meaningless old age. For some people time becomes such a burden that they remove it by ending their life with suicide. The stereotype of bad old age, deeply anchored in their consciousness as well as their previously negative socialization, turns their last life stage into an ordeal.

However, we cannot exclude the third approach to time in the late adulthood, which is revealed by people who view their final stage of life as the period of gradual stillness and focus on spiritual development. This is connected with successive resignation from fulfilling certain roles which, by absorbing time and energy, limited their capacity for in depth reflection on the ultimate meaning of life. The spiritual dimension of late adulthood creates the space for self-reflection, improves one's self-evaluation skills as well as allowing development of the skills of creating emotional distance towards the trivia of everyday life (Harwas-Napierała, & Trempała, 2000, p. 10). It is worth noticing that Maria Straś-Romanowska treats spiritual development as the fourth dimension of psychical life. This dimension involves "individuals discovering – through their subjective experience – the non-material, meta-physical reality that is the source of the absolute value and the supreme sense of life" (Straś-Romanowska, 2003, p. 47).

SUMMARY

To summarize, we need to point out that temporal perspective in each of the three stages of adulthood undergoes far-reaching diversification. Assuming that adults have relatively regular contact with knowledge and constantly take advantage of various forms of transferring this knowledge, we can state that the value of time increases with years passing by. Apart from the dark scenario of late adulthood, in all other cases the price of time, as non-renewable good, constantly grows.

It seems that as years go by, we subjectively feel that time accelerates. While searching for the reason for this state of affairs, we can conclude that this acceleration is fostered by:

- the increasing number of devices and civilizational and cultural attractions;
- the growing number and quality of life tasks;
- the increasing level of understanding the world and the mechanisms that rule over it.

The above listed factors lead us into the realization of the enormity of tasks which could potentially construct our life roles. Thus, despite our deteriorating condition, we try to fulfill some of them at least partially, shortening this way our subjective perception of free time, which in turn accelerates the rate time passes by.

Even though "the ticking of the biological clock", especially in late adulthood, is "much more profound" (as noticed by H. Bee), due to their reflexive consciousness elderly people are not only able to sustain their "state of possession" in the psycho-social and intellectual sphere but also undertake educational activities that contribute to their development (Semków, 2012, p. 145).

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CREATIVE LIFE STORY WORK WITH SENIORS

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ABSTRACT

We summarize the theoretical background and basis for creative activities focused on the life story work with the seniors as realised in "Centrum MEMORY", Bratislava, Slovakia. Older adult clients with various levels of cognitive functioning could benefit from the combination of creative and reminiscence activities. The importance of creativity and its benefits in senior life is outlined and emphasized.

Key words: life story, seniors, reminiscence, creative activities

INTRODUCTION

"Centrum MEMORY" is the first preventative, diagnostic and specialized facility for people with dementia and memory impairment, one of its kind in terms of complexity of services in Slovakia. In its activities social services are being realised in daycare for people with dementia, psychodiagnostic services for people with memory impairment and educational activities for professionals caring for the persons with dementia of various etiology. The important part of "Centrum MEMORY" services are also various preventative or therapeutic programmes for clients, in which creative work with life stories is used .

CREATIVITY IN LATER LIFE

Creativity, the arts and cultural activities as part of a community is considered a human right (United Nations, 2013). Examples of how human creativity can drive progress, adaptation and innovation are well-known from the history and everyday life. What Mihaly Csikszentmihalyi (1999) points out in his system model about the creativity over a lifespan is that creativity is not a result of creativity test or the kind of judgement that somebody makes of our work. It is an idea

or action that changes a cultural domain or something that could be more trivial (Csikszentmihalyi, 1990). Culture is made up by a multitude of domains, and when a domain is changed we have "*Creativity*". So a creative person is someone whose idea or action succeeds in changing one of the domains of culture. But we still have "*creativity*" which represents personal creativity - creativity in everyday life, that all of us are striving for and which will in some cases develop into cultural creativity. The creative process is what makes us totally human, and can make us happy despite all of the things that can go wrong in our lives including the period of old age. By understanding how the creativity works we have a chance to learn how to improve the quality of life for everyone including older adults (Csikszentmihalyi, 1995). The understanding of creativity in which we view all people as demonstrating a variety of creative characteristics and preferences, varying in degree and expression, is more recently presented by Donald Treffinger and his collaborators (2012). Instead of asking how creative we are, they challenge us to move beyond looking at the level of creativity to the question how we are creative, considering the style of creativity, which could vary ways of expressing and its applying.

Creativity can be described in various terms and definitions. According to Carolynne Addams-Price (1998), it represents cognitive and emotional processes involved in the conception of meaningful products. Patsy Fasnacht (2003) defines it as the ability to recognize a problem and experiment with new ideas to solve the problem using divergent and convergent thinking. It can also be viewed as meta-cognitive process that generates novel and useful associations, attributes, elements, images, or sets of operations, and better solves a problem, produces a plan, or results in a product clearly not present before (Pesut, 1990). Creativity requires an individual to be open to new ideas and approaches, in order to seek an original solution for a problem or challenge at hand (Fisher, Specht, 1999). Problem-solving ability and creating novel products of outcome is basically the shared central characteristic in defining creativity. According to the investment theory of Robert Sternberg and Todd Lubart (1991), creativity requires a confluence of six distinct but interrelated resources: intellectual abilities, knowledge, styles of thinking, personality, motivation, and environment. Although levels of these resources are sources of individual differences, often the decision to use a resource is a more important source of individual differences. Creativity in this theory is in large part viewed as a decision, which suggests that creativity can be developed (Sternberg, 2006).

One of the popular current topics on creativity is aging creatively. As we age, many older adults might not feel themselves as being creative and their willingness to engage in creative activities is low. Society in general tends to have a negative view of aging and a belief that old age is a period of decline and older people no longer have the faculties or resources to respond creatively (Hickson, Housley, 1997). The negative view of ageing believes that old age brings a decline in ability to provide an original solution to a problem or challenge at hand (Formosa, 2013) and relative to younger adults, older adults

typically behave more conventionally and are less likely to be open to new, original ideas (Zimprich et al, 2009). Factors which contribute to creative cognition such as problem solving, flexible thinking and memory retrieval could in fact decline with age. But the overgeneralized prejudice no doubt places its own restrictions on the expectations of the elderly themselves that they can maintain or even improve their creative abilities. The decreased cognitive capacity to be flexible and creative could reflect that older adults generally respond more conventionally because, compared to younger adults, they have a longer reinforcement history of conventional behavior and noncreative behavior is reinforced more often (Flora, 2004). Even in research the preconceived notions about aging and creativity prevent us from looking for more benign aspects of creativity in later life (Lindauer, 2003).

When exploring the relation between creativity and aging, two main models are available and dominated: the *Peak and Decline model* and the *Life Span Developmental Model*. In *The Peak and Decline Model* the degree of creativity is based on production, quantity and novelty. In accordance with that aging is viewed as the time of loss and creativity declines with aging (Frugé, 2016). Beginning in middle age and continuing into older adulthood, adults may experience declines in abilities related to creativity, such as the production of original solutions to open-ended problems (Reese et al., 2001). Alternatively *Life Span Developmental Model* holds the position that creativity and productivity are not equivalent and that creativity continues to grow, change and evolve with life span development (Reed, 2005). Observed declines in abilities related to creativity may not reflect an unavoidable consequence of aging, rather they may occur as a result of increasingly infrequent engagement in creative activities as individual age (Tranter, Koutstaal, 2008). Creativity is not a timebound act nor a function of chronological age and despite alternations in cognitive processing with age, it can be argued that the ageing brain is more adapt to imaginative thinking with increased distractibility and disinhibition (Hickson, Housley, 1997). The old age may simply represent a different kind of creativity and the ageing brain could be better suited to creative activity (Price, Tinker, 2014).

We offer the view that what is important is not the ability to generate a quantity of novel ideas and creations, but that the later life provides more time for reflection and construction of one's life story and the creativity should be supported in fulfilling this task. C. Addams-Price (1998) also concludes that late-life creativity reflects aspects of late-life thinking: synthesis, reflection, and wisdom. Therefore, in the alternative view as to how to evaluate the presence of creativity in older age, the individual's reflection, restructuring, and synthesis of ideas and wisdom could be characterized as creativity and similarly those interventions which stimulate these characteristics could be considered as creative activities (Flood, Phillips, 2007). What is mostly important is that being creative or to be involved in creative activity in older age can not only bring novel product or outcome, but also some other positive changes as the results of creativity.

IMPORTANCE OF CREATIVITY IN OLDER AGE

Creativity plays an important role in the lives of older people promoting social interaction, providing cognitive stimulation and giving sense of self-worth (Price, Tinker, 2014). Through creativity, older people could potentially explore new endeavours, develop their sense of identity and cope better with the process of ageing (Fisher, Specht, 1999). Therefore, creative activity is one proposed coping mechanism for ageing individuals and populations. Developing creative coping strategies can enable the older adults to adapt more effectively to physical, psychological and psychosocial changes that occur during later life, increase adaptive skills and facilitate a flexible approach to handling everyday challenges (Flood, Phillips, 2007). Because of the physical and functional declines that are inevitable as one ages, greater creative ability would be a useful characteristic to have in order to more effectively adapt to inevitable age-related deterioration as well (Flood, Scharer, 2006).

Older age provides not only losses but also opportunities for growth through creative expression. Creative production throughout life's transitions can teach older adults much about themselves. It can help put into place the meaning of life and the meaning of aging, it may lead to both psychological and spiritual renewal and greater clarity of being. Creative flow may produce an optimal experience and can bring the fulfillment of producing even greater psychological growth and transformation (Hickson, Housley, 1997).

Through creative activity, the individual deepens an understanding of self and cultivates purposeful or meaningful involvements. Engagement in creative activities can provide both the opportunity to engage in independent decision making and the occasion to receive social reinforcement for doing so. This may result in an increase in independent behaviors and may also increase feelings of perceived environmental control (Hanneman, 2006). In this way, it strengthens a sense of self that is competent, efficacious, and capable of doing (Fisher, Specht, 1999). The creative process benefits the older adult: to learn about oneself can lead to personal growth and to improvement of coping skills to more efficient ways of how to deal with the problems associated with the old age (Flood, Phillips, 2007). Findings also suggest some other potential benefits of creativity for senior health: mental clarity, improved emotional states and means for expressing experiences of life (Flood, Phillips, 2007). Further evidence of how creative engagement can contribute to healthy ageing can be found in the largest study of creativity to date which is Cohen's (2005) 3-year longitudinal study of creativity and ageing. The senior group with the implemented arts programming experienced diminished presence of problems and the use of medications, fewer doctor's visits and better scores on a geriatric depression scale and loneliness scale.

LIFE STORY METHODS

Our creative life story work with seniors is based on biographical approaches, which provide older people with opportunity, if they so desire, to talk about their life experiences. A broad spectrum of life story methods can be identified in the domain of working with seniors which could be grouped in clusters such as reminiscence, life review, autobiography and life history. Robert Butler (1963) was the first to underscore the importance of reminiscence and life review in successful adaptation of older adults. He forwarded the idea that reviewing past plays an adaptive role in coming to terms with the finitude of the life. Reminiscence is the act or process of recalling and sharing one's personal memories and is distinguished from life review that also involves the evaluation of negative past experiences and conflicts. In order to fully apprehend the aging experience, it is necessary to listen to the stories that older people have to tell: the personal meaning of the life cycle is nowhere more clearly unfolded than in those who have clearly completed it (Westerhof, Bohlmeijer, 2014). Exploring older people's past and present lives with them, particularly the circumstances which have shaped their experiences, potentially provides greater insights into their needs and aspirations and may help to challenge ageist stereotypes about later life. Listening to a person's life story is a powerful way of showing that they are valued as an individual and may also have a cathartic value (Clarke, Hanson, Ross, 2003). Older age challenges us to sustain well being as we experience increased levels of vulnerability with factors such as changes in personal lifestyles, deterioration of physical health, loneliness etc.

It seems important to assist older people in developing coherent, meaningful life-story. The quest to derive from significance from years of lived experience is one of the most compelling challenges of aging. Experiences themselves do not have meaning until a person reflects on, recollects, and interprets them (Brady, Sky, 2003).

Reminiscence interventions have been developed specifically with this aim (Webster, Haight, 2002). Current promising development in reminiscence interventions include therapies in which reminiscence is combined with other approaches such as creative therapy (Willemse et al., 2009) or its simpler form creative reminiscence. Reminiscence integrated with creativity can increase the likelihood of self-transcendence as a critical component of wisdom and adaptation in later life and to help the older adult to organize challenges of life's events into some meaningful system (Levenson et al., 2005).

CREATIVE REMINISCENCE

Reminiscence is typically not considered as a creative activity, but it actually clearly demonstrates characteristics of creativity and can be realised using the art-based models of reminiscence. According to Marvin Formosa (2013), reminiscence entails cognitive-emotional processes of providing meaningful

solutions to past problems. In his study of reminiscence sessions conducted with older adults, creative engagement of this form led to improved levels of personal empowerment. Firstly, it was by bringing about changes that enhance more positive attitudes towards life, better problem-solving skills, and greater emotional control (intrapersonal empowerment). Secondly, it was by stimulating changes in attitudes and skills related to interacting with other people, such as appreciation of other people's merits, willingness to seek help from others, and eagerness to care for others (interpersonal empowerment). Reminiscence as the life-review method can be further enhanced by creative expression of memories. In this way people are encouraged to create and discover metaphors, images and stories that symbolically represent the subjective and inner meaning of their lives (Bohlmeijer et al., 2005).

What we mean by creative reminiscence is encouraging people to explore their memories through creative activities which could be pleasurable for participants and entertaining for anyone with whom they may wish to share their results. Still to fulfill the quality of creative activity, it also should have three elements: innovation, valuable quality and appropriateness for the situation (Kaufman, Sternberg, 2007). Additional factors which should be taken into account include the notion that creative activities vary greatly between individuals, cultures and groups within society therefore the diversity of older population must be taken into account. The older population is diverse with the needs for older people ranging widely from active to those who are frail. Therefore creative reminiscence is beneficial because it involves a broad range of interests and can be encouraged in those with all functional abilities (Price, Tinker, 2014).

Reminiscence interventions are often only oral and that requires a good level of cognitive functioning to be preserved (Watt, Cappeliez, 2000). Reminiscence practices that rely primarily on memory, are mainly based on cognitive recall and can strengthen the experience of failure (Harries et al, 2013). The focus on broad themes like family history, accomplishments and turning points, which are often used in reminiscence, requires that people have the ability to review their life, to select the most important events, to summarize them and find a meaning in them (Bohlmeijer et al., 2005). For some older adults, this may be too complicated. We decided to use creative reminiscence as one of its greatest strengths is the number of ways it can be adapted so as to be appropriate for anyone, regardless of age or cognitive abilities. Creative expression which is the basic part of it is more appropriate not only for self-expression, but also as a way to access and explore memory. Arts-based approaches in reminiscence can offer a way to reflect and communicate non-verbally: therefore, older people can reminisce about things they cannot or will not put into words. This allows older people to remember while at the same time containing their memories in an aesthetic form. Some older people may be better able or more willing to reminisce under these circumstances (Larson, Perlstein, 2007). Virginia Batchelor (2009) stated that the main value of creative activity proces-

ses is that it opens an emotional outlet, which in the case of dementia, when many cognitive functions are compromised, allows emotional expression, a key element for understanding the person with dementia. The explanation of why reminiscence activities can be successfully implemented for people with dementia is based on the memory functions distinction. Explicit memory is the form representing the direct and conscious recall or recognition of recently processed information. Implicit memory reflects the unconscious effects of previous experiences without conscious recollection. It is that type of memory, which can be relatively intact or less severely impaired in dementia memory impairment (Machado et al., 2009). According to Juhani Pallasmaa (2005), it is very natural to combine reminiscing with other activities that depend on procedural long-term memory – memories of embodied actions together with multi-sensory memory triggers as combined in creative reminiscence activities. He states that we remember through our bodies as much as through our nervous system and brain. Anne Davis Basting (2006) claims that people with dementia who have edited themselves into silence for fear of saying the wrong thing, or not understand, can use the arts to reconnect with themselves and the people who care for them. What she means by the arts is any medium used for creative expression - including creative reminiscence. According to her, the arts bring to people with dementia tools that enable them to express and their vision of the world and are particularly powerful for this group because the arts operate on an emotional level. Where rational language and factual memory have failed people with dementia, the arts offer an avenue for communication and connection with caregivers, loved ones, and the greater world - the arts offer a chance for people with dementia to connect with people who have forgotten them - their communities at large.

Engagement in creative activity and its components were also explored from the perspective of both clients and therapists in the study with elderly people dealing with life-threatening illness (la Cour et al., 2005). We consider the findings relevant for the creative reminiscence as it corresponds with our anecdotal experience when working with clients with dementia. This analysis indicated that creative activity was perceived in terms of multi-faceted core category of “*creating connections to life*”, which was recognized as being made throughout the process of engaging in creative activity. Results should be interpreted with some attention to the possibility that the clients were disconnected before engagement in creative activity or that there was a need to reconnect or stay connected. The creation of connections in creative activity was provided by drawing up and refashioning memories and experiences from the client’s life both therapists and participants in the activities re-established and supported their clients as individuals rather than in their roles as clients with disease. Furthermore, the engagement enabled clients to make connections between past experiences and their present situation and possible future. This kind of engagement holds potential for clients in relation with their actual abilities to confront and rebuild attachments to core cultural ideas and values as well as

social relationships, not just with physically present people, but also remembered and idealized social others including their own past identities and self-images that are brought forward again to engage contemporary challenges.

CONCLUSION

Loss of the memory does not automatically mean loss of the creativity or capacity to feel and to express empathy. Music, movement, mime, touch, dance, drama and art can all be used, or used in conjunction with reminiscence (Gibson, 2011). Indeed it is essential that seniors with various cognitive functioning continue to have opportunities to express their creativity (Cohen, 2004). Creative reminiscence as a form of creative life story method might be beneficial to help older adults recognize the strengths they have and those that have carried them successfully during their ageing. It also provides an opportunity for self-expression building on own life experience. To feel comfortable looking forward the end of life, a person must come to terms with both the good and bad in life and allow for a final separation and acceptance of that history (Stephenson, 2006). Creative reminiscence includes the process of various creative activities (drawing, painting, music, movement etc.), in which concrete products are formed. The resulting objects serve afterwards as representative of the life story work and a point of discussion for curious others with whom the elder wishes to share.

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LAST LOVERS BY WILLIAM WHARTON IN THE OPINIONS OF SENIORS

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ABSTRACT

The issues of old age, once neglected in terms of reflection and research on this period of life, in recent years took on another dimension. With the growth of the elderly population in the world, more attention is gradually paid to issues related to improving the quality of life of seniors. Of particular interest are those aspects of life that have a direct impact on the sense of well-being of the elderly, namely: family, health, finances. The aspect of health is, however, considered mostly in the context of an overall psychophysical fitness, access to health care, adequate pensions enabling the purchase of medicines, rehabilitation, etc. In contrast, they less frequently deal with issues related to sexual attractiveness of the seniors and their erotic needs. Old age still does not go hand in hand with the sexual appeal. Elderly women are seen as unnecessary, invisible. They are not perceived as being able to evoke sexual desire. This social reception affects the senior women's perception of themselves. In the eyes of a community an elderly woman may still be attractive intellectually, but not physically. Stereotypes built around the old age also assume that people in late adulthood have no sexual needs.

Key words: late adulthood, old age, seniors, William Wharton, novel, femininity, University of the Third Age, stigma, stereotyping, sexuality, erotica, sex

The story of the novel by William Wharton is set in the seventies of the last century. The fifty-year-old American John arrives in Paris after parting with his wife to devote himself to his passion – painting. He takes no savings with him, living almost like a beggar, on the streets. During one of his painting sessions in the open air he meets a seventy-two-year old French woman, Mirabelle. She is an unusual elderly lady – she practices yoga, plays the harpsichord, speaks foreign languages and is also well read. After the death of her parents and older sister she lives alone, with no children, husband or friends. She is also blind, although lack of sight does not prevent her desire for self-realization. On the contrary, it enhances her cognitive needs. Mirabelle's occupation therefore defies the thesis that old age is characterized by gradual withdrawal

from active life, giving up previously performed roles and isolation from the larger surroundings (Kałużny, 2002). It is the stereotyping of the elderly people which stigmatizes them and influences the way in which they are treated. The strength of stereotypes also affects the behavior of the seniors themselves, who surrender to the expectations of the community (Łazarewicz, 2015, p. 26). Thus a phenomenon of self-fulfilling prophecy is created. It is not only the active life of the heroine of *Last Lovers* that separates her from the stigmatizing view of the elderly. Her physical condition also strays from the typical image of seniors, women in particular. The view on senior women is mentioned by Dorota Niewiedział (2014, p. 263): "Today's senior is faced with an exclusion from culture, and in the best case she is associated with a stereotype in which her most important traits are unattractive appearance, the envy of youth, struggle for attention or the loss of femininity". Even in the case of appearances, Mirabelle differs from the majority of women of similar age: she is slim, graceful, agile, quick, brave and full of life. Without a doubt one can consider her an attractive woman, both in body and spirit. In spite of this, in the eyes of fifty-year-old John she for some time remains "an old lady". The American's perception shifts only as a result of the change in his relations with Mirabelle – when they establish an erotic bond. Then the descriptions of the Parisian become simply depictions of an appealing woman. A woman who has a delicate and kind face, soft, narrow lips, hair tied into a long braid and looks like a small girl, a teenager (Wharton, 1991, p. 192, 197, 213, 218). The American even concludes that "it really is hard (...) to believe (...) that she's seventy-two years old" (Wharton, 1991, p. 232).

For some readers these physical depictions seem hardly credible. The reason for that could be popular opinion on elderly women, described as "invisible". "This situation is considered oppressive by the elderly women and it negatively affects their self-esteem or acceptance of their own bodies. The more their physical image strays from the culturally propagated model, the greater their lack of approval for their body and marks of old age such as grey hair, wrinkles or less firm skin" (Niewiedział, 2014, p. 269). The heroine of *Last Lovers* does not feel like that, but perhaps it is due to the fact that, as a blind person, she couldn't have observed the passing of years and its effect on her body. On the other hand, it is clear that she fears seeing her own, old body, which indicates that she is aware of the changes taking place in her appearance. She says it directly to her lover John: "You must promise to hide your portraits of me and take away all the mirrors. (...) I do not think I could possibly look at myself" (Wharton, 1991, p. 357). He in turn tells her that she is a very attractive woman. The perception of women in their late adulthood as less attractive compared to younger women and less attractive compared to younger ones and their male peers is explained by the theory of evolution. Physical attractiveness and fertility are strongly correlated. "Additional studies have supported the theory of an existence of a double standard of attractiveness /appearance. This meant that a youthful appearance is more important in case of women than men, and as a consequence – elderly women will be judged more negatively" (Niewiedział, 2014, p. 268).

Elderly women tend to perceive themselves solely on the basis of their physical appearance and not their own, often youthful, identity. "The physical signs of aging, such as gray hair or wrinkles, are treated as a disguise, or even a prison from which one cannot break free" (Niewiedzial, pp. 269-270). This explains the attitude of women in old age. One of the behaviors consists of hiding (lying about) their age through numerous rejuvenating treatments. The second demeanor is characterized by seeming indifference to those spheres of life in which physical attractiveness matters.

(A)SEXUAL SENIORS

Sex of the elderly still remains a taboo subject. It is rarely brought up, as if erotic love could be attributed exclusively to younger people. The reason for this standpoint is a theoretical gradual disappearance of sensual needs in old age. It is a stereotype and a myth. The desire for sexual intercourse is normal and healthy at any age in adulthood (Hamilton, p. 157). People in late adulthood therefore have the same needs as younger people. The only difference is in the possibility of its realization. Age-related illnesses often limit and sometimes outright prevent sexual activity. Chronic diseases such as diabetes, hypertension and cardiac or urological diseases negatively affect the quality of sex life (Hamilton, p. 89). Also, medicines may cause side effects that include reduction or loss of libido.

Stereotypes concerning a reduction and even lack of erotic needs in the elderly is also explained by the effect of cohort. This is due to the fact that people who were brought up in the times with less social tolerance than today are reluctant to talk on topics related to sexuality. Researchers immediately reach the conclusion that seniors do not have a sex life, while in truth they simply do not discuss it (Hamilton, p. 158).

And those elderly people who have the courage to talk about their sex life, are stigmatized by the public. They are then met with embarrassment and indignation (Krasuski, & Shepherd, 2015, p. 87). The community, if it has to, is more prone to accept "a randy old man" than "an inappropriately and inadequately behaving elderly lady" (Krasuski, & Shepherd, 2015, pp. 87-88).

The seniors themselves also are reluctant to engage in an erotic activity. Changes in appearance, reduced physical fitness become the causes for fear of confrontation with a potential sexual partner. "How will she react to me?", "Can I do it?" "Will I be laughed at?" - these are the most common questions put before oneself. The fear of disgrace and rejection is sometimes so strong that it effectively prevents an establishment of intimate relationship.

On average women live longer than men. As a result there is more women than men in the same age group. This leads to a situation in which senior women, due to the lack of a partner, are less sexually active than women in the younger age group. Again - this observation can lead to the wrong conclusion,

that if elderly people do not engage in sexual intercourse, then they have no desire to begin to do so. Yet another group is formed by the widowed persons, who due to the memory of their deceased husband/wife and certain loyalty does not come into another intimate relationship. This problem affects primarily women (Krasuski, & Shepherd, 2015, p. 88).

For a part of the society sex is also associated with procreation, which in the case of female seniors is no longer possible. However, sexual activity is still very much available. Paradoxically, it is at the time when a woman is no longer capable to reproduce that the intercourse can be very satisfying for her. She no longer needs to use contraception and can indulge herself in sensual pleasure with almost no limitations. The only boundaries in that case are the individual needs of a senior and both his/her and the partner's physical capabilities. Even though in old age the need for stimulation is reduced and the time of reaction extends, these are completely natural processes. It is worth adding that a large part of seniors is comprised of people both physically and mentally active, who feel sexual needs and are able to fulfil them.

In "defense" of the sexuality of elderly people it is also worth mentioning the fact that sex in this age positively affects health, and "sexual longevity has a positive effect on the length and quality of life" (Lew-Starowicz, p. 121). The intensity of sexual activity doesn't change with age (Hayflick, 1994, p. 136), although the erotic needs can undergo modifications in different stages of life (Wawrzyniak, 2011).

POSITIVE AGEING

The period of old age is characterized by reminiscing to often very distant memories, possibly only due to sustained long-term memory. Also, the crystallized intelligence is proved to increase in this stage of life. It means that - contrary to the stereotypes - seniors do not have to be physically or intellectually weak, they can possess good psychophysical condition, enjoy life, have plans for the future. And although the worsening of health linked with aging limits physical strength, the abilities gained before and sustained with regular training allow them to still be viable despite the effects of inevitable perceptive-motoric changes.

Additionally, life according to the theory of positive ageing assumes the existence of certain actions. Robert D. Hill writes that they are undertaken "in order to increase the well-being, even in the case of health decline connected with ageing and the loss of someone close." (2010, p. 28). By looking at the life of Mirabelle, one can assume that she lived according to the mentioned theory. This theory assumes that a human's goal is the pursuit of happiness (welfare) through affirmation and acceptance of one's life in all its stages. This objective is constituted based on the ability to experience positive emotions, engaging in activities and giving sense to one's life. It is achieved through kind

relationships with others, physical and mental autonomy as well as personal development (Wawrzyniak, 2015, p. 118). "The mission of positive ageing is very clear – to add more life to your years, and not only more years to your life" (Vaillant, 2007, p. 335).

It revolves around the assessment of a sense of well-being both in subjective and objective sphere. Something which is only an inconvenience for one person can be severe hardship for another. Mirabelle from Wharton's novels accepted her blindness with relative calm, not resigning from active life due to her incapacity. Someone else in her place could have succumbed to grief, stagnation, isolation from the world and other people. This often happens even in the case of younger people who e.g. due to an accident suddenly become handicapped. And regardless of medical predictions they can take the form of a double-sided attitude: to surrender and withdraw from all activities available to them or continue the previous ones and possibly add new ones.

This intrinsic activity of seniors is precisely what improves the quality of their life in old age. One of the factors that affect the lives according to the concept of positive ageing is the maintenance of kind relationships with other people. The heroine of *Last-lovers* had neither family nor friends.

But loneliness caused by a lack of family was compensated by her ease of establishing relations with people and friendship with birds. The pigeons that she took care of every day with a great deal of attention additionally evoked her need of being active. As claimed by C. B. Germain and A. Gitterman, "taking care of a domestic animal or a plant can preserve the ability of maintaining relations with other people, as well as a sense of meaning and effectiveness. For example, a bird or a plant which requires care and react to attention and interest, can give joy and a feeling of affinity to an elderly person" (2008, p. 192).

ELDERLY WOMAN IN THE VIEW OF SENIORS

In order to learn the opinion of seniors on the topic of reception of *Last Lovers* I have conducted research on a group of persons aged 68-75. The research subjects were students of the University of the Third Age on the University of Wrocław: three women and two men. Each of them has read the novel by W. Wharton. I have used qualitative strategy. The research problems in the uncategorized casual interview were concerning especially: 1/ evaluation of the physical condition of the heroine, 2/ Thoughts on the romance of the heroes.

The reason for choosing this exact group for the research was the subjects' educationally-cultural activity. The students of UTA in UWŕ take part in various classes for cultural and educational activation. They make use of *i.a.* the offer of a discursive club, reading club, journalism workshops. They read books, articles, participate in discussions on the topic of literature and journalistic writing. What drew my interest in particular was how the people who are

seniors themselves receive a novel whose main heroine is a 72-year-old who has an affair with a man 20 years younger than her. The opinions of the subjects differ. The women perceive the heroine in a different way than the men. "I have a 73-year-old wife. I know what a woman's body looks like at this age. Wharton had to devise a lot in here" (L., 75-year-old). The 68-year-old K. provides a similar insight, claiming that even seniors who take care of themselves couldn't arouse a man 20 years younger. H. (70-year-old) pertained to her own experience: "I had a divorce ten years ago. I met with various men, so I know what it looks like in practice. Mature men are not interested in women older than them, bah, men are even not interested in women of their own age. They only look for younger women".

Mirabelle's physical condition does not have to be only an imagination of the writer, though, since the speed of aging is affected by cognitive processes, such as regular physical and muscle exercises, which hamper or slow the decline of intellectual capabilities with age (Hill, 2010, p. 28). The subjects, however, undermine this thesis. "I don't know any woman at this age whom I could describe in a way Wharton did – that she is slim, pretty and attractive, well, in the sexual sense. Maybe except for famous actresses, but in this case the scalpel has done its job" – another woman claims (I., 69-year-old). The 70-year-old W. supports this opinion; "It's hard for me to imagine having sex with a 72-year-old at the age of 50. The thought alone seems distasteful to me". According to the seniors a woman of Mirabelle's age can be well-read, have an ear for music, be physically efficient, impress with a knowledge of foreign languages and ability to play an instrument. "But she will never be the same as a woman younger than her. She is not that age anymore, and no amount of gymnastics can change that" (H., 70-year-old), "let's not fool ourselves that after 70 one can be beautiful, slim and young" (K., 68-year-old).

INTIMACY OF THE HEROES IN THE EYES OF SENIORS

The erotic relations of a 72-year-old woman and a man 20 years younger is in the opinion of the senior readers another fact hard to accept, a process which is hard to believe. "Weird behavior", "science-fiction", "unlikely relationship", "distasteful scenario" – such judgments were the most common when I asked about the reception heroes' romance in the novel. Only I. (69 years old) stated that such a relationship could happen in real life. The subject admitted however, that as a senior she viewed this novel entirely differently than as a young wife: "As a young married woman I rejected this kind of love, it seemed impossible, unattractive. But now I hold a different opinion, I believe that it could happen. Although the descriptions of exploring a man's body by Mirabelle were not to my liking. Because of those erotic depictions it was really hard to see love in there. I found it probably because I wanted to".

W. (70 years old), on the other hand, claims that as a man he wouldn't be able to fall in love and have intercourse with a woman who is 20 years older than him. "It's just the way we are, corporeality is important to us. We see with our eyes and what we see arouses us. I don't believe that an old and grey-haired woman could arouse a man who is still quite young". L. (75 years) has a similar opinion, since he believes that the motive behind the romance was John's desire to live in Mirabelle's house. Meanwhile, K. (68 years old) opposes such materialistic reasoning. She said that "although a way to a man's heart leads through his stomach, it doesn't explain why John was so committed to the relationship. He did not have to live off Mirabelle as he could have returned to America at any time".

The relationships in which one of the partners is much older than the other still evokes disapproval of the society. The older the female partner is, the bigger the disapproval. The community also suspects other reasons than love for the creation and maintenance of this kind of a relationship (Lew-Starowicz, 2004, p. 116). For such couples it is harder to live together due to the reactions of other people, and most of all the lack of social acceptance. "We imagine such partners in an intimate situation and an aesthetic discomfort occurs (Lew-Starowicz, 2004, p. 120). In the opinion of H. (70 years old) the erotic fragments in the novel are unnecessary. She explains this stance by saying that "everyone knows what a sexual contact between a woman and a man looks like. In truth, the author could have spared himself those moments". Meanwhile, K. (68 years old) thinks that the "moments" were not supposed to evoke a feeling of arousal or disgust in the reader, but only portray erotica from the point of view of a blind virgin - Mirabelle.

It can be assumed that the readers of the novel are under the influence of a stereotype, in which sex is not appropriate in old age and "there exists a certain taboo in our society which forbids us to talk about sex among seniors" (Bonowicz, 2015).

CONCLUSIONS FROM THE RESEARCH

In the views of senior subjects claims focusing on a lack of credibility of events in the novel clearly prevail. Some of them think that a 72-year-old woman cannot be physically appealing to a 50-year-old man. They also believe that such love is impossible in real life. Only one senior admitted that she believes in an establishment of this kind of relationship outside literature.

The descriptions of erotic moments are in the opinion of the subjects an unnecessary element, perceived as distasteful or even disgusting. This view correlates with opinions of some Internet users: "I think that the author went too far, while reading I was nauseous not simply because of inappropriateness - the lovers being in a senile age, but due to the excess of sweetness and care which this unusual pair exhibits on a daily basis" (Tet, 2015), "Are «Last

Lovers» a geriatric version of Romeo and Juliet? Well, this thought has crossed my mind... Has Wharton created an alibi for people who have significantly younger partners, as if it wasn't only about money and the position of the older partner?" (Tunio, 2015), "In books I appreciate their credibility. In fantasy I can value the honesty of feelings, in science-fiction, the possibility that something like that can truly happen. But in this kind of love I will never believe" (Mallwa, 2015).

In summary, intercourse for old people still evokes in the society a feeling of inappropriateness, distaste, embarrassment. These opinions are even more determined when an intimate relationship occurs between an older woman and a younger man. According to the society the roles performed by the elderly should revolve around the categories of family (mother, grandmother, great-grandmother), formal (a member of an association, religious organization), informal (neighbor, member of a social group), professional (retired person, pensioner) and social (citizen of a country and the world). There is no place for a senior-lover in this categorization. This possibility is not even taken into consideration.

The causes of such evaluation can be found in the culture of youth. Maria Straś-Romanowska speaks outright of the negative consequences of the cult of youth, which contributes to marginalizing the problems of old age, ageism and promoting strength, fitness and attractiveness of the body (2010, p. 13). And the old body still raises resistance from giving it a function connected with attributes of the youth and in it – the sexual role. Especially the sexual one.

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EXPERIENCE

NEW WAYS OF TREATMENT IN GERIATRICS AND PERCEPTION OF THOSE METHODS BY PATIENTS

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ABSTRACT

Developing Western societies are characterized by growing numbers of older people. This trend will increase in coming decades. Medicine and healthcare of developed countries have to stand against new needs of societies rich in people over sixty years old.

This paper will briefly review new technologies and ways of treating disorders of older people on the one hand, and reception of these methods by older patients on the other hand. We briefly describe therapeutic methods used in clinical neuroscience dividing them into 3 categories: therapies based on implantation of external devices into the organism, therapies using video games, and therapies using virtual reality. These therapies will be discussed according to three rules that have been proposed considering the approach to effective therapeutic methods targeting older people.

It can be assumed that older people tend to be afraid of using unknown solutions, even to improve their own health states. Contrary to this claim, most of researches report very high rate of acceptance of the aforementioned techniques by older people. However, laboratory teams should treat older people with extreme care so as to not provoke aversion to technologies used in intervention.

Key words: electrical stimulation devices, video games, virtual reality, elderly

INTRODUCTION

Dynamic development of neuroscience has resulted in new opportunities in neurotherapy which can be used by clinicians. It raises many ethical questions; as to how much clinicians can interfere into patients' bodies? Moreover, is there a possibility that some day two kinds of people would be established; these who use electrical devices which enhance their brain functions and these who do not. Furthermore, if changing of personality is possible, does it have to be forbidden or not, to name a few. However, it is not the main topic of this document, the reader is directed towards other articles considering man and machine ethical discussions published elsewhere (Keiper, 2006, pp. 4-41; Clausen, 2009, pp. 1080-1081; Mackenzie, 2011, pp. 18-20; Denning, Matsuoka, Kohno, 2009, pp. 1-4).

Increasing numbers of older people in Western countries create challenges which health care authorities of developed countries have never met before. In Poland prediction shows that the group of people who are 65+ years old will account for 23,2% of whole population in 2035 (Główny Urząd Statystyczny, 2008). The above mentioned demographic situation creates needs for developing new methods of neurotherapy, which will face up to the Geriatric Giants, which include, inter alia: immobility, dementia and depression (Biercewicz, Kędziora-Kornatowska, Marzec, 2006, pp. 133-136).

Methods used in Geriatrics, having regard to the increasing number of older people, should be:

1. Widely available – access to treatment of these disorders should be widespread in all developed countries due to restricted funds of health care providers and patients and limited ability of older people to move.
2. Effective and easy to use – demographic prognosis shows that ageing populations will be characterized by a limited number of people able to work. Thus, most health care providers should be trained in providing these methods, moreover, therapy should offer self-service to patients, even to a small degree, to unburden capacity of health care.
3. It must have as few as possible side effects, and be fun to use – the best therapy or method would not work if it would be not used. Patients have to feel comfortable using it, and not be afraid of using it, even it should provide some fun for them.

In the document we will list and briefly describe techniques that were introduced in the nineties and seem to be good solutions regarding the above mentioned rules, namely: Electrical Stimulation Devices (ESD) - Deep Brain Stimulation (DBS) and Vagus Nerve Stimulation (VNS), therapies based on video games (VGT) and therapies based on virtual reality (VRT). All of the above mentioned methods are based on new technologies, which older people may be not familiar with. Some difficulties may be raised in accepting them by older patients. It is worth examining difficulties that researchers have met while conducting studies based on using these technologies. Moreover, effec-

tive methods of making older people familiar with unknown technologies should be developed. Inter alia, soft competencies of the laboratory team are crucial for motivating older people into participating in intervention. Such methods would be critical in Health Care as well, where in ideal circumstances, the patient has to be in situation where he or she knows everything he needs to know about therapy to be able to make best free choice in picking up best way of his or her treatment.

ELECTRICAL STIMULATION DEVICES

Deep Brain Stimulation

Electrical stimulation was used in Ancient Rome for the first time. It was discovered that treading on a kind of cartilaginous fish, called the torpedo fish could relieve pain related to gout (Gildenberg, 2005, pp. 71-79). Nowadays, electrical stimulation of many body areas are widespread therapy for different symptoms. DBS has now been widely known as a therapy for Parkinson's Disease and tremor (Benabid, Pollak, Hoffmann, et al., 1991, pp. 403-406; Benabid, Pollak, Gao, et al., 1996, pp. 203-214; Bittar, Burn, Bain, et al., 2005, pp. 457-463; Koller, Lyons, et al., 1999, pp. 847-850; Krack, Batir, et al., 2003, pp. 1925-1934) with proven efficiency in treating depression, obsessive-compulsive disorder, Tourette's syndrome and chronic pain symptoms (Bittar, Burn, Bain, et al., 2005, pp. 457-463; Marchand, Kupers, et al., 2003, pp. 481-488; Owen, Green, et al., 2006, pp. 202-206; Lozano, Mayberg, et al., 2008, pp. 461-467; Pereira, Green, et al., 2007, pp. 591-603). Activity of the brain can be managed efficiently by this method. DBS using microelectrodes (f.e. 1.5 mm length electrode) is characterized by localised effects (affecting in specific ways the structures of the brain near the electrode) which probably could be extended indirectly to other areas by affecting on brain circuits. DBS has changeable parameters (on/off, amplitude, frequency and pulse width of the current delivered) could be changed easily by the patients themselves in many cases (Allert, Mehnert, et al., 2011, pp. 305-310). Unfortunately, this method is not without side effects (Williams, Ernst, Birns, 2012, pp. 170; Trachani, Constantoyannis, et al., 2010, pp. 213-217; Halim, Baumgartner, Binder, 2011, pp. 804-806; Hyam et al., 2012, pp. 469-478; Nazzaro, Pahwa, Lyons, 2011, pp. 606-609; Rätsep, Asser, 2012, pp. 547-553; Liu, Shan et al., 2013, pp. 1714-1723). Nonetheless, the last twenty years resulted in more than 100,000 treatments with DBS for movement disorders. An interesting study evaluated patients' own perceptions of living with aforementioned implanted device by using semi structured interviews (Hariz, Hamberg, 2014, pp. 272-278). Totally, 42 patients from Sweden were interviewed (31 males and 11 females). Researches proved that a mounted device is rarely an object of worry for patients, even one of patients declared „in a way it has become a part of me". The external part of stimulating device could not be hidden from others, but it was not object of complaints or annoy-

ance. Even some patients revealed their device to others with premeditation, to share the knowledge about such treatment. Other people showed the device to their relatives only, other patients hid the device, because they worried about other people's thoughts about it. Noteworthy, the main misgiving of patients in studies were not focused on their feelings about their own appearance after the operation or their concerns about impact of stimulator on themselves, their personality or identity or their lives. Their greatest worry was focused on the potential possibility of damaging the device during regular activities (Hariz, Hamberg, 2014, pp. 272-278). In the case of therapies aimed at improving cognitive functioning, several other methods exist, which do not necessarily interfere into patients' bodies. Our brain can be stimulated not only directly, but by taking mental as well as physical activities. Moreover, the risk of changing self-identity seems to be not an issue in such treatment. However, there are several more issues which will be reviewed in the following paragraphs.

Vagus Nerve Stimulation

Vagus nerve stimulation is a method based on interval electrical stimulation of the left cervical vagus nerve by an electronic, surgically-implanted generator connected by a lead to the vagus nerve. This method could be useful in relieving symptoms in many diseases; treatment-resistant major depression (TRMD) (Conway, Sheline et al., 2012, pp. 163-171), anxiety (George, Ward et al., 2008, pp. 112-121) or in epilepsy (Ben, Menachem et al., 1994, pp. 616-626), to name a few. Mood disorders (for example depression, anxiety) is one of the so-called Geriatric Giants (George, Ward et al., 2008, pp. 112-121), which significantly lowers quality of life of older people who suffer from these disorders.

Similar to Deep Brain Stimulation, Vagus Nerve Stimulation requires implanting an electrode into a patient's body. The device planted under skin is almost invisible, however, decision-making processes while choosing these kinds of treatment can produce some troubles.

Moreover, despite of the fact that Vagus Nerve Stimulation is not the newest of methods in clinical neuroscience, a letter to the President of Polish National Health Fund of 2012 (*National Health Fund*, 2012) showed many administrative problems with such intervention, because there were no special codes assigned to this method, which caused problems in funding such operations.

Perception of Electrical Stimulation Devices by patients

In response to ethical questions postulated in Introduction of this paper, the possibility of creating a class of brain-enhanced people become more realistic than ever. Enhancing of cognitive functioning regarded as normal or above, is now a fact (Farah, Illes et al., 2004, pp. 421-425; McCabe, Knight et al., 2005, pp. 96-106; Sahakian, Morein-Zamir, 2007, pp. 1157-1159). Medicalization of cognitive capacity can lead to a situation, when cognitive performance of people who did not choose to increase it, could be perceived as a pathology (Conrad, 2008). What should be underlined, is the fact that one day, clinical

neuroscience will give us an opportunity to stand up against the possibility of changing our traits. It seems that willingness to change traits depends on misgivings about influence of this intervention on changing patient's self-identity. Results of questionnaire-based research (Riis, Simmons, Goodwin, 2008, pp. 495-508) showed that participants were most willing to change these traits or cognitive skills who were described as unrelated to their self-identity. On one side it shows the need for ethical discussion and perhaps even legislation concerning boundaries of brain-enhancing interventions, on the other it reveals possible sources of patients' fear related to brain surgery. The need for ethical discussion concerning brain-hardware interfaces is strongly underlined (Clausen, 2011, pp. 495-501).

Adam Keiper (2006) in his essay „The Age of Neuroelectronics“ shows some aspects of life of people who decided on Deep Brain Stimulation as a form of treatment for their diseases . He quotes news that Rees Cosgrove, neurosurgeon, shared with the President's Council on Bioethics. He reports a case of a female patient who suffered from Tourette's Syndrome and was treated with Deep Brain Stimulations. Clinicians were able to manipulate functions of the implanted device to boost the patient's creativity. The patient was a graphic designer and her improvement in creativity was noticed by her employer. Another patient reports his preferences about device settings which depend on daily tasks - if he was going to go on social meetings, he preferred settings, which as he claimed, gave him a state of arousal, enhancing articulation and creativity.

The above mentioned cases are really interesting in the light of possibility for a patient to control the functioning of his stimulator by manipulating a handheld therapy controller on his own. However, most patients from a study which considered perception of living with implanted stimulator (Hariz, Hamburg, 2014, pp. 272-278) reported that all patients are informed about the way to manipulate the controller, nevertheless only 7 of them which constituted 17% of all group claimed that they feel confident while manipulating it on their own needs. Ability for self-management accords with the second rule from Introduction, however in this case it provides some ethical issues that should be discussed.

THERAPIES BASED ON VIDEO GAMES AND THERAPIES BASED ON VIRTUAL REALITY

Therapies based on video games

Neurotherapy using new opportunities given by the developing branch of video games entertainment is more frequent nowadays. The Nintendo Wii video games console had been introduced by the media as a powerful method that will give an opportunity to introduce regular physical activities in homes, hospitals and rehabilitation centers in the Western world (Elsworth, 2008; CBS

news, AP., 2008; Gnyp, 2008). Wii Fit was one of the so called *techno hits* of 2008 hailed by one of the most popular Polish journals *Wprost*. Description of the product shows the simple way in which that console differs from others: the gamer has to control the game not by pushing buttons on a controller, but by moving the controller itself. Wii Fit is an another controller which can be plugged in Wii console, in the shape of a platform which the gamer uses by balancing on it (Gnyp, 2008).

Research from 2010 showed that more than half of stroke rehabilitation centers placed in main cities of Australia are equipped with Nintendo Wii console (National Stroke Foundation, 2010). Wii Fit has been marketed as a health and fitness tool and was the first interactive video game to be endorsed by the United Kingdom's National Health Service Change 4 Life program (Gajewski, 2009). Nowadays, PlayStation and Xbox have their own „fit” products . It gives opportunities in neruorehabilitation that were so far unheard of.

However, researches from 2011 (Laver, Ratcliffe et al., 2011, pp. 64) obtained quite pessimistic results. Inclusion criteria for patients who were, inter alia, 65 years old and over, get 21 at least points in Mini Mental State Examination (MMSE) to be medically fit to participate and able to stand up from sitting position without any help. 22 participants had rehabilitation based on Wii Fit supervised by clinician, 25 minutes per day, five days per week. An interesting result from these studies is an observation that at the beginning participants were not highly polarized if they prefer standard or computer-based therapy, however after the implementation of using Wii Fit, they reported an antipathy to using this method and underlined their preferences for using conventional therapy. Their explanation of preferences for conventional therapy was based very often on feeling that this method is more effective .

On the other hand, other studies showed Wii Fit well-acceptance in a community of older people (Joo, Yin et al., 2010, pp. 437-441; Williams, Soiza et al., 2010, pp. 238). Researchers (Laver, Ratcliffe et al., 2011, pp. 64) underline the problem of 'veil of experience' which describes the fact that patients prefer therapy methods which they are used to. Moreover, researches report patient's behaviour which is sometimes called 'ceiling and floor effects' in case of tests of global cognition- some patients find it too hard to resolve, some think that level of complexity of questions are too low, which offends their intelligence (Franco-Marina, García-González et al., 2010, pp. 72-81). Authors (Laver, Ratcliffe et al., 2011, pp. 64) find similar problem with Wii Fit- some may regard is as too complex, some as too childish.

Therapies based on virtual reality

Virtual reality is an emerging technology (Sveistrup, 2004, p. 10) that could be used as a rehabilitation method by Health Care providers as well by patients on their own. Therefore, it is well fitted to first rule from the Introduction. Moreover, it is rather easy to use after short training, and ready to use at home, because such simulation is produced by electronic devices, which are

rather handy. Another property of this artificial environment is that it is real-time and interactive, and what is important in to this paper, it is responsive to patient's actions (McComas, Sveistrup, 2002, pp. 55-61) which can be made and/or received in two or three dimensions (Pimentel, Teixeira, 1993). Treatments based on virtual reality were reported as effective tools in increasing cognitive speed and improving mobility and balance (Bisson, Contant et al., 2007, pp. 16-23) in older patients.

Virtual reality also has been used in training patients with dizziness and balance problem as result of labyrinth damage. Participants' subjective assessment showed decrease in the dizziness intensity and improvement of the physical and emotional sensations (Józefowicz-Korczyńska, Walak et al., 2014, pp. 51-57). Another positive consequence of VRT was noted in patients with phobias (Łukowska, 2011, pp. 103-108) and older adults with sleep disturbances (Chang, Wang et al., 2014, pp. 1312-1313). It seems that using this method has a better effect than standard imaging techniques. It concerns especially post traumatic stress disorders (PTSD) patients, specific phobias, anxiety disorder, social fear.

Authors (Jørstad, E. C., Hauer et al., 2005, pp. 501-510) underline that not only physical, but also psychological components are crucial in further post-traumatic rehabilitation. As a consequence there is growing interest in therapy based on virtual reality, including Virtual Reality Exposure Therapy (VRET). One study by Barbara Olasov Rothbaum et al. (1999, pp. 263-271) shows that the application of this of 5 to 7 week therapy significantly decreased PTSD symptoms in Vietnam veterans. Patients participated in 90 minute sessions twice a week, where two different virtual situations were presented. One of them was the helicopter flying over Vietnam and the second was a forest glade surrounded by the jungle. Unfortunately, the researchers were not able to verify their outcomes in randomized study (Ready, Gerardi et al., 2010, pp. 49-54). Joann Difede and Hunter G. Hoffman (2002, pp. 529-535) show that VRET significantly reduced depression and PTSD symptoms measured by the Beck Depression Inventory and the Clinician Administered PTSD Scale in participants after the World Trade Center attack. Other studies including combat in the Gulf War or Iraq veterans also states that the VRET could be effective in relieving symptoms of PTSD patients (Litz, Engel et al., 2007, pp. 1676-1684; McLay, Wood et al., 2011, pp. 223-229; Reger, Holloway et al., 2011, pp. 93-96). Regarding elderly subjects, there is the opportunity to use VRET in treatment, especially when the technology becomes more approachable.

Scientists used VRT in patients with brain injury with hemianopsia, forcing them to pay attention to the neglected part of eyeshot (Łukowska, 2011, pp. 103-108). VRT was applied to patients with traumatic brain injury (Lee, Ku et al., 2003, pp. 383-388). Participant tasks were to move in virtual space of the supermarket picking specified goods for the shopping basket. Patients had to navigate in the virtual supermarket with the joystick, Head Mount Display and 3 Degrees of Freedom Position Sensor. The subjects performed the task

five times during a period of five days. The system assessed navigation rate, which included elapsed time, distance moved, number of collisions with walls and executive function which included number of selected goods, the number of refrigerator doors opened, number of joystick button presses, error rate. However, the participant group was too small to obtain statistically significant results (Lee, Ku et al., 2003, pp. 383-388). Previous studies showed improvement in various group of patients for example with Alzheimer's Disease and moderate level of Parkinson Disease (Žak Krupnik et al., 2014, pp. 9-13).

VRT has been used in the Tele-Rehabilitation Institute at Rutgers University. Games using the system Rutgers Arm II) called *Pick-and-Place*, *The Treasure Hunt*, *The Card Island*, *The Breakout 3D* were used. Treatment consisted of 3 sessions every week, lasting up to 1 hour for overall 6 weeks. Participants were post-stroke, their age ranged from 46 to 70 years old. After therapy participants improve their skills in: normal life (ADL), active range of motion, grasp strength, flexion of shoulders, elbows and fingers (Burdea, Cioi, et al., 2011).

Ecological value of Virtual Reality rehabilitation

Stroke is the third most common cause of death in the world, after heart attacks and cancer diseases. In the developed countries, 70% of stroke patients have trouble walking, including 30% experiencing severe mobility impairments (Banecka-Majkutewicz, Dobkowska et al., 2005, pp. 207-216). Limitation of independent gait function not only reduces functional abilities, but also reduces the quality of life of these patients. One of the main objectives of physiotherapy is to recreate the pattern along with improving of gait, also using virtual reality. Rehabilitation in virtual reality affects the improvement of gait function, improves the function of balance, improving posture control and increased certainty during gait (Banaś, Majchrzycki et al., p. 112). In the virtual environment one can create an individually customized exercise program for the patient. With VR, cortical motor reorganization could be obtained in order to regain functional capacity. Additionally, systematically increasing improvement of executive functions can be gained because the task of using VR can be carried out in relation to the tasks of every day life (Nidhi, Savitata, Abha, 2010, pp. 79-82).

Virtual reality scenarios have also been designed for testing instrumental activities of daily living, including wheelchair navigation (Rizzo, Buckwalter, van der Zaag et al., 2000, pp. 63-70).

There were several projects and research studies developed in the last two decades where computer-based interventions were suggested for memory training and cognitive rehabilitation of elderly people with MCI (mild cognitive impairment) and early-stage dementia.

Virtual reality cognitive training mimics real-world activities (for example using virtual kitchen and cooking) and therefore offers greater potential for transfer to ADLs (Yamaguchi et al., 2012). Training in the virtual supermarket improved also their executive functions (defined as higher-order cognitive functions needed for performing complex tasks) (Kizony, Korman et al.).

Perception of therapies based on video games and therapies based on virtual reality by patients

A systematic review (Kueider, Parisi et al., 2012) from 2012 shows effects of different kinds of neurotherapy on improving cognitive functioning in older people. It consists of interventions which included Neuropsychological Software, Classic Cognitive Training Tasks and Video Games. Results suggest that computerized training is an effective and low-cost method to improve cognitive functions of older people (Kueider, Parisi et al., 2012). It is with regard to the first rule mentioned in Introduction of this document, that methods of neurorehabilitation should be widely available due to restricted funds of patients and health care. Moreover, such small-sized electronic devices give an opportunity for home use.

It seems, that a very important aspect in such studies is to have good motivation in participation groups of patients (Torres, 2011, pp. 55-58). This contention, repeats itself in other studies, because it was great adventure and fun for patients, so they determined this method as better and less boring than conventional methods (Józefowicz-Korczyńska, Walak et al., 2014, pp. 51-57). In another study using computer games two participants proclaimed that they did not want to participate in studies, despite the encouragement from research team (Torres, 2011, pp. 55-58). Some of the participants who used Wii Fit exergames, withdrew after the first sessions, because they probably had feelings that unsupervised exergames could be unsafe and they felt uncomfortable in participating in the therapy. The rest of patients rated this method as giving high enjoyment, feeling general improvement, one of them said that his balance was improved and he could do more complicated daily activities (Agmon, Perry et al., 2011, pp. 161-167; Pietrzak, Cotea, Pullman, 2014, pp. 166-177). However, some of the patients involved in studies were initially anxious, but they got used to playing games very fast, moreover, gaming provide them positive emotions (Torres, 2011, pp. 55-58).

Some interesting conclusions could be drawn from studies applying VRT to patients with Traumatic Brain Injury (Lee, Ku et al., 2003, pp. 383-388). For example, some patients find it hard to learn a new ability such as using controllers, however, patients which got used to using VR before hospitalization, gained best improvement. Nevertheless, other studies which included after-stroke patients showed that participants have shown acceptance after studying new technologies, they were grateful that they could take part in this study (Burdea, Cioi et al., 2011). Moreover, their mood, morale, attitude to life, self-confidence (in winning the games or doing tasks with their affected arm) improves because of using new technologies (Burdea, Cioi et al., 2011). Overall, research shows that older people can get fun from using video games (Joo, Yin et al., 2010, pp. 437-441; Williams, Soiza et al., 2010, pp. 238; Torres, 2011, pp. 55-58; Lee, Chen, Hewitt, 2011, pp. 1231-1237; Schmiedek, Bauer, 2010, pp. 59-67) . This is in accordance with the third principle from 'Introduction' section.

Additional benefit of Nintendo Wii Fit exergames improved social communication with family and the desire to spend time playing exergames together with their grandchildren. The most important reasons, for using virtual reality and video games in the rehabilitation process, announced by patients was higher self-confidence during gait, good motivation associated with the easy scoring system visible during the game (Agmon, Perry et al., 2011, pp. 161-167).

What is worth noting, was the considerable number of participants for studies included in the review (Torres, 2011, pp. 55-58) who had no initial experience in using new technologies such as video games before participating in the study, despite this fact, the neurorehabilitation programme could still be effective. Unfortunately, in some studies (García-Betances, Jiménez-Mixco et al., 2015, pp. 49-54) patients and healthy subjects reported difficulties in interacting with a computer. Patients had more difficulties with the mouse, than the control group, so it is possible that virtual reality could be also used to predict the risk of contracting diseases like MCI or dementia. The relatively low cost of this virtual environment makes it an attractive and feasible option for wider utilization and implementation in rehabilitation clinics (García-Betances, Jiménez-Mixco et al., 2015, pp. 49-54) .

In a review (Weiss, Rand et al., 2004, p. 12) which describes different rehabilitation methods based on Virtual Reality, it is noted that older participants report high levels of enjoyment from taking part in such rehabilitation. The level of difficulty and perceived effectiveness reported by older patients are at a very good level (Weiss, Rand et al., 2004, p. 12). Moreover, VR probably could be useful in treatment of various disorders. It has proven positive effects on the balance, improving physical fitness. It seems that this method of rehabilitation is potentially the most effective and acceptable for both: medical doctors and their patients (Agmon, Perry et al., 2011, pp. 161-167; Pietrzak, Cotea, Pullman, 2014, pp. 166-177; Rendon, Lohman et al., 2012, pp. 549-552; Duque, Boersma et al., 2013, pp. 257-263) . Chan Tuen Ching et al. (2012, pp. 714-721) reported that 83% of patients would like continue rehabilitation based on virtual reality at home, and 90% were happy after this type of exercise although they had no experience of Wii Fit before this study. They were interested in feedback and it made them more motivated. It showed that this method is well accepted by the elderly.

However, in case of neuropsychological therapies based on video games, the most problematic is a first part of second rule, namely the effectiveness. The main issue is lack of scientific proof of effectiveness of computer-based cognitive training. Unfortunately, the results of applying the cognitive training are not optimistic. Although a number of commercial products have arrived on the market in the last decade, Shipstead Zach et al. (2012, p. 628) conclude that contrary to advertisement of these products, there is still, as their review of literature has revealed, lack of scientific proof of cognitive training effectiveness.

RESULTS

Both Deep Brain Stimulation and Vagus Nerve Stimulation seems to be effective tools in, to name a few, treating Parkinson's Disease, tremor and treatment-resistant major depression, anxiety, epilepsy, respectively. However this method is not free from side effects, however its overall cost/benefit ratio seems to be fair for patients.

Both, therapies based on video games and therapies based on virtual reality have some proven effectiveness in improving, *inter alia*, scores in Activities of daily living scale, cognitive speed, mobility and balance, subjective assessment of dizziness, physical and emotional sensations, phobias, sleep disturbances, post traumatic stress disorder symptoms, active range of motion, grasp strength, flexion of shoulders, elbows and fingers. Nevertheless, in case of therapies based on video games and therapies based on virtual reality, described results were obtained on small group sizes. More randomized control trials with larger groups are needed to incorporate these methods into standard clinical therapies for patients.

DISCUSSION

Therapies for geriatric patients using electrical devices show that fine tuning of the stimulator is important to reach the balance between relief of symptoms and side effects occurrence, therefore the above mentioned method should be improved to increase patient quality of life. Moreover, it shows one more ethical issue of Deep Brain Stimulation- ability to self control it by the patient. First, if Deep Brain Stimulation could enhance their creativity, according to what patients have reported, we can presuppose that coming decades will show what kind of mental functioning could be improved. Likewise, what if the Deep Brain or Vagus Nerve Stimulation could be applied as mind-enhancer of normal functioning people? With a controller on their own, they will be able possibly to gain improvement in their capabilities which could be reversible at any moment. Another issue is protection of such stimulators. Every new technology which reaches popularity at a particular stage of development is exposed to hacker attacks. In case of above mentioned stimulators it could lead to potential harm of patient's health or even death. Last but not least, the already mentioned issue considering possibility of changing personality comes back in this particular topic. What if we are able to manipulate these traits which are strongly correlated with self-identity of patients such as temperament or moral values?

Noteworthy, therapies based on using Electrical Stimulation Devices fulfill some criteria of therapies used in geriatrics from our Introduction. They are not yet widely available nor low-cost, however they seem to be effective. The controller seems to be quite easy to use after brief introduction, however the treatments have some side effects during use, and not all patients find it unproblematic to reveal the fact that they are using such devices.

Another case is the therapies based on video games and therapies based on virtual reality. Accessibility seems not to be an issue in this case, nor side effects or enjoyment. The majority of patients report that they are able to enjoy using such treatments, especially when they feel support from clinicians and/or researchers. The most problematic issue seems to be two values of these methods: the effectiveness and ease-of-use. Older participants need an introduction before initiating such therapies, especially if they have little experience of using such items. The effectiveness of cognitive functioning therapy is a field of science which still should be deeper studied to prove it.

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PHYSIOTHERAPY METHODS IN PREVENTION OF FALLS IN ELDERLY PEOPLE

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ABSTRACT

The process of population ageing is observed not only in Poland but also in other European countries. Physiological processes of ageing reduce the functional capacity. In particular, associated diseases, progressive weakness and failure of the motor system increases the risk of collapse in seniors. Dangerous consequences of falls, inter alia, injuries, can often cause death, what justifies its classification as a so-called geriatric giant. Health and psychosocial consequences of falls should be noted. Therefore, there is a great need for induction of preventive measures. Results of numerous studies constantly show that an effective intervention in preventing falls in seniors should include, first and foremost, multidirectional rehabilitation, which aims to improve balance and increase postural strength muscle. In addition, prevention should include: patient education, pharmacotherapy prescribed by a medical specialist, eyesight improvement, elimination of potential risks surrounding the patient. The introduction of multi-directional prevention of falls can reduce the risk of their occurrence up to 50%.

Key words: elderly, risk factors, falls, prevention

INTRODUCTION

Motor system disturbances can be caused by process of ageing. They consist of increased swing posture, decreased extensor reflex and increased latency in reaction time of some reflexes (Gajos, Kujawski, Gajos, Chatys, Bogacki, 2014, pp. 99-108). Decreasing effectiveness of vision, hearing and proprioception is related with ageing, which can cause decreased maintaining of balance. In older people the gait pattern is frequently changed to, so called, *elderly gait*. It is described as taking smaller steps, decreased velocity, raising the feet lower from the ground, decreased mobility in the hips and knees. Gait disturbances can coexist with many diseases such as Parkinsons Disease where gait velocity is decreased (Świątek, Urodow, 2013, pp. 195-200).

Falls are rapid, unintended changes of body posture. Falls lead to decrease of fitness performance, which is directly linked to a reduction in quality of life (Skalska, Żak, 2007, pp. 167-174; Kamińska, 2013, pp. 21-26; Edbom-Kolarz, Marcinkowski, 2011, pp. 313-318). Falls are one of the senile, chronic disabilities included in Geriatric Giants. In addition, they are the base of psychosocial and economical issues. Usually, there are several reasons for the fall. It is impossible to distinguish one, main reason for such an event. The risk of fall occurrence increases with age. In European countries a growing interest in the topic of falls in public health policy occurred in recent years (Skalska, Żak, 2007; Świątek, Urodow, 2013; World Health Organization, 2007).

EPIDEMIOLOGY OF FALLS

The epidemiological studies showed that 28-35% of people over 65 experience falls. This number increases to 32-42% in case of seniors over 70, to 50%

over 90. Patients living in nursing homes have falls more often than people living in their own homes. Almost half of these people have recurring falls (Skalska, Żak, 2007; Kamińska, 2013, pp. 21-26; World Health Organization, 2007).

The most frequent falls among seniors occur while walking. In other cases the reasons are environmental factors (about 44%) or the performance of dangerous activities (only 5%) (Kamińska, 2013, pp. 21-26). It should be noted that people with impaired cognitive function have twice the risk of falls than other people of the same age without this disorder (Kupisz-Urbańska, Broczek, Masakowska, 2013, pp. 8-9) .

THE CONSEQUENCES OF FALLS

The consequences of falls among the elderly are, inter alia: increased morbidity, dependence on caregivers, long-term disability and even increased mortality among this age group. These factors lead to lower quality of life and increase the cost of treatment (Debra, 2011, pp. 37-48).

About 65% of falls are connected directly to the injury, of which 10-15% lead to serious injury, the most common effect is the bone fracture (common in patients who suffer from osteoporosis), head trauma, or injury to the soft tissues. The possible results of these complications are prolonged immobilization, which may result in pressure sores, venous thrombosis, urinary tract infections, pneumonia, dehydration, hypothermia and spasm in the joints (Skalska, Żak, 2007; Kamińska, 2013).

The occurrence of these complications, results in prolonged hospitalization. The consequence of the collapse are very often dangerous fractures of the proximal femur. In fractures in this area, approximately 20% can lead to death (within a year). Approximately 50% of patients do not regain the fitness level which they had before the accident, and in approximately 12% of cases break or fracture in the same location will occur again. Falls are the cause of changes in psyche of elderly, they tend to fear occurrence of similar incidents. They tend to feel discouragement, fear of performing activities of daily living, which results in reduced activity of the secondary decrease in overall efficiency and impaired daily functioning. The above mentioned factors lead to dependence on family caregivers. This sequence of events, occurring one after the other, is called "fear of falling". In patients with a recent fall, it affects approximately 73% of the cases, and approximately 46% of the patients who had falls in the past. It is assumed that approximately 40% of admissions of elderly patients to hospitals or care centres is directly connected with the consequences of falls (Skalska, Żak, 2007; Kamińska, 2013; Edbom-Kolarz, Marcinkowski, 2011).

MOST COMMON REASONS AND CIRCUMSTANCES OF FALLS

Reasons for tumbles can be divided into internal, caused by coexisting illness, which in turn entails overall poor health, as well as external, coming from the surrounding environment (Edbom-Kolarz, Marcinkowski, 2011).

Internal tumble causes. Bone health and bone preservation have a major impact on reducing the effects of a tumble. Monitoring the bone mass is of utmost importance for patients of more than 65 years of age. Early detection of osteoporosis allows for starting the treatment quickly, thus preventing the weakening of bones. Diabetic patients often suffer from sight issues (e.g. amblyopia), which may also be a cause of falls. Any motion system diseases i.e. paresis, joint dysfunction, increase the likelihood of a fall (Skalska, Żak, 2007; Edbom-Kolarz, Marcinkowski, 2011).

External tumble causes. Figures show, that the majority of collapses of elderly people happen in a place they know best – their homes. Rugs, carpets, stairs, sills, slippery floors are the problem. Falls happen also during the daily chores (e.g. hanging curtains, changing the light bulb) or after taking medicines, in this case it is not only the amount that is important but the type as well. Taking psychotropic drugs (antidepressants, hypnotics, sedatives), diuretics or antihypertensive drugs highly potentiates the risk of falls. The primary cause of a falls is often looked for in the environmental factors, however the true reason may be an internal factor, which is weakening the overall dexterity, as well as reflexes. Elderly people are prone to tumbling due to limited physical activity and high volume of activities that create risky situations, which may in turn lead to a collapse (Skalska, Żak, 2007; Dzieża-Grudnik et al., 2014, pp. 537-540; Wnuk et al., 2010, pp. 3-9; Edbom-Kolarz, Marcinkowski, 2011).

THE ASSESSMENT OF THE RISK OF FALLS IN GERIATRIC PATIENTS

The effective action which prevents falls among elderly people, in the first place should include a risk assessment of their occurrence. This could be part of a regular physical examination already performed by staff in primary health care (primary care). The substrate to determine the patient's care plan is a comprehensive geriatric assessment (Pearse et al., 2003, pp. 518-521). It is a comprehensive assessment aimed to identify medical problems, as well as functional capabilities in seniors, in order to determine a plan of treatment and physiotherapy, to provide care, as well as the initiation of therapy and long-term care. Comprehensive geriatric assessment is most effective in cases when it is used in patients at risk of reduced functional capacity or of those with necessary staying in hospital or institutional care. Effective implementation of comprehensive geriatric assessment permits not only to extend the life, but also to increase its quality. It's should include long-term care in the clinic and

in the home of the patient. Primary health care provides health care benefits to its patients directed at treatment, prevention and diagnosis of diseases or to reduce disability, rehabilitation, health education, and what is very important, also for the promotion of health.

As part of primary health care research is contracted aimed at detecting factors causing lowering of self-service, reducing the efficiency of the organism of seniors. The aim of these activities is to detect diseases, to identify the limits and needs, not only health but also social and psychological among elderly patients. Such an approach to the patient may consequently not only serve emergency assistance, but also long-term care (Kamińska, 2013; Brzozowski et al., 2014, pp. 41-44; Żak, 2008, pp. 18-21).

Separation of the causes which are most often reasons for falls in the elderly, can be the key to the implementation of measures to reduce their incidence. These activities should be multidirectional, containing all areas of human functioning. The outpatient procedure uses a lot of functional tests, in order to assess the risk of falls among people over 65 years old (Szot, Golec, Szczygiel, 2008, pp. 12-17).

Instruments for geriatric assessment in an evaluation of the risk of falls estimate physical fitness of the patient, is used in this case test:

- scale ADL (Activities Of Daily Living) and IADL (Instrumental Activities Of Daily Living), Barthel Index, The Tinetti Test, Get Up and Go, Test Berg, Stops Walking While Talking;
- intellectual function, and also emotional, apply here: test AMTS (Abbreviated Mental Test Score), scale MMSE (Mini Mental State Examination), scale GDS (Geriatric Depression Scale) and scale BDI (Beck Depression Inventory) (Vivrette et al., 2011, pp. 16-29; Wrislay, Kumar, 2010, pp. 761-773).

The methods of verifying the internal factors that contribute to the fall are classed as: control the exercise of orthostatic attempting in order to identify orthostatic hypotension, measuring blood pressure and heart rate and control of muscle mass and strength. It should also check the condition of sight and hearing. Emphasizing that the fall may also occur during examination, entails the need for proper preparation office and belaying patient (Skalska, Żak, 2010).

FALLS PREVENTION

Falls prevention is about eliminating the factors that cause it (Skalska, Żak, 2010). Considering the reasons mentioned beforehand, it should be clear that the environmental and situational factors can most notably be influenced. This is the reason why, education on tumble risk, behaviour change and reducing the risk of collapse in the house is important. Statistics support this fact, 75% of falls occur in homes, most often during avoidance of various furniture and items and using the stairs, thus the collapses are caused by external factors. In

order to ensure safety, preventive actions such as mounting appropriate grips and rails facilitating movement or standing up (eg. in the toilet or the shower cabin) should be taken. Other important safety measures include bright lightning, removing obstacles from the floor, using non-slip rugs, removing sills if possible. Commonly used items and often visited places should have easy access and maximum bed height should be 50cm (Debra, 2011; Świątek, Urodow, 2010).

Preventive actions carried out by the medical personnel should focus on informing the patient, modification of the pharmacotherapy, treating orthostatic hypotension, correcting sight and audition, removing the environmental hazards, osteoporosis treatment and prevention, rehabilitation including introduction of motion and balance exercises, as well as training leading to increase of muscle mass (Kamińska, 2013).

Every person above 70, that has a noted occurrence of falls, people with high-risk of collapse, as well as everyone, who suffered an injury or with balance and movement disorder should be considered for preventive actions (Skalska, Żak, 2007).

THE PURPOSE OF PHYSIOTHERAPY

The purpose of physical therapy is taking countermeasures to prevent occurrence of symptoms resulting from immobilisation. To achieve it while hospitalized the patients have physical therapy, that includes: anticoagulants exercises, breathing, active and passive exercises, that aim at keeping the correct mobility in the joints, flexibility of the soft tissue and strengthening the muscles. A very useful tool here is the 'stand up and go'- test, which makes it possible to check how strong, mobile and fit the lower limbs are and to check general coordination and dynamic balance (Skalska, Żak, 2007; Guccione, Wong, Awers, 2014, pp. 389-419).

Very important is the cooperation of the whole staff e.g. nurses, who ensure changes in position of the patients to prevent bedsores (Guccione, Wong, Awers, 2014).

The aim of physical therapy is to introduce exercises that ensure an improvement in balance and muscle strength (Kamińska, 2013). It slows down the progress of the disease in the body, thus lowering the risk of falling down, it helps to restore the normal function capability and enables the patients to perform the activities of daily living (Debra, 2011). Balance can be formed and improved effectively by means of training (Wnuk et al., 2010). A variety of exercises used aims not only at improving balance but flexibility, suppleness, coordination and response time as well. Moreover, physical activity could influence positively on cognitive functions of older people (Gajos, Kujawski, Gajos, Chatys, Bogacki, Ciesielska, Zukow, 2014, pp. 91-100). Results of cognitive tests, which are most often reported to be improved after participating

in physical training, are, inter alia, Mini Mental State Examination (MMSE), Auditory Attention Tests and Digit Span, Digit Span backwards (Kujawski, Gajos, Gjaos, Stemplowski, Ciesielska, Kędziora-Kornatowska, 2015, pp. 11-16). A moderate physical activity for 30 min about 5 times a week is recommended (Skalska, Żak, 2008; Son et al., 2015, pp. 51-57). Very important is to teach the patient how to change the position of the body in a safe way. This will prepare the patient for eventual falls, teach control, how to prevent harm by falling down and how to get up to prevent additional damage (Skalska, Żak, 2007; Son et al., 2015). All preformed actions should prevent falling down in the future and thus lower the rate of injuries, morbidity and mortality amongst the elderly. It will also prevent possible disabilities, **dependency** on family members and lower the number of hospitalized patients (Kamińska, 2013). A great role in lowering the risk of damages resulting from falling down and in ensuring free and confident movements is played by the right orthopaedic equipment. Individualized equipment fitting for the seniors ensures stability of the torso and the limbs and provides the right support for the body, which in turn helps to develop compensatory mechanisms and in some cases substitutes for the lost limb. Choosing the right orthopaedic equipment helps the patient to move freely and to feel comfortable. Shoes are also important as equipment which stabilize the ankle, contain anti-skid soles and should be easy to wear (Kamińska, 2013; Dzieża-Grudnik et al., 2014).

Seniors often tend to fall when changing the body position from the standing position to the sitting position; that is in situations in which the blood pressure in the body drops rapidly. The physiotherapist job in a geriatric ward or care homes is to teach the patients proper getting up techniques: first you should sit on the bed, than lower your feet first, than stand up. Each of the 'sitting up' steps should be made slowly until the breathing stabilizes (Świątek, Urodow, 2014).

TRAINING IN THE PREVENTION OF FALLS

Current studies showed that training among seniors has a positive effect on the improvement of daily activities. Individual strength and balance training decreases risk of falls and improves self-confidence in everyday duties (comparison of the exercisers group with not exercisers group) (Campbell et al., 1999, pp. 513-518; Mackenzie, Clemson, 2014, pp. 211-215). Individual training controlled by physiotherapist shows significant improvement of functional parameters and physical abilities in the balance tests, comparing to the study group, which had group balance training. A common feature of both trainings was statistically significant decrease of falls ($p < 0,0001$) (Nitz, Choy, 2004, pp. 52-58).

Undirected group exercises reveal significant improvement of physical ability but not reduction risk of falls (Lord et al., 1995, pp. 1198-1206). Decrease

of falls has been noted after oriented exercises whose purpose is to upgrade daily factors among weakened seniors (Bamett et al., 2003, pp. 407-414) and older women with repeating falls history (Skelton et al., 1995, pp. 1081-1087). In the second group, exercises were especially focused on dynamic balance and gait, muscle strength, physical strength, suppleness, functional skills. Besides that, there was recommended home training. Results showed 31% decrease in number of falls compared with control group, which had a home exercises programme twice a week (Campbell et al., 1999; Mackenzie, Clemson, 2014; Nitz, Choy, 2004).

Tai Chi is increasingly used in the prevention of falls. This method has a positive effect on physical and mental ability of seniors, and so it reduces not only risk of falls, but also the fear of falling. Nodim in study on group ≥ 65 years old with a slight imbalance disturbance noted improvement in balance after 10 weeks Tai Chi training focused on balance and overcoming obstacles. Intensive Tai Chi training did not reduce falls risk a in group of patients with general weakness. It was deduced that Tai Chi could be inadequate training for people with increased risk of falls. It seems that multifactorial training is more effective in this group (Skalska, Źak, 2004; Brzozowski, Chomiuk, Śliż, Folga, 2014; Hackney, Wolf, 2014, pp. 127-135).

Comparison of both interventions (Tai Chi and Otago) aiming prevention of falls and checking lower limbs strength, balance, gait time parameters in the group of older women, confirmed efficacy of both interventions in mobility. Moreover Otago group had greater improvement in strength of limbs, while Tai Chi group had better scores in balance (One Leg Stand test) and gait speed (Wolf et al., 1996, pp. 489-497. Balance training strengthening calf muscles twice weekly for 5 weeks, showed an increase of strength of calf muscles, functional capacity and better self-confidence in keeping balance (Maritz, Silbernel, 2015).

Kathleen K. Zettergren et al. (2011, pp. 88-94) conducted 8 weeks therapeutic programme and assessed influence of yoga on: control of posture, mobility, rising from the floor, gait speed in the elderly. They noted positive effects of yoga on control of posture and gait speed .

Bartosz Wnuk et al.(2010, pp. 3-9) examined the effect of gait exercises on a treadmill in group of 30 patients with osteoporosis and higher risk of falls. They used two kinds of training: first consisting of walking forward, second backwards. Additionally each study group had complex physiotherapy including active, coordination, respiratory and relaxing exercises. Intervention lasted 2 weeks: in the first week patients had 3 sessions of 10 minutes training, in the second week - 4 sessions 10 minutes each. At the final Tinetti test, after intervention, they noted significant increase in scoring among the study group with walking backwards training. In this group balance in standing position improved about 17,7% and balance during gait 27,9%. Both trainings resulted in increase of speed in the Up&Go Test. In the Functional Reach Test noted statistically significant growth of the distance about 11,4% in the group with

walking backwards. Increase of the torque values of the extensors of the knee joint were showed in both groups. What was interesting was increased values of the torque were higher in the right lower limb by 34,5% and in total values of the torque in both limbs by 30,1% in the backward gait training group.

There are also studies, which examined influence of backward gait training in a group of patients with stroke. These studies showed faster gait, longer step and improvement of lower limbs symmetry in comparison with the forward gait training group (Yang et al., 2005, pp. 264-273).

Backward gait training has positive influence, which results from strong proprioceptive sensory stimulation. At the same time it is strengthening the force and stabilizing head, torso, pelvis muscles and deep dorsal muscles, abdomen and gluteal muscles. It can influence an increase of better gait efficiency and balance.

All of these studies show positive qualitative and quantitative changes effects, which are necessary in safe daily locomotion of seniors. It is important that researchers are incessantly looking for better and better methods, which may be used in falls prevention (Wnuk et al., 2010).

CONCLUSIONS

There are many types of exercises aimed at preventing falls but the results of using them are different and they force the therapist to choose the most suitable ones according to individual needs of each patient, it is a crucial point of every physical therapy as well as physical exercise. The studies that distinguish groups of patients with exercises aiming at primary prevention and those with exercises aiming at secondary prevention deserve special attention. It is necessary to conduct further random studies that will estimate the efficiency of training among a bigger group of patients; it could help to standardise the recommendations for fall prevention.

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DOMESTIC VIOLENCE IN THE CONTEXT OF THE EDUCATION OF SENIORS

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ABSTRACT

The article discusses domestic violence as dangerous, unlawful and violent conduct, which currently threatens the generation of seniors. The author stresses the need for primary prevention of domestic violence in the context of the education of seniors at the University of the Third Age. In the text the author presents the content focus of preventative lectures to the target group of seniors. In connection with the content of primary prevention is highlighted the opportunity to help the victims of domestic violence through the association for assistance to victims of crime „Bílý kruh bezpečí“. On the basis of the exploratory investigation, the views of seniors on the issue of the domestic violence are presented in the text.

Key words: education of seniors, victim of domestic violence, prevention of domestic violence, protection of victims, violent person

INTRODUCTION

Domestic violence goes across the socio-demographic composition of society. In the overall picture and in each case they apply different groups of causes of this violence (Čírtková, 2014, p. 67). Domestic violence is often described as the most widespread form of violent behaviour in society (Buskotte, 2008, p. 17). Surprising is the fact that the probability of being attacked, injured or killed in a safe home for family members is three times greater than the likelihood of attack on the street, and that every eight Czech woman are beaten by partners. Domestic violence is latent, the least controlled, and from the perspective of frequency and severity the most underestimated of the social forms of violent behaviour (Ševčík, & Špatenková, 2011, p. 22).

As an introduction it is important to mention one of the definitions of domestic violence, which was established by the Council of Europe Convention on the prevention and combating of violence against women and domestic violence in 2011. Literally here it was noted that domestic violence means all

acts of physical, sexual, psychological and economic violence that occurs in the family or in the home, or between former, or existing spouses or partners, regardless of whether the perpetrator shares or has shared a common household with the victim (<http://xoe.int/t/dghl/standardsetting/convention-violence/convention/Convention%202010%20Czech.pdf>).

Domestic violence affects all categories of people, regardless of their education, age or ability as applicable to the labour market. There are certain specifics in the behavior of the victim. The victim at the time of the call for help is under a strong psychological pressure, and generally lacks self-confidence. The breakdown of victims of domestic violence can be divided into children, women, men and the elderly (Ševčík, & Špatenková, 2011, p. 126).

Domestic violence against the elderly – the victim, in this case a senior, may not know at the beginning, that the members of the family, with which it shares the household, have a propensity for violence (Šmejkalová, 2011, p. 38). Only in stress situations (the emergence of the depending on the help of the others, the loss of certain skills – particularly the ability to participate in the running of the household, the incipient mental problems of the victim), some family members may begin to behave aggressively (Voňková, & Spustová, 2008, p. 70). At the time of the tyranny the victim of this is so surprised, the majority are not able to adequately respond. Alarming for this group of victims is the fact, that the situation in large measure also applies to care in institutional facilities (Fischer, & Škoda, 2014; Buriánek, 2006).

Especially in the area of the primary prevention of risk behaviour known as domestic violence, is at the time very desirable (Vágnerová, 2014, p. 354). The aim of primary prevention is under the national action plan for prevention of the domestic violence in the context of the Czech Republic, in particular, the involvement of the public. In terms of public opinion, it is necessary take advantage of every available way to eliminate entrenched cultural and social stereotypes that make violent people legitimate. (<http://www.koordona.cz/domaci-nasili/legislativa/60-narodni-akcni-plan-prevence-domaciho-nasili-na-leta-2010-2014.html>). It is therefore necessary to make use of their elimination by every lawful and constitutionally conformal procedure, involving both legal resources (change the laws), additional methods, such as the solution of the problems. realization of information campaigns. The national action plan for the prevention of domestic violence in this area calculated with the use of other educationally effective tools, such as awareness-raising activities, the Conference or the extension of teaching at schools (<http://www.dejmezenam-sanci.cz/res/data/010/004403.pdf?seek=4>).

In the above mentioned context at the University of The third Age, which is part of the Masaryk University, in the year 2015 a specialised lecture specialised lecture took place on the theme of the domestic violence in the context of the new legislation. The time allotted for the lecture was two hours, it means 45 min x 2 (<http://u3v.muni.cz/o-nas/>). The aim of the lecture was to inform seniors about issues, that no doubt could be touched upon. The lecture drew

attention to the basic concepts, the definition of domestic violence, expressions of the analysis of risk behavior and the specifics of the seniors in the role of victim. The lecture then resulted in the specific procedure of the victim or a witness of defense against domestic violence, i.e.. The possibility of filing a criminal notification to the police of the Czech Republic, for help on the other helping agencies. For example The „Bílý kruh bezpečí“ association, that since 1996 is a full member of the transnational organization of Victim Support Europe (previously The European Forum for Victim Services), that actively cooperates in the development of projects, standards, researches, reviews, implementation of the documentation for the framework decisions of the Council of the European Union in the field of the treatment of victims of crime in the EU (Čírtková, 2014; <http://www.bkb.cz/>).

The „Bílý kruh bezpečí“ association in nine of the counselling regions in the Czech Republic (Prague, Plzeň, Liberec, České Budějovice, Pardubice, Jihlava, Olomouc, Ostrava, Brno, Czech Republic) provides a professional, free, impartial and discreet assistance to victims of crime, witnesses and survivors of the victims including the moral and discrete support (<http://www.bkb.cz/>). Direct assistance is based on the personal contact with a pair of consultants, a lawyer and expert on the psychological assistance. This service is provided free of charge in the role of volunteers (<http://www.bkb.cz/>).

The content of the lectures was mainly elected because of the assumption that the issue of the domestic violence for persons over 65 years old are still a taboo. Part of the lecture was a reconnaissance probe, whose objective was to verify this claim.

OBJECTIVE

The main objective of the exploration of the probe's work was to find out what kind of awareness seniors have about the analysis of risk behavior, where they consider the problem as socially significant, where they see the causes, and whether they know where to turn for help if necessary. The exploration of the investigation took place in the framework of the lecture at the University of the Third Age, Masaryk University.

The views of respondents on the issues of the elderly – domestic violence.

THE METHODOLOGY

The search medium consisted of 30 respondents, assisted on 20th March 2015 at a lecture on the theme of domestic violence, focusing on its prevention. The respondents were students of the University of the Third Age, Masaryk University. A participant in the program of the University of the Third Age can become a person who has reached the age required for the granting of old-age

pension and has full secondary education with a leaving exam (<http://u3v.muni.cz/o-nas/>). The students of the University of the Third Age are students under Act No. 111/1998 Coll. on universities. Teaching in the context of long-term rates takes the form of lectures, tutorials, seminars or excursions. Each lecture lasts 2 hours and they are held once every two weeks from September to May in the academic year (<http://u3v.muni.cz/o-nas/>). In the course of the training it is not necessary to undergo any form of participant evaluation (<http://u3v.muni.cz/o-nas/>).

The Age of respondents ranged from 63 years to 85 years. The average age was 71 years of age. Of the 30 respondents were 4 men and 26 women. For transfer and data evaluation questionnaires into electronic form has been used Microsoft Excel 2010. Return of the questionnaires was 100 %. The evaluation was carried out on 30 respondents.

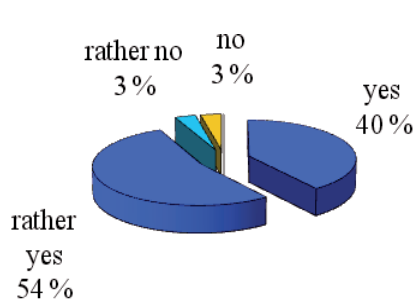
THE EVALUATION OF THE QUESTIONNAIRE SURVEY

The questionnaire survey was carried out anonymously, when respondents filled out a questionnaire (Appendix 1) in printed form. The selection of respondents was more or less random, the respondents have in common only the fact they were schooled at the University of the Third Age of the Masaryk University. From which it is clear that they are of pensionable age and have full secondary education with leaving exam. You can also have reason to believe that the respondents came from the city of Brno, and from the outskirts the city of Brno.

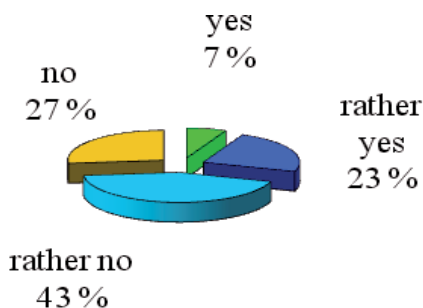
The graphic quantitative assessment of individual questions from the questionnaire confirms the topicality of domestic violence as a problem of contemporary society, even by the elderly. 94 % of respondents believe that at present the issue of the domestic violence is really a social problem (Graph No. 1). 70 % of respondents believe that the existing legislation inadequately protects the victim (Graph No. 2). It can be assumed that these 70 % of respondents believe that the existing legislation in the Czech Republic acts preventatively against the occurrence of the domestic violence (Graph No.3). As shown in Graph No. 3, from 70 % of the respondents, 7 % of the situation could be assessed.

The reaction of respondents was very interesting as to the potentiality of the threat (Graph No. 4). Respondents could select more than one answer, which some did. 63 % of respondents see their social group as a vulnerable of the elderly. If we want to search the cause as to why they have designated their own social group as the threatened, we would have to examine the issue more deeply. The answer may be given, for example in the current media output on individual causes, non intentional ignorance of the nature of the analysis to the problem or a simple link – the lecture is on a topic that doesn't concern me. However, it may be a condition where the respondents really feel threatened

themselves by the domestic violence, or they have a concern about their peers such as from the place of residence.



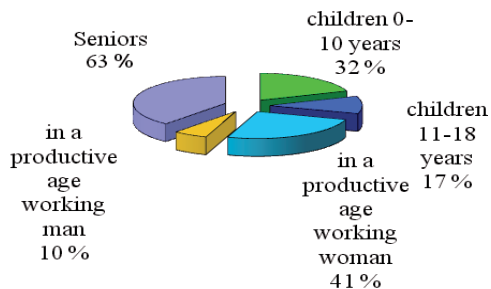
Graph No. 1. Do you think the issue of domestic violence is really a social problem?



Graph No. 2. Does the legislation protect the victims of domestic violence sufficiently?



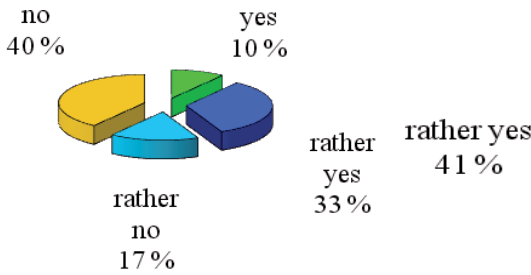
Graph No. 3. Do you think the current law acts preventatively against the occurrence of a domestic violence?



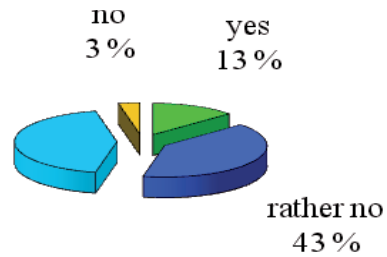
Graph No. 4. Who are the most frequent victims through the social profile of the domestic violence according to your opinions?

A question that explores a lay opinion on the communication of the respondent to the Police of the Czech Republic, is not targeted to causes of the domestic violence. The respondents indicated that their experience may not apply to the time period, or to a specific action. The question was deliberately very general. The result of the survey showed that each of the respondents has met with an officer of Police of the Czech Republic. 57 % of the respondents attached themselves to the response, that their communication with a officer of Police of the Czech Republic was not good. (Graph No. 5).

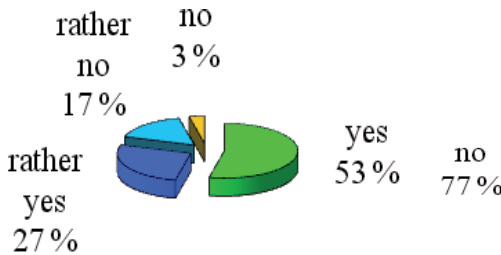
54 % of respondents believe they can prevent domestic violence. (Graph No. 6). The question, how is it possible to prevent the problem, was answered by 17 respondents. In their free answers respondents mentioned for example the medialisation of the problem, the education aimed at seniors in the area of law and psychology, functional educational environment in the family, in particular education for responsibility, justice and respect, early and adequately



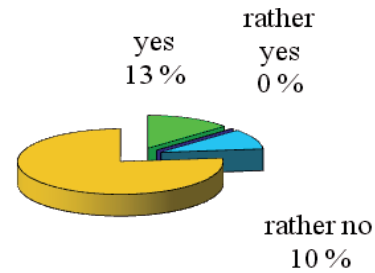
Graph No. 5. Do you have a good experience about the communication with a policeman of the Police of the Czech Republic?



Graph No. 6. Do you think we can prevent domestic violence?



Graph No. 7. Do you know, what a subject you could contact being a victim?



Graph No. 8. Have you ever participated at the lectures about the topic of domestic violence in the past?

respond to starting violence, etc. 25 of the respondents took advantage of the opportunity to freely express what they see as the biggest problem in the detection of domestic violence. Respondents independently agreed that the problem with the solution is in fear of the victim of the aggressor and stood in front of the other people. The victim is afraid and ashamed.

80 % of the respondents subsequently stated that they know which subject to turn to if necessary (Graph No. 7). 19 of the respondents in the following free answers stated that they would turn for aid to the Police of the Czech Republic. 6 of the respondents said that they give credit to the Police of the Czech Republic. The remaining 12 of the respondents commented the answer „no more“ One respondent stated he supposed that the Police of the Czech Republic can hit quickly. The answers correspond with the result of the answer given in Graph No. 5. Another variant of the answers was the possibility to turn to the „Bílý kruh bezpečí“ association, on the doctor, psychologist, or a friend.

It can be presumed that the obtained answers really match the result of the last questions of the questionnaire (Appendix 1), where 26 of the respondents. 87 % have mentioned, that they had not participated or personally attended with a targeting awareness of the lecture on the theme of the domestic violence in the past. (Graph No. 8).

DISCUSSION

Criminal variables, risk factors are related to the victims and violent persons. These variables should act as a warning signal for doctors and other persons who may come into contact with the victim (Čírtková, 2014, p. 69). To this finding have independently come 6 respondents. 20 % and by their free answers following-up on Graph No. 6. For example respondents indicated that domestic violence can be prevented: „... quality relationships in the family“, ... „it depends on the nature of the abuser, usually the victim alone can't handle“, ... „in the right direction of young people and children in the family.“

As factors increasing the exposure of seniors to maltreatment, is often quoted in the literature: the overall poor health ,disorders, cognitive and communication functions, loss of self-sufficiency, social isolation, living with a violent person and dependency on it (Buriánek, 2006, p. 83). On the other hand, no small role is played nowadays to material, and housing dependency of the victim to the violent person, overloaded and existential problems of families and a decrease in the willingness and capabilities of family members to provide quality care, etc. Not coincidentally, the deterioration of the family relationship is involved in unemployment, alcoholism, drug addiction, previous aggressive or antisocial conduct violent persons (Buskotte, 2008, p. 29; Čírtková, 2014, p. 94).

If we think about contemporary society so, what it really is, especially known to the high pace of life with all the negative effects on human beings, it is not easy for any generation to live (Vágnerová, 2014, p. 351). It is necessary to especially note that the elder person becomes to be uneasily to any amendment of affecting himself, with the age of the growing risk of various illnesses (dementia, personality disorders and behaviour, mood disorder, anxiety disorder phobia), the burden of the departure of the close member of the family, death in the family, the disintegration of families caused by divorce. It can be said that everything depends on the relationships between family members (Vágnerová, 2014, p. 317; Čírtková, 2014, p. 68). The most common causes of conflicts are just disagreements and disruption of these relationships (Vágnerová, 2014, p. 352).

What should be the primary prevention? We can only agree that it depends on the level of the family environment. The effort should primarily be to attach the functionality of the family environment in the process. In this field a single educational process for the family, the school might help, a non-governmental and voluntary organisation working against violent behavior, peer groups, but also the personality of each individual. Simply said, society as a whole (Fischer, & Škoda, 2014). The part of primary prevention targeted to seniors in the area of crime and violence, should be given greater attention. The warning signal is that within the exploratory probe 87 % of respondents have mentioned they so far had not met with any targeted training on the topic of domestic violence (Graph No. 8). So, we can rightfully assume, because of the examined group of

respondents, they have information and different natures of interest. The trend of primary prevention, not only due to the dynamic development of the company, should be the lifelong learning in the area of social problems relating to a threat to the position of the individual in the narrowest social group (Fischer, & Škoda, 2014; Vágnerová, 2014, p. 317). Appropriate content and form of the prevention of the lecture, seminar, discussion, etc. in the places where they meet senior citizens, would certainly contribute to greater awareness and prevention for this generation the role of the victim.

THE CONCLUSION

Why the violence in families does occur? What is the awareness of the respondents about a high-risk behavior, called the domestic violence? Not only this questions asking for, we are trying to describe a reconnaissance answer, by the respondents – the elderly. The benefit probe, is the finding that in the area of primary prevention, there is a space, which could undoubtedly, after the filling contribute to a greater possibility of the defense against the examinee violence.

The family should be for its members, especially in today's era, the place of the peace, safety, understanding and love. Often it is, however, rude, dismissive, hostile environment. The senior is like a child, like a direct or an indirect victim. The age of the elderly it brings with him a vulnerability, physical illness, psychological disease, often it brings economic dependence on their offspring, to the naive gullibility and faith in change in the situation for the changing to be the better. The latency of the domestic violence in the elderly, it is primarily the existence of fact of the shame and the fear that the public will reveal the violent – the immoral behavior of his tormentor – a member of the family. The existing problem is confirmed by the questions, the seniors asked after the end of the lectures. The most common questions were related to the economic relationships between parents and children. Often the donation of an apartment or house from the parents – the elderly person to his descendant, is the impetus for the violence. If people are interested in socio-pathological problems, they have questions and they do not turn to the problem of back, it's the best way to address the risks in behavior and mitigate any consequences.

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- [15]

Appendix 1

THE QUESTIONNAIRE			
<input type="checkbox"/> man <input type="checkbox"/> woman age			
Do you think the issue of domestic violence is really a social problem?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no
Does the legislation protect the victims of domestic violence sufficiently?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no
Do you think the current law acts prevent against the occurrence of a domestic violence?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> I can't assess
According to your opinion, who are the victims most frequently through the social profile of the domestic violence?			
<input type="checkbox"/> children 0-10 years	<input type="checkbox"/> children 11-18 years	<input type="checkbox"/> working women in a productive age	<input type="checkbox"/> working men in a productive age

<input type="checkbox"/> Seniors	others.....		
Do you have a good experience with the communication with the police in the Czech Republic?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no
Do you think we can prevent the domestic violence?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no
What in your opinion is the most serious problem in the detection of the domestic violence?			
Do you know, what a subject would you contact being a offer?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no
Please indicate specifically:.....			
Why?.....			
Have you ever participated in the lectures on the topic of the domestic violence in the past?			
<input type="checkbox"/> yes	<input type="checkbox"/> rather yes	<input type="checkbox"/> rather not	<input type="checkbox"/> no

Date:.....

DYNAMICS

EMPLOYMENT IN LATE ADULTHOOD: PSYCHOLOGICAL ARGUMENTS PRO'S AND CON'S

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ABSTRACT

The research participants were people aged 60-79. The research shows that higher employment status contributes to their psychological well-being, primarily to positive interaction with others and their ability to master the environment. The research has proved that higher education and confidence in financial well-being of employed people reduce the intensity of asthenic emotions, while in those unemployed it increases the intensity of asthenic emotions. The employed are more self-confident; their self-confidence contributes to their psychological well-being. Self-confidence of the unemployed people, while enhancing psychological well-being, increases sthenic emotions. It is shown that reticence as self-attitude modality plays a greater role in the personality structure of the elderly people who are unemployed. The conclusions are made on weak and strong points of employment in late adulthood.

Key words: employment, psychological well-being, self-attitude, emotions, late adulthood

INTRODUCTION

In late adulthood people have different opinions about employment: some people are strongly against it, as they were eagerly looking forward to the age pension, whereas others cannot imagine their life without everyday duty and going to work, while the third group obviously goes with the tide of not trying to overcome life circumstances.

Employment can be of different types: it can be related or not related to one's speciality obtained in youth and mature period of life. We were interested in employment irrespective of its relation to the speciality obtained. The issue of employment in late adulthood is becoming more and more topical for Ukraine and Europe in general, as we have a significant percentage of people who are over 60 and still have the right attitude to active life, good mind and high working performance. According to the data of Country Meters, in

Ukraine there are 15.5% of people aged 65 and over. To compare – in the US such people make up 13.1%, in Poland – 13.7%, in France and Switzerland – about 17%, in Germany – 20.6%, in Japan – 22.9% .

A lot of psychological researches stress the significant impact employment has on the psychological well-being of a person (Aleksandrova, 2002, pp. 101-125), adaptiveness (Krasnova, Lidars, 2002, pp. 159-175), health and financial condition evaluation (Nazarova, 1999, pp. 62-71). Employment that preserves a sense of life helps demonstrate competence and prevents social isolation, it is a powerful «antidepressant» in the old age. However, practice shows that the older a person is, the less employers want to employ such a person providing various reasons for rejection. Negative social stereotypes and ageism also play an important role.

Martin Greller (the US), while studying the role employment and career has in the process of ageing of a person came to the conclusion that an important factor that makes an efficient person aged 55 and over quit his/her job is social ageing. Attention is also paid to the social stereotypes which create conditions that make a person give up professional activity. People who despite this fact continue working in old age, better evaluate their health, observe improvement of their intellectual functions and increase in life satisfaction. A job becomes a source of stability, it means interaction with other people and these relationships can give a new sense of life. Therefore, there is an established opinion that in order to ensure positive well-being in old age a person should continue professional activity (Greller, 1996, pp. 55-60).

The aim of the research is to reveal weak and strong aspects of employment in late adulthood, namely: 1) what social and demographic factors influence psychological well-being and self-attitude of the employed and unemployed people; 2) whether there is a difference in the relations between psychological well-being and self-attitude in the employed and unemployed people; 3) what is the role of sthenic and asthenic emotions in the life of the employed.

RESEARCH PROCEDURE

Psychological well-being was measured by means of the Ryff scale of psychological well-being as adapted by Tetiana D. Shevelkova and Pavlo P. Fesenko (Istratova, Eksakusto, 2012, pp. 93-103), self-attitude – methodology by Volodymyr V. Stolin and Sergiy R. Pantyleiev (Romanova, 2009, pp. 360-366), sthenic/asthenic emotions – methodology by Vadym E. Milman (Milman, 1990, p. 23-43).

The data were analyzed separately for the groups of the employed and unemployed people. Reliability of the results obtained was checked by means of such mathematical and statistical analysis as: comparative (Student's T-tests with $p < 0.05$), correlational – according to r-Pearson (with $p < 0.01$ and $p < 0.05$). The procedure of factor analysis (with $> .50$) consisted in determining the

key factors resulting from the procedure Varimax normalized for each of the groups.

The group of research participants consisted of 121 persons aged 60-79 that corresponds to the age period of late adulthood. Out of them there were 60 males and 61 females. 40% of the respondents are employed (mainly in medical, technical, economic and educational fields), 60% are unemployed. Below are the social and demographic characteristics of each of the groups.

The average age of the employed respondents who participated in our research is 65.8 years; 60% are males, 40% are females. The majority has higher education (62%) and have subordinate status at work (58%). 54% spent their childhood (age till 12 years) in the village, however, at the period of the research the overwhelming majority (72%) lived in cities. Significant number of the respondents (74%) live with a spouse; evaluate their health (60%) and financial situation (76%) as average. The average age of the unemployed research participants is 68.2 years and they are mainly females (57.7%). Almost half of the respondents have higher education (49.4%), a significant number (62%) spent their childhood in the village and now live in cities (66.2%). A little bit more than a half live with a spouse (56.3%). A substantial majority have evaluated their health (76.1%) and financial situation (76.1%) as average.

Thus, the major differences between the employed and the unemployed respondents as to their social and demographic data lie in the fact that among the elderly people employed, participating in our research, males prevailed, they are about two years younger, they are better educated, the majority of them migrated from villages to cities and the overwhelming majority preserved their families (they live with their spouses) as compared to those unemployed. Every fourth person employed evaluates his health as good and practically every fifth considers that his financial situation is good and these are higher indicators in comparison with the group of unemployed participants.

PSYCHOLOGICAL WELL-BEING AND EMPLOYMENT IN LATE ADULTHOOD

Psychological well-being of the employed people aged 60-79 is most significantly influenced by their status at work. Rise of a status from a subordinate to a person in charge has a positive effect on both general psychological well-being ($r=0.335$) and as such its aspects as positive relations with others ($r=0.301$) and environmental mastery ($r=0.316$). If an elderly person performs functions of a person in charge, it presages such qualities of this person as trustful attitude to others, empathy, affection and mutual understanding. Such people become more efficient with respect to controlling functions and tend to create favourable conditions for achieving their goals.

The key factor of self-realization and openness to the new experience in the elderly people irrespective of their employment is higher educational

level ($r=0.354$ for the employed, $r=0.453$ for the unemployed). Also education has a considerable impact on the goals which an employed person sets in life ($r=0.459$), as well as a place this person spent his/her childhood - in the village or in the city ($r=0.284$), and how a person evaluates his/her health ($r=0.280$). Giving a sense to their life, living through the unity of the past, present and future is more characteristic of those older people having a job, who have higher education, spent their childhood closer to cities and who more positively evaluate the condition of their health. The reverse is also true: the old-aged people who have not lost their life targets are of better opinion about their health (Figure 1).

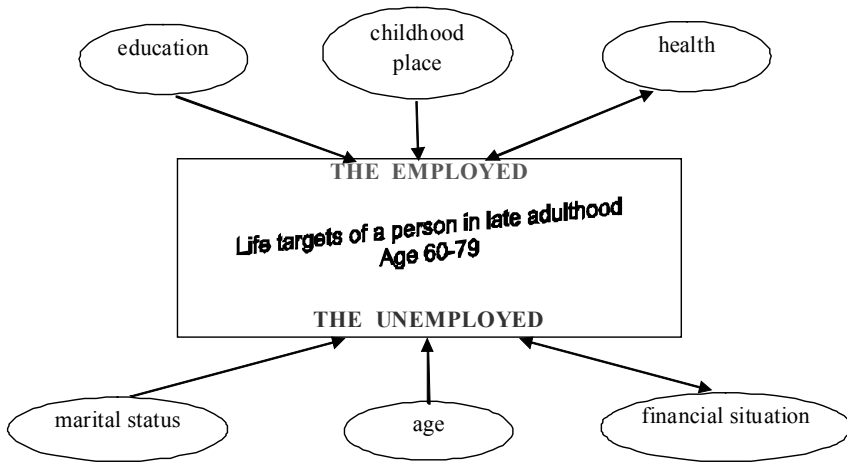


Figure 1. Social and demographic factors of a person’s life targets in late adulthood.

Source: Author.

For the unemployed people of that age education, a place where childhood was spent and evaluation of their health are not related to their life targets. The sense and focus of their life is determined by the subjective evaluation of their financial situation ($r=0.234$), marital status ($r=-0.239$) and age ($r=0.258$): feeling that there is a focus in their life will grow with age in those people who have a family (live with a spouse) and better evaluate their financial condition. It is also likely that those people who are more satisfied with their financial situation are more determined in life (Figure 1).

The role of self-attitude in the factor model of psychological well-being is highlighted by the results of data analysis for the elderly people who are employed. The model is represented by six factors and accounts for 64.33% from the general dispersion of data. The rest of dispersions are stipulated by accidental impacts which are not considered in this model. The role of psychological well-being for the employed people in late adulthood is indicated

by the first factor that accounts for 25.41% from the general dispersion of data and includes such indicators of psychological well-being as a general indicator (0.821) positive relations with others (0.770), environmental mastery (0.736), personal growth (0.733), purpose in life (0.693), self-acceptance (0.680); such modalities of self-attitude as self-respect (0.864), self-value (0.740), self-confidence (0.714), mirror-like I (0.652), self-management (0.625) and auto-affection (0.561).

Psychologically advantaged employed people aged 60–79 years can be characterized as self-confident people who respect and value themselves and who are capable of self-management. They have positive feelings towards themselves and think that that people around are also have a positive opinion about them. These results are supported by correlation analysis, which, apart from the aforementioned, also indicates diminishing of inner conflict, self-accusations and self-abasement in psychologically advantaged elderly people who are employed. We pay attention to the lack of connection between the inner well-being and self-acceptance, self-affection and reticence (Table 1).

Table 1. Correlation between psychological well-being and self-attitude

Self-attitude modalities	The employed (N=50)	The unemployed (N=71)
Reticence	0.029172	0.452014**
Self-confidence	0.619804**	0.677173**
Self-management	0.432546**	0.499271**
Mirror-like I	0.450971**	0.559754**
Self-value	0.631102**	0.468062**
Self-acceptance	0.073294	0.285919*
Self-affection	0.068043	0.279996*
Inner conflict	-0.506361**	-0.505719**
Self-accusation	-0.432208**	-0.446277**
Self-respect	0.544019**	0.704667**
Auto-affection	0.464557**	0.439624**
Self-abasement	-0.518243**	-0.523884**

* with $p < 0.05$ ** with $p < 0.01$

Source: Author.

Factor model of psychological well-being for the unemployed is also presented by six factors which account for 66.23% from the general dispersion of data. This model does not consider dispersions which are caused by accidental impacts. Significance of psychological well-being is reflected in the first factor which explains 30.58% from the general dispersion of data. It combined such indicators of psychological well-being as a general indicator (0.862), positive relations with others (0.817), purpose in life (0.769), self-acceptance (0.718), environmental mastery (0.709), personal growth (0.687); such modalities of self-attitude as self-confidence (0.606) and self-respect (0.545). Thus, according

to the factor analysis, only two self-attitude modalities are important for the psychological well-being of the unemployed. This group of respondents can be characterized as psychologically advantaged self-confident unemployed elderly people who respect themselves.

Correlation analysis for this group confirms and expands the circle of interrelations indicating the role of all self-attitude modalities under research in improving psychological well-being of the unemployed people in the period of late adulthood (Table 1).

What is the role of personal autonomy in the self-attitude of the employed? Being one of the indicators of psychological well-being it characterizes a person as independent and autonomous, capable of resisting the stereotypes of surrounding people. For this group of elderly people autonomy did not get into any of the factors. As correlation analysis shows, autonomy growth leads to improvement of self-management ($r=0.378$) and diminishing of inner conflict ($r=-0.395$), self-accusations ($r=-0.339$) and self-abasement ($r=-0.406$).

For the unemployed people at this age autonomy has a broader spectre of influence. It is part of the fourth factor which accounts for 5.23% from the general dispersion of data. This factor has the following structure: autonomy (0.611), self-abasement (-0.917), self-accusation (-0.843) and inner conflict (-0.812). Thus, one can assume greater independence of those unemployed persons who are not inclined to negative self-attitude. It is also supported by the data of the correlation analysis. More independent and autonomous, able to resist the pressure of those around them and having their own criteria of self-evaluation are those elderly people who show higher self-confidence ($r=0.293$), self-respect ($r=0.256$), value themselves as personalities ($r=0.259$) and think that surrounding people also respect them and approve of their actions ($r=0.237$). Greater autonomy in late adulthood is peculiar to those unemployed people who are not inclined to inner conflicts ($r=-0.504$), feelings of guilt ($r=-0.405$) and self-abasement ($r=-0.498$), which means that they do not have negative attitudes towards themselves.

SELF-ATTITUDE AND EMPLOYMENT IN LATE ADULTHOOD

As expected, employment in late adulthood positively influences self-acceptance of a person ($r=0.278$), and higher status of a person at work enhances his self-confidence ($r=0.283$) and self-value ($r=0.348$), decreasing the level of self-accusations ($r=-0.296$). More positive self-attitude of the employed is also caused by a place where one has spent his childhood and permanent residence: the closer childhood was spent to urban areas, the more positive is the attitude a person has towards himself ($r=0.303$) and the less a person blames himself for his failures and bad luck ($r=-0.316$); the closer to the urban area a person lives in old age, the less a person blames himself for his failures ($r=-0.310$) and the less such person tends to have negative self-attitude ($r=-0.306$).

It is supported by factor analysis. In particular, the fifth factor that accounts for 6.04% from the general dispersion of data, combined the following scales: childhood place (0.520), place of permanent residence (0.554), self-accusations (-0.836), self-abasement (-0.817) and inner conflict (-0.609). Thus, the employed people who spent their childhood years in cities and in old age also live not far from a city show reduction of negative self-attitude.

Self-attitude of the unemployed elderly people also proved to be related to the place where they spent their childhood which is shown by the third factor (accounts for 8.90% from the general dispersion of data). This factor includes a place where one's childhood was spent (-0.575), self-value (0.545), self-acceptance (0.570), self-affection (0.734) and self-affection (0.763). It allows us to make a conclusion that those unemployed people who did not spend their childhood in a village will show growth of positive self-attitude in old age.

Quite unexpected is the impact of the financial situation of the employed people on their self-attitude. If a person who receives a pension, while having an opportunity to be employed, evaluates his financial condition as good one, then his inner agreement with himself and approval of his plans and wishes goes down ($r=-0.285$). A person is likely to sacrifice his unrealized intentions to achieve a higher level of financial well-being, however, this assumption is to be additionally checked. On the contrary, higher evaluation of their financial situation on the part of the unemployed can be a source of integration of their creative life, inner activity, can reinforce their belief that their destiny is in their own hands ($r=0.237$).

The research failed to reveal a correlation between education level and self-attitude of the elderly people who are employed, although in the process of getting older they will try to give less and less information about themselves ($r=0.336$), as if protecting their inner world from external interference. Factor analysis allowed us to specify these data. As the sixth factor reveals (4.62% from the general dispersion of data), closely correlated are such variables: age (0.710), health evaluation (-0.633), financial situation evaluation (-0.654) and reticence (0.514). Thus, reticence of the employed is enhanced not only because of their age, but also because of dissatisfaction with their financial condition and health.

To compare, reticence of the unemployed depends on the level of education ($r=0.247$), and with age their self-respect and ability to self-management will grow ($r=0.316$ and $r=0.322$ respectively). These variables are combined in the fifth factor (4.75% from the general dispersion of data). It has the following structure: age (0.561), education (0.536), reticence (0.558), self-management (0.589), self-respect (0.565), sthenic emotions (0.697). Higher education and sthenic emotions will support self-management and self-respect of those unemployed elderly people, who are not capable or are not willing to reveal important information about themselves.

WHAT ROLE DO STHENIC AND ASTHENIC EMOTIONS PLAY IN THE LIFE OF THE EMPLOYED PEOPLE?

As to their intensity, sthenic/asthenic emotions of the employed and unemployed elderly people are not different. It was revealed that depending on the employment they will be influenced by different social and demographic factors (Figure 2). Higher status at work contributes to the appearance of sthenic emotions ($r=0.305$). General age tendency is the following: those elderly people who are employed with age will feel more and more emotions which weaken energy resources of the body (asthenic) ($r=0.281$), and those who are unemployed, on the contrary, will feel more emotions that will increase these resources (sthenic) ($r=0.271$). Higher education and higher evaluation of their financial situation in the employed will decrease asthenic emotions ($r=-0.374$ and $r=-0.397$ respectively), while in the unemployed will strengthen sthenic ($r=0.396$ and $r=0.403$ respectively). One can also expect that those employed people who have less asthenic emotions and those unemployed who have more sthenic emotions, are more satisfied with their financial condition.

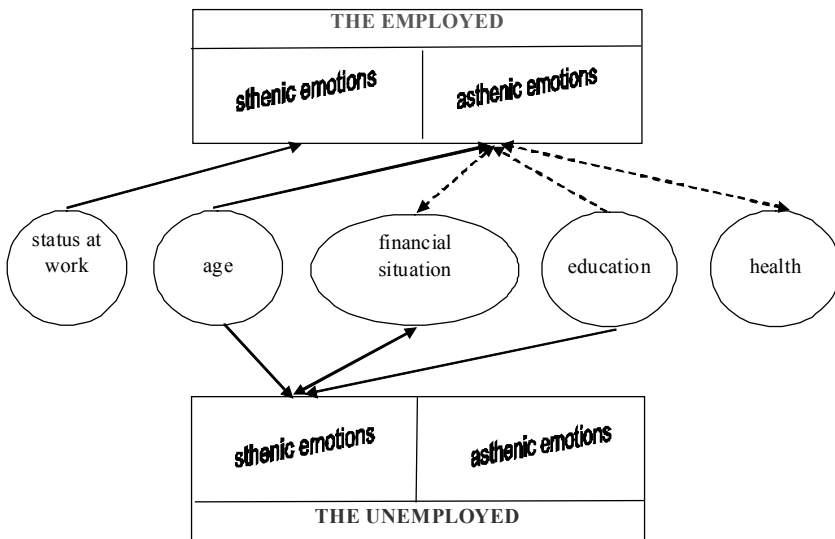


Figure 2. Social and demographic factors of sthenic and asthenic emotions of a person in late adulthood.

Source: Author.

Moreover, asthenic emotions of the employed people become weaker under the influence of the subjective health evaluation: lower level of asthenic emotions will be observed in those people who have higher opinion about their

health, and vice versa, those who are more satisfied with their health, will have less asthenic emotions ($r=-0.314$).

Domination of different emotions (sthenic/asthenic) intensifies different self-attitude modalities in late adulthood. Sthenic emotions, depending on the employment, contribute to self-management and self-respect (r is within the range from 0.311 to 0.497). With the unemployed people sthenic emotions also help self-confidence ($r=0.393$) and reticence ($r=0.386$). If elderly people have positive emotions and their inner resources are intensified, then irrespective of the fact whether they have the status of the employed person or not, such people will be convinced that the results of their activity will depend primarily on them. This, in its turn, will promote more positive evaluation of one's own «I». It is also possible to boost self-confidence of the unemployed, which, according to the data of our research, turned out to be a little bit lower than in the employed people ($t=-2.630$; $p=0.009$), by stimulating sthenic emotions. Experiencing these emotions it is easier for people to «doctor» information, they want to tell others about themselves.

If asthenic emotions of the employed are related to their self-acceptance ($r=0.309$), then those of the unemployed are related to experiencing of the inner conflict ($r=0.328$) and self-abasement ($r=0.289$). Thus, experiencing the so called passive emotions some elderly people (those who continue working) can start developing more positive attitude towards themselves, approving of their own plans and intentions; while the others (those who have already stopped working), on the contrary, can feel increase in negative self-attitude, doubts, feeling of guilt, inner tension.

CONCLUSIONS

Employment in late adulthood has its pro's and con's. The situation is particularly favourable when a person has a status, has higher education, lives throughout his life close to the city or in the city and generally is satisfied with his health. Such people will have good self-acceptance, self-confidence, lower level of proneness to inner conflict, self-accusations and self-abasement, as compared to others.

A serious forewarning for the elderly people who are employed is the fact that with age they show an increasing tendency to develop emotional «passiveness», which is expressed in experiencing asthenic emotions. In old age such emotions should not always be considered as negative demonstrations, as they can enhance self-acceptance of the employed person. Asthenic emotions can be opposed by high educational level and satisfaction with one's health; emotional resources can also be strengthened by the high status at work. An argument that can be used against employment of the elderly people is that satisfaction with one's financial situation can lead to diminishing of self-acceptance.

We do not observe similar peculiarities in the unemployed people. On the contrary, higher evaluation of the financial condition and elderly age positively influence self-management and goals that a person sets in life. The place where one has spent one's childhood and permanent residence place play a considerably lesser role in their psychological well-being and self-attitude, than in the employed people. Unlike the employed people, who tend to have an increase of asthenic emotions, with age the unemployed have more intensified sthenic emotions. In their turn, asthenic emotions enhance not the self-acceptance, which is the case with the employed, but inner conflict and self-abasement. Thus, one can speak about different directions of sthenic and asthenic emotions with the employed and unemployed people in late adulthood.

Education of a person and autonomy do not change their role depending on employment or unemployment. Irrespective of employment, higher education will support personal growth in late adulthood, while more independent and autonomous will be those elderly people, who are not inclined to negative self-attitudes.

Further research on the problem in question can be related to the more detailed study of the way employment can influence motivational structure of personality depending on the gender of a person.

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THE TALENT OF MATURE WOMEN AND THEIR LEGACY FOR HUMANITY

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ABSTRACT

This paper is a compilation of facts about women who shone in their youth either for their research, their works of art, or their social and political activities, and who remained active in their later years, when they became what are commonly called senior citizens. It was during these years that these brilliant women managed to crystallise and consolidate the work they had done all of their life, bringing about changes in scientific, artistic, cultural and social fields, and leaving behind a legacy of knowledge for future generations.

A small group of women representing different disciplines has been chosen here, and all of these women were active in their later life. Many others who could have been included will not be found, not only because there is not enough space here to mention all of them but also because there is a lack of sources dealing with the millions of senior heroines who are anonymous; elderly women who play a vital role in the development of humanity when they pass on knowledge and values; women who remain active in their later years and who only retire the day they die.

Key words: elderly woman, contribution, active ageing

INTRODUCTION

At the beginning of the 21st century the rights of the vast majority of women in the world (some 3.700 million) were consistently being ignored or violated. 15 years later, in 2016, nothing has changed. Women who are lucky enough to be born in countries in which the law establishes equal rights and duties for both sexes usually have to struggle so that such laws should be obeyed, because although they are written on paper, they are not followed in the real world. Women are paid less for the same job, have fewer chances to reconcile their professional and private lives, and have to overcome all sorts of hurdles for reasons of gender, and have to face even harder odds as they grow older. But it has been elderly women who have embraced new models of society and elderly women who have passed on a legacy of culture and values to their children and grandchildren. And it has always been women who have nur-

tured the emotional balance of society from the privacy and invisibility of their homes, contributing to the well-being of society by offering support and comfort on a daily basis.

One of the many injustices that women have to put up with is that many outstanding women in the world of the arts, science and in the humanities should have been overlooked or viewed with contempt. Even worse, some of them had to hide behind men who took advantage of their genius in a society that refused to let them take centre stage, women like Rosalind Franklin, who discovered the structure of life without ever getting the recognition she so much deserved.

Out of all of these women, those who managed to live to an older age continued to work in the field they had devoted their lives to, actively ageing while expanding their knowledge, spreading their wisdom and sharing their work with the rest of us for the good of all society.

KEY FIGURES

The most prestigious award on the planet, the Nobel Prize, has seldom been given to women. The first one to get the prize was Polish **Maria Salomea Skłodowska** (Marie Curie) (Warsaw, Poland, November 7 1867, Passy, France, July 4 1934), who won the prize for Physics along with her husband Pierre Curie and Henri Becquerel in 1903. She is also the only woman who has won the Nobel Prize on two separate occasions, since she received the Nobel Prize for Chemistry in 1911. Her daughter, Irène Joliot-Curie, won the Nobel Prize for Chemistry in 1935, the only time a mother and daughter have both won the prize. Marie discovered two new elements: Polonium (which she named after her homeland, Poland) and radium. The use of radium has been crucial in humanitarian efforts using medicine. During the First World War Marie put together, with the help of private donations, a team of experts in radiology, and with the aid of her daughter Irene, they equipped two hundred radiological vehicles. Both mother and daughter went to the Front in order to teach doctors all about the new techniques and methods being used in radiology. Struggling against the misogamy prevalent in her day, she made discoveries and did groundbreaking work that led to key advances in science; historian Tadeusz Estreicher, in *Polski słownik biograficzny* [Polish biographical dictionary] (1938), is convinced that the trail blazed by the Curies has had a significant impact on world development in the 20th and 21st centuries. Thanks to treatments based on their discoveries, countless people are still being saved today.

Maria Salomea Skłodowska lived until she was 67, immersed in her work and research until the very end.

Selma Ottilia Lovisa Lagerlöf, writer, (Mårbacka, Sweden, November 20 1858-Mårbacka, March 16 1940), was the first woman to get the Nobel Prize for Literature (1909). She remained committed to society until the time of her death. At the age of 81 this indefatigable humanitarian was still trying to do

her best to help fellow humans, collaborating in the efforts to aid Finnish refugees who were victims of the Soviet military siege during World War II, While doing so this committed woman suffered a massive heart attack that brought her life to an end.

Mother Teresa (Uskub, Ottoman Empire – currently Skopje, Macedonia –, August 26 1910-Calcuta, India, September 5 1997), secular name **Agnes Gonxha Bojaxhiu**, originally from Albania and naturalized Indian. She founded the missionaries of charity in Calcutta in 1950. She took care of the poor, the dying, the sick and the orphaned for more than 45 years until she died aged 87. She got the Nobel Peace Prize in 1979 when she was 69. She remained devoted to humanitarian aid another 18 years and aged actively while remaining involved. Her legacy continues today and is an example to follow by all those providing aid, dignity and hope to the millions of dispossessed and downtrodden.

Rita Levi-Montalcini (Torino, Italy, April 22 1909 - Rome, Italy, December 30 2012), neurologist and politician. Her work with Stanley Cohen postulated that cells only proliferate when they receive an order to do so, an order which is transmitted by substances called growth factors, a groundbreaking discovery in medical science. In 1986 while ageing actively, she got the Nobel Prize for Physiology and Medicine. She continued working until she was 102 years old.

Nadine Gordimer, writer, (Springs, Gauteng, South Africa, November 20 1923 - Johannesburg, South Africa, July 13 2014), winner of the Nobel Prize for Literature in 1991, «has been greatly beneficial to humanity through her magnificent epic writing». In her books she deals with interethnic conflict and apartheid. In her later life (she lived until she was 81) she became an activist fighting against HIV and AIDS, raising funds for the Treatment Action Campaign, a group that tries to help sick South Africans gain free access to life-saving treatments. Gordimer fought relentlessly throughout the whole of her life to defend freedom of expression and denounce censorship, always refusing to connive with spurious powers and continually condemning totalitarian governments.

Doris Lessing, maiden name **Doris May Tayler** (Kermanshah, Irab, October 22 1919 – London, England, November 17 2013), also published under the nom de plume Jane Somers and she was a writer, feminist, communist, pacifist and anticolonialist. She won the Nobel Prize for Literature when she was 88 years old. The themes she deals with in her books are cultural conflicts, the flagrant injustice of racial inequality, the contradiction between individual conscience and the greater good. Her work had a significant impact on social change in the 20th century. Lessing transcended labels by shedding light on issues and conflicts that affect all individuals irrespective of gender, ideology or country. She remained active until her death at 94.

Elinor Ostrom, was an American political economist, (néé **Elinor Claire Awan**; Los Angeles, USA, August 7 1933 – Los Angeles, June 12 2012). In 2009, when she was 73 years old, she won the Nobel Prize in Economic Sciences, while actively ageing, a prize she shared with Oliver E. Williamson for

their “analysis of economic governance and organisation of cooperation”. The Swedish central bank chose Ostrom for her work saying she had proved that common property can be administered effectively by a group of users and also because of her independent work about “economic governance and the limits of corporations.” Ostrom’s later work focused on the multivariate nature of the interaction between humans and ecological systems. Her economic theories are applied with views to creating a fairer and more sustainable world economy. She died June 12 2012 aged 78.

Gertrude B. Elion (New York, USA, January 23 1918- North Carolina, USA, February 21 1999) has gone down in history as one of the most important scientists in the field of medicine. Her research in different disciplines had outstanding results: she synthesized the first treatment for leukemia and the first immunodepressant used in human transplantation, and her work laid down the foundations that led to the development of AZT, a drug used in the treatment of AIDS. Just like many other women working as scientists. she managed to do this in what was definitely a man’s world, in which her achievements were overlooked or frowned upon. In 1988, when she was 78 years old, she got the Nobel Prize for Medicine, a late recognition for a woman who had no other choice but to face the prejudice of her day. She remained involved in the dissemination of scientific knowledge until the time of her death. In her own words “in a certain sense a circle has closed since my days as a teacher have led me to get involved in old age in sharing my experience in research with new generations of scientists.” Her commitment and effort paid off with the best kind of reward: effective treatments for millions of patients around the world. Her modesty is all the more remarkable when one thinks of the determination she must have had to succeed in a difficult and sometimes hostile environment.

Concepción Arenal, Spanish writer and social activist (Ferrol, Spain, January 21 1820 - Vigo, Spain, February 4 1893). Negotiating the obstacles women had to face in a time when women were not normally allowed to go to university, she managed to study Law, Sociology, History Philosophy and modern languages in Madrid (even having to disguise herself as a man). She wrote opinion articles in the name of her husband when he was taken ill. Despite the fact that her articles were more acclaimed than those of her husband, when the newspaper found out that she was the author, she was allowed to continue only if her name didn’t appear on the articles and as long as she accepted half the money her husband was paid. She did research into the issues and difficulties Spanish women had to face at the time to fulfil their role in human society with dignity. She fought bravely against the prejudice that prevailed against women in those days because of their alleged physiological, moral and intellectual inferiority. She also explored the consequences that no access to education or the workplace had on women. Concepción Arenal helped to give birth to feminism in Spain. She believed that education and access to knowledge would play an essential role in shaping the future of women and equality; her struggle for the equal rights of women blazed the trail for generations to come.

Svetlana Aleksándrovna Aleksíevich (Ukraine, Soviet Union, May 31 1948), a Russian-speaking writer and journalist from Belarus who got the Nobel Prize for Literature in 2015, the first writer to be awarded the prize for non-fiction in a hundred years. The Swedish Academy cited her “polyphonic verses, a monument to suffering and courage in our days”. She remains active in maturity (she is 67) sharing her wisdom and divulging her research.

Florence Nightingale, a British nurse, writer and statistician (Florence, Tuscany, May 12 1820-London, England, August 13 1910) that is considered the pioneer of modern nursing and creator of the first conceptual model of nursing. She laid down the foundations for professionalizing nursing with the establishment of her nursing school at St Thomas’ Hospital in London in 1860. This was the first secular nursing school in the world. Her work inspired Henri Dunant, the founder of the Red Cross and author of the humanitarian proposals that were later adopted by the Geneva Convention. Florence Nightingale remained active until her death at age 90.

Vera Rubin, an American astronomer, (Philadelphia, USA, July 23 1928), who pioneered work aimed at measuring the rotation of stars in a galaxy. Her measurements suggested that the rotation curves of galaxies remain flat, contradicting theoretical models, all of which constituted the most direct and sound proof for the existence of dark matter. Vera has contributed with her research and dedication to the development of modern astronomy, opening the door to understanding one of the greatest mysteries in astronomy down through the ages. Rubin is now 87 and she is still working, actively ageing while working as a research astronomer in the Carnegie Institute in Washington.

Ida Noddack, maiden name **Ida Eva Tacke**, German chemist and physicist, (Lackhausen, German Empire, February 25 1896 - Bad Neuenahr-Ahrweiler, Western Germany, September 24 1978), was the first scientist to discuss the idea of nuclear fission in 1934 but there has been no recognition of this in scientific circles. She continued to work on her research in her later life until her death at age 82.

Carolina Herschel (Hannover, Germany, March 16 1750 – Hannover, January 9 1848), the first “professional astronomer”. Together with her brother she discovered a thousand double stars and proved that many of them were binary systems, thereby finding for the first time evidence of the existence of gravity outside the solar system. Apart from working as her brother’s secretary, she independently discovered eight comets, three nebulae and she catalogued. She did research and studied stars until her death at age 97. Her work was only recognised posthumously.

Susan Brownell Anthony (Adams, USA, 1820 - Rochester, USA, 1906) American feminist. Together with Elizabeth Cady Stanton, one of the leaders of the American suffragist movement who fought during the second half of the 19th century so that women could have the right to vote. From the age of 72 to 80 (between 1891 and 1900) she played a pivotal role in the American National Woman Suffrage Association and helped change the social fabric of the world.

Barbara McClintock, American scientist (Hartford, USA, June 1902 – Huntington, USA, September 1992) specializing in cytogenetics, she discovered the regulating elements of genetic expression and transposition. In 1983, at age 81, she won the Nobel Prize for Medicine or Physiology for her work on transposable elements, 30 years after she had completed it. She remained active in later life and particularly after her biography (written by Evelyn Fox in 1983) she had a substantial influence on public life. She lectured frequently at Cold Spring Harbour to an audience made up of young scientists. She died at age 90.

Senior women in politics:

- **Indira Gandhi**, (Allahabad, India, November 1917 – New Delhi, India, October 31 1984), the most powerful leader in India for decades. At the age of 67, while still highly active, and three months after she had been reelected as Prime Minister of India, she was assassinated.
- **Queen Elizabeth II, United Kingdom** (Elizabeth Alexandra Mary; London, England, April 21 1926) at age 89 she is still the Queen of England, the United Kingdom and Northern Ireland and head of the Commonwealth, a great example of someone ageing actively.
- **Golda Meir** (Kiev, Ukraine, May 3 1898 – Jerusalem, Israel, December 8 1978), in 1969, when she was 71, and actively ageing, she took office as the Prime Minister of Israel.

CONCLUSIONS

From ninety year-old queens who are still influential in world politics and society, or women like Florence Nightingale whose work laid down the foundations for the Red Cross and the humanitarian proposals of the Geneva Convention, to astronomers who have changed our understanding of the universe with their discoveries, senior women have brought about social change and continue to exercise a positive influence on modern day society, with their writings and condemnation of human injustice and their unflagging support of humanitarian causes aimed at improving the life of the dispossessed and downtrodden, they have raised awareness among millions of people and given birth to a collective conscience focusing on solidarity, transforming the unfair world around them into societies operating on the principles of justice and equality; demanding and defending equal rights for women, doing research and advancing economic measures devised to ensure a fair and sustainable world market economy, actively ageing women are behind scientific discoveries and medical breakthroughs that have saved the lives of millions of human beings and their work over the last century has brought major improvements to the quality of life of countless people. Effective treatments against cancer, immunodepressants used in human organ transplantation, treatments against the AIDS virus or the discovery of the regulating elements involved in genetic

expressions are all major contributions made by women who were still actively working in their later life.

The greater longevity of women determines a greater number of women among the elderly, a demographic trend that can be seen all across Europe. To give credit to the role played by ageing women in society is a great opportunity. It is a chance to disseminate the truth about the positive role of ageing women in society both in traditional and social media and communication: their activities, their concerns, their problems, their skills and their solidarity. To inform people of their contributions to national economies is an opportunity to give credit to their efforts and tip the scales in favour of the relational economy they are highly invested in rather than yield to prevalent concerns in public opinion about spending. It is also a great chance to make the most of the potential of ageing women to keep on learning, reaching realization in a life project that includes active ageing. Age cannot be construed as a reason to deny people all the rights of full citizenship. Ageing women should not be forced to confront both the barrier of their gender and their age. Age should rather be used as a chance for modern day women to conquer a space which belongs to them because of the contributions they have made to advances in society.

To discuss the activities and abilities of ageing women is important, particularly the role they play in strengthening the intergenerational relations within the family nucleus. Ageing women usually manage to make the most of intergenerational relations adapting more readily to the "modernity" of younger generations and proving to be more flexible to change. This trait encourages them to participate in programmes that foster intergenerational relations outside the framework of family units. Thanks to the experience they have strengthening the emotional and relational ties between different generations in the family, ageing women are able to play a pivotal role in the implementation and development of a society to be enjoyed by people of all ages. The participation of the ageing population and of ageing women in particular should be used to its full potential as a driving force that will help improve living conditions by means of constant dialectics involving representation-participation.

A society for all ages has to be a society in which all of the citizens have full rights of citizenship, in which everyone is represented and in which everyone can participate in balance with the others, and in which no one can be cast out of the public arena due to the fact that they are ageing, or due to the fact that they have stopped working, because in the case of women barriers and ceilings would become twofold and involve both age and gender. This is therefore an opportunity to shed light on the value of ageing women in all of their diversity and heterogeneity, so that they have the final word on how they chose to age, hopefully in a fulfilling and active way that will benefit the whole of society.

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EXPRESSION

THE CREATIVE POTENTIAL OF THE ELDERLY THROUGH AN EXAMPLE OF GRAND MASTERS

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ABSTRACT

This article presents characteristics of the selected aspects of the creative potential in older persons. In addition to specific aptitudes or gifts, cognitive qualities such as intelligence, knowledge and experience have been indicated as the components of creative potential. Furthermore, the importance of a developed lifestyle at earlier stages of life has been highlighted, along with the attitude towards one's ageing, spiritual sensibility and motivation for creative work. An attempt has been made to illustrate distinguishing characteristics of works by outstanding creators in the latter parts of their lives. More often than not, critics cited the following characteristics of creative persons: individualism, inclination towards harkening back to the past, melancholic spirits and thought orientation regarding transcendent reality.

Key words: elderly, creative activity, openness to Transcendence, melancholy

INTRODUCTION

Creativity - realized both in the egalitarian sense by an ordinary, average man and in the elitist meaning as the so-called "high creation" characterized by remarkably gifted people - is strictly related to personal development. On the one hand, creative activity is a derivative and a sign of the growth process effectuated throughout life, on the other hand, it has impact on a person's development, dynamizes it and gives it direction. It also has a crucial, manifold correlation with the quality of life of a creatively-disposed person. As a rule, creativity encourages a high sense of life quality. Oftentimes, though, it is motivated by its low standard of living and a wish to divert attention from acutely felt deficiencies. One can also look at creative activity from a personalistic perspective noticing its display of subjectivity of a human being, his intentionality, fulfilling the natural need for transgression, self-efficacy, the symbolic 'going beyond' the *status quo*, self-determination and self-realization. As argued by many researchers who represent life-span development psychology, a human being can evolve and stay creative throughout their whole life even during

twilight years. It is the inborn creative potential that allows this to happen, the tapping into which, however rests notably on personal will-power, auto-determination as well as life circumstances to some extent, especially the manner of living through important experiences and attaching personal meanings to them. Although every person has their specific, individual development resources, not everyone draws from them in equal measure. Psychological researches show that only a scant number of the elderly achieve their full growth potential. This regularity also applies to younger people, it is no wonder then that among the old ones there are only few for whom a creative way of living and one related to that self-realization does not serve as the most important incentive for activity. However, there are older people who live creatively and evolve almost until the end of their days, enjoying and feeling the sense of life.

NON-SPECIFIC APTITUDES FOR CREATIVITY IN THE ELDERLY

Except for the specific factors that make up the creative potential of a human being, such as innate capabilities, gifts or predispositions it is also important to mark out the non-specific factors, which are equally important and downright essential in order for a person to live a creative lifestyle. These include mental, emotional-motivational and personal dispositions. From among the mental factors, the ones which deserve special mention are the following: intellectual performance, cognitive curiosity, knowledge and various skills acquired in the course of school education as well as through one's own learning. Fluid intelligence and cognitive functions such as cognitive flexibility, working memory or planning are of significant importance in the context of creativity. These functions are part of the so-called cognitive reserve which provides crucial assets for seniors in their later stages of life. Whereas, the enablers of the cognitive reserve consist of some personal characteristics and socio-economic status (education and type of professional work) as well as the individual way of leisure time management (Byczewska-Konieczny, 2015). The research of the above quoted author (and other scholars, too) goes to prove that higher education along with personal characteristics such as extraversion and openness to experience aid cognitive performance and make for effective functioning. However, what is interesting and arousing conflicting feelings at the same time is that long, above-average time spent at professional work and many social contacts do not have positive impact on cognitive reserve, they even show negative effects for cognitive condition. The functions of fluid intelligence responsible for learning ability and information processing, focus of attention, working memory, new knowledge and skills acquisition decrease with age. At the same time, though there arises the level of crystallized intelligence founded upon previously acquired knowledge and experience. Crystallized intelligence engages the post-formal-relativist, contextual and dialectical thinking. These processes reveal themselves at their most intense in the middle

part of life. Generally, these processes remain effective even at later stages of life provided that we are dealing with the usual ageing, free of pathology. If an elderly person stays active and gets involved in the mentioned processes in day-to-day functioning, they can cope well especially with various psychological problems. Contextual thinking allows for the perception of events in the wide-ranging background of meaning, in the far-reaching perspective that goes beyond the horizon of material reality. Owing to this, judgments of the development-oriented older people are usually toned-down, balanced and their decisions prudent. Thinking relativism in turn makes it easier to look at matters from different perspectives, which in effect results in more tolerance, human understanding toward those with opposite opinions³. Eventually, dialectical processes make it possible to recognize paradoxical events, reconciling logically-conflicting judgments, coping with contradictions, finding meaning in that which is meaningless as compared to formal-logical rationality. "More haste less speed", "The very thing that stands in your way allows you to move on" "The great little man", "Life after life" – these are the examples of phrases the understanding of which poses no difficulty for the elderly who naturally employ paradoxical-dialectical thinking. The increased decline in fluid intelligence, which takes place from an early adulthood, together with the progress of the crystallized intelligence occurring simultaneously, manifests itself in an exemplary way, among others, in scientific production. There is a conviction amongst the representatives of the sciences that the largest number of the most important accomplishments that require both formal and logical thinking have been observed in younger researchers (up to approx. 40 years of age). It is quite contrary to the humanities, where the most significant works were created by older scholars who had greater life-experience and broader view of the world. Such persons are more prone to profound reflection rather than to calculation. Relatively high, long-term level of fluid intelligence performance, of course, may additionally foster tapping into the cognitive reserve, the previously acquired knowledge and exercising the resultant problem-solving skills. In addition to intellectual and performance factors, there are others, crucial, yet non-specific ones concerning creative activity also pertaining to the elderly such as motivation, willingness to act and initiative. Without auto-determination even a huge potential be it for the intellect or art does not sustain creative activity or personal development.

While in childhood and in youth a person considerably develops in a somewhat spontaneous fashion, absorbing the incoming information, being subjected to social mechanisms of learning, in adulthood – due to adaptive reasons – one does not have to get intentionally involved in one's development anymore. Thus, motivation, personal will, and desire to implement one's possibilities or

3 Sometimes, unfortunately, thinking contextualism and relativism can give rise to negative consequences. The difficulty in making a decision, wavering between two opposite points of view, being in a state of "barren balance" as termed by C.G. Jung, are the very examples of these problems.

capabilities prove to be especially indispensable. Therefore, statistically considered, in the second half of life, the self-realization process is particularly visible. Much research data and observations of life convince us that the willingness to act and self-discipline constitute an even more vital factor in terms of personal and social success than the congenital abilities do alone. Consequently, one can have a great creative potential and nothing to show for it. And vice versa, oftentimes averagely gifted learners achieve high status in their chosen walk of life in adulthood through their systematic effort and assiduous work.

For a creative activity of seniors lifestyle, related to their attitude towards old age, plays a significant role. In senior years we usually deal with the continuation of the lifestyle developed during earlier stages of life. However, there are also exceptions to this rule. Out of the most frequently occurring approaches spotted by researchers such as: constructive, defensive, hostile ones – towards the world and themselves (see: Steuden, 2011), the constructive approach has been found as the most beneficial factor to further development and the creative activity. It is manifested by seniors who accept their last stage of life, positively value their past and look to their future optimistically. Moreover, constructive approach is also linked to the satisfying social interaction. Paradoxically, defensive attitude encourages any activity even creativity. It is clearly visible, especially in persons who have been accustomed to intensive, systematic action for whom such *modus operandi* comprises their meaning of life and has been crucial to personal style of everyday functioning. Those who show the defensive approach have been observed to be plagued by fear of ageing, the loss of mental and physical health, status, and by fear of the end of life. In such cases, activity serves as a buffer against negative feelings, the experience of the existential drama of passing. Also, it helps to divert attention from upsetting thoughts, which, in case of gifted people are often translated into artistic work. Spiritual sensibility is hard to overestimate in particular in terms of creative activity of the elderly, their openness to transcendent and metaphysical values as well as searching for the answers to the unfolding existential questions about the meaning of life faced in the perspective of passing, suffering and finiteness. These themes are usually related to the temporal reorientation consisting in higher than ever thought-direction towards the past with the increasing need for reorganization of memories, balancing the life outcome, the reinterpretation and giving meaning to the earlier life experiences in the light of the newly discovered values. Spiritual sensibility also consists of aesthetic sensitivity, the need for contact with nature, music and works of art. Aesthetic experiences liven up seniors' memories, evoke associations, make older people reflect on life and they give them motivation to undertake creation. The specific paradox we are dealing with, in relation to seniors, is that on the one hand senses become weaker (e.g. eyesight or hearing), on the other hand, sensitivity to beauty, the harmony of colours, shapes or sounds tend to increase with age. Sometimes the elderly notice and appreciate more aesthetic peculiarities than younger people do. The increase in aesthetic sensitivity of

seniors can be best seen in their characteristic interest taken in the views they have always been familiar with yet have not appreciated beforehand, e.g. the view of trees growing next to the often traversed road, a historic building or sunset.

THE PERSONAL FEATURES OF CREATORS MANIFESTED IN THEIR WORKS CREATED IN THE AUTUMN YEARS

The factors set out in the article which encourage the creative activity of seniors can be found in biographies and works of outstanding creators. The book by Mieczysław Wallis entitled: *The latter creation of grand masters* (1975) provides circumstantial evidence confirming the above - mentioned thesis. The author adduces numerous examples of creative people, who lived very active lives - almost until the very end - creating works that delight recipients worldwide. From among masters who present different fields of art there are, inter alia, Michelangelo, Titian, El Greco, Rembrandt, Mozart, Goethe, Thomas Mann, Beethoven, Leopold Staff and many others. The analysis of works created in the autumn years shows their considerable individualism concerning the form, the excellent fluency of the artistic means of expression by their creators, who defy any rules or standards. Just as the plenteous lexis (e.g. in the late works by Goethe, Leopold Staff or Thomas Mann) astounds readers, so too do the immense means of expression (e.g. in pieces by Beethoven) surprise his listeners. In juxtaposing the characteristics of the works by "the great artists" with the previously quoted comments on the elders' personal dispositions, one can see various convergences. Thus, the very mentioned presence of the paradoxical and dialectical processes characteristic of thinking in the elderly may be illustrated with the following words from the poem by Leopold Staff under the title *The blooming branch* (Wallis, 1975, p. 132)⁴:

I have lived and out of things of man I am familiar with everything
Wherefore my thoughts which counsel me
Are sad yet sunny just like the old in orchard
And I learn (...) to see wistful sweetness in tears, kindness in sin.

By contrast, the appreciation of beauty and rapture over it can be found in his other later poems, for instance in the poetic work, entitled: *The smile of hours* (Wallis, 1975, p. 132):

If a man comes from nothingness, is it not enough for him to be given
at least for a fleeting moment the beauty, awe and rapture reigning over it?

4 There are literary narrations of the characters and at the same time prime examples which point out to the presence of all kinds of post formal thinking in the mind of a developing person provided among others in the novel by Stefan Chwin entitled *The Golden Pelican* (2000); see: Straś-Romanowska, (2005). Also, the novel by Wiesław Myśliwski entitled *The Last Deal* (2012) may serve as an example of tendency to increased downright turbulent reflection, and the broad, multifaceted and deepened thinking which is characteristic of the elderly.

Nota bene Staff may serve as an example of a man who evolved throughout his life, making good use of his creative potential. The expression of this creative attitude is best seen in his ever-changing poetry both in content and form. M. Wallis characterizes L. Staff's poetic path in the following words: "...It led us (the path - remainder MSR) from the pessimistic fin de siecle moods of sorrow, melancholy and lassitude through the pagan-bacchanalian "life- intoxication" vagabonding and artistic bohemian unconcern to the joyful franciscan affirmation of life; from the lyrics of dream to the poetry of commonness; from the captivation by the beauty of the polish landscape at a different time of day or year and the adoration of the quiet polish country with all your heart, from the delight with the appeal of the Mediterranean landscape and ancient sculpture, from the understanding of the world as order and harmony through the deep religious tones of the *Eye of a needle* to the radical transformation caused by the shock of the World War 2. Eventually, this path leads the poet to facing his life outcome - to fulfilling an important, peculiar need of the elderly that the poet expressed in the collection under the title *The Nine Muses* (Wallis, 1975, p. 142).

As the last living member of my generation,
 dear friends I buried,
 I have seen life change
 And so have I changed like life itself
 I have loved people and nature,
 Into the future I have looked optimistically
 I have worshiped freedom and unconstraint,
 Fraternized with the wind and a cloud
 I was neither attracted to the bronze monument,
 nor resounding horns nor thunderous applause,
 I shall only leave an empty room and a reticent, quiet fame.

Staff's poetry is also an example of an open-mindedness and a deepening reflectiveness of an ageing creator as well as an increased spiritual sensibility that comes with age. He could draw from many sources of knowledge - the ancient, medieval, modern, from the Bible and younger creators.

Another characteristic feature of the creative disposition in the elderly is their keen awareness of tasks and goals to accomplish along with their implementation. On the one hand, elderly people experience many constraints in terms of possibility of action. On the other hand, they feel desire to go outside the former limits. This results in the creation of challenging works in that the creators no longer respect the traditional conventions and - sometimes even their own rules that they employed in their former artistic work that their audience used to be familiar with. As an example, Wallis cites the case of the latter creation of Michelangelo, who transgressed any traditional rules concerning the art of painting in his *Last Judgment*. Likewise, Goethe did not reckon with any respects be it space or time in the second part of *Faust* (Wallis, 1975, p. 165). The impression of eccentricity or the extravagance the creators leave on their recipients is often interpreted by the critics as an indication of "aspi-

ration towards monumentalism" (Wallis, 1975, p. 166.). Psychologically, this fact can be considered as a sign of the wealth of experience and the thinking depth which are hard to contain inside the mind of the creator. Also, the inexpressibility of this plenitude often happens to be hardly comprehensible for existentially less-experienced people. On the other hand, the acquired mastery and the ever-present potential makes it possible for artists to reach their goals, the ones which occurred at the former stages of their life, yet for some reasons these ideas were not implemented at that time. For instance, Wallis gives the following examples of these: *Faust* by Goethe, *Ode to Joy* by Beethoven, and *The Pieta* by Michelangelo. The reason for bringing up the former themes in the latter stages of life may be the result of the characteristic of the elderly's need to return to the past and give expression to what they held dear. Somehow, back then, they did not realize how important that was for them or simply they did not know how to find the right means of expression. However, not every creator is characterized by such determination to continue their activity in twilight years. Many seem to show the keen awareness of lowered vitality, the incoming demise and the ensuing end put to their creativity as well. This state of mind was displayed by Juliusz Słowacki in one of his latter poems (Wallis, 1975, p. 174).

In the past I thought of performing crazy deeds,
To call nations into your existence
Presently, though a small corner of the earth shall suffice to dwell
Where I'll put myself in a conch made of planks and let myself drown.

Yet, many creators evince the need to complete their oeuvre, the wish to almost convey "the communication of their will" to get across the essence of their experiences, thoughts, anything which is regarded by them as most essential in life. C. Monet's words are representative in this regard: (...) *I would not like to die having not said what I needed to say, or at least without having tried to do so.*" (Wallis, 1975, p. 174).

In various, often intense, bitter-sweet feelings the older artists, there prevails a melancholic tone suffused with existential thoughts which can be found, among others in the poetic letter of Cyprian K. Norwid. This letter has, again a clearly "testamentary" nature (Wallis, 1975, p. 175).

Diverse abundance shall disappear and creep away
Treasures and strengths shall blow through and the public shall quiver
Out of the things of this world only two will last,
Only two of them: poetry and charity...and nothing more...

Individualism, freedom, the independence from external restraints, from a variety of conditions and conventions makes it hard to establish one, typical style for old age - although there have been many attempts made to this end. Most frequently, the common features found in the works concern the sphere of feelings and spirituality. In the latter works of the grand masters one can find the prevailing romantic air, lyricism, melancholy, the intertwining of fan-

tasy with reality and the penchant for symbols. Critics maintain, for example R. Hamann (after: Wallis, 1975, p.184), that in the creative works of older artists one can observe the alteration of their psyche primarily in the sphere of spiritual life. They take more interest in their interior rather than the surrounding world, they reminisce about the past, work the memories through. Oftentimes they give those memories a fresh, more complete or intriguing expression, artistically. The problem of introversion still remains a contentious issue, though; it is generally thought to increase in the second half of life. Although critics notice such increase of introversion in some creators, (e.g. in Beethoven), others are known to show both the introvert and extrovert tendencies (e.g. Thomas Mann, El Greco). H. Elzenberg shares an interesting opinion (after: Wallis, 1975) that the practical, social personality should be distinguished from the artistic one. Consequently, one can be introverted in everyday life functioning, disengaged from social interaction, but create extrovert content. Many artists' fundamental, natural characteristic traits are projected on the protagonists portrayed in the works they create. The character trait of grand masters the critics find unquestionable, is their inclination to succumb to a metaphysical mood. This inclination can be linked to the tendency mentioned in the first part of the article, observed in normally ageing people. It is displayed via natural loosening of cognitive structures, oft-repeated reveries and thinking which goes beyond the material reality along with the confrontation with the transcendent world. This tendency is known in life-span development psychology as gerotranscendence (Torstam, after: Straś-Romanowska, 2011).

CONCLUSION

To sum up, it can be concluded that the creative potential of man does not diminish with the ongoing process of ageing. Depending on the individual personal traits, the said potential can be realized in different ways and to different extents. The modifications in the range of cognitive structures, greater autonomy in thinking and action, as well as the awareness of one's mastery, help a creative individual to act in an unconventional manner. In turn, the wealth of experience with cognitive openness, combined with introversion, considerably direct the attention of an ageing person towards reminiscence of the past. Those memories are willingly subjected to deeper afterthought, reinterpretation and confrontation with transcendent values. This helps the creators to gain an insightful meaning, which goes to prove that creatively active people undergo constant personal development. To paraphrase Victor Hugo's thought one could say that old age has no power over the creator. For a creative person ageing still means evolving⁵.

5 The original version of Hugo's words is as follows: "Old age has no power over geniuses (...). For Dantes and Michelangelos to age is to grow" (after: Wallis, 1975 p. 193).

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ARTISTIC ACTIVITY AMONG THE ELDERLY AS A FORM OF LIFELONG LEARNING, BASED UPON THE OPINIONS OF THE UNIVERSITY OF WROCLAW'S UNIVERSITY OF THE THIRD AGE HANDICRAFT GROUP MEMBERS

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ABSTRACT

The article deals with the topic of creativity and artistic activity among elderly people in the context of claims related to the idea of lifelong learning. It discusses the phenomenon of creativity and how senior citizens can benefit from it. The artistic activity of people in the age of late adulthood is also discussed in that context. In the last part of the text, theoretical claims are collated with what the artistic groups' elderly members said themselves during a focus group interview.

Key words: third age, late adulthood, creativity, artistic activity, lifelong learning, UTA, older people's education

When raising the matter of elderly people's education, it is important to define the term of late adulthood itself. So far, different scholars that have examined this matter posited different definitions and assumed the period to be starting at various ages. Most frequently a person is considered to enter the stage of late adulthood when they are ca. 60–65 years old. The period itself can be discussed from the angle of chronological, biological and psychological aspects (Straś-Romanowska, 2011). Another viewpoint worth considering is the one presented by Talmage, Lacher, Pstross, Knopf, Burkhart, who claim that the essence of defining one's age lies in the subjectivity of an individual: „Age appears not to be the defining criteria for the third age; thus, the third age may be better defined not by crisis or policy, but by the decision of a person to exist outside of the work activities and careers he or she was immersed in during the second age” (2015, p. 234).

LIFELONG LEARNING

The emergence of the concept of lifelong learning dates back to the beginning of the 1970s. Jarvis defines this idea "as an individual process which continues throughout the whole of life – lifelong learning" (Jarvis, 2004, p. 64-65). It was rooted in the "national efforts to promote lifelong learning societies for people of all ages", "initiatives responding specifically to sharp increases in the percentage of a country's older citizens", "outgrowth of the adult and continuing education movement that gained momentum in the 19th century with the rise of democratic attitudes towards the benefits of education for all – including a nation's older citizens" (Manheimer, 2008, p. 111). Also worth noting are the benefits of lifelong learning, not only for the person but also for the whole community, as they say, Talmage and others: "philosophically, lifelong learning can act as a mechanism for self- and community-betterment and psychological growth" (2015, p. 233).

Older people's education can be backed up by those gerontological studies which are focused on the value of intellectual, emotional and spiritual development – factors that can contribute to the enhancement of one's life quality. What has been made apparent, is that adult people also feel the need to acquire certain skills – ones that can be useful when adapting to situations typical for middle and late adulthood, such as the change of one's social role as a result of retirement, which, in turn, results in having more leisure time and involving in activities such as voluntary work (Manheimer, 2008).

Late adulthood is quite often discussed and examined only from the angle of its negative sides and the limits that it carries. This approach is criticised by Talmage and others, who stress the potentials related to this period of life. Lifelong learning can be the cause of realizing some need or exploration. It also seems worth pointing out that quite often the individuals whose cases were examined in studies stated that they were not even conscious of the possibility of learning. Education of people who are going through the period of late adulthood can result in numerous benefits, such as the sense of joy and satisfaction, increased confidence, better handling of everyday problems, gaining new skills, social engagement, better physical condition and intellectual stimulation that leads to the increase of self-knowledge, the will to support the community in which the senior citizens live, strengthened sense of one's worth, personal and spiritual renewal and finding one's purpose in life (Talmage, Lacher, Pstross, Knopf, &Burkhart, 2015)

Lifelong learning can be used in different spheres of, especially informal, education (Malewski, 2010). Nevertheless, it is related to the activity of various kinds of institutions. Among them, Universities of the Third Age are a group that can be considered to be implementing the concept of lifelong learning in practice. They fulfil a number of essential functions:

- the educational function, beneficial in terms of acquiring and broadening of one's knowledge, as well as exercising cognitive processes;

- the affiliative-integrational function, which consists in satisfying the need for belongingness and helps to create interpersonal relationships;
- the expressive function, consisting in satisfying the need for self-expression, which is related to the general activeness, creativity, following one's passion, undertaking charity endeavours, as well as to one's feelings and spiritual life;
- the experiential and exploratory function, related to the opportunity of student internships and conducting academic studies – thanks to the institutions' attendants;
- gerontological prophylaxis – counteraction against the process of growing old too early (Brzezińska, 2014).

With regard to the themes undertaken is worth paying particular attention to the expressive function and the affiliative-integrational function which relate to the functioning of seniors in specific groups and a sense of belonging. On the other hand, through the implementation of expressive function, the elderly create, are creative, are involved in artistic activities and they realize their passions.

CREATIVITY AND ARTISTIC ACTIVITY AMONG THE ELDERLY

Attempting to define the term of creativity, one can assume, as Hennessey & Amabile did, that „most researchers and theorists agree that creativity involves the development of a novel product, idea, or problem solution that is of value to the individual and/or the larger social group, psychologists have had great difficulty finding consensus as to definitional components that reach beyond these two criteria of novelty and appropriateness (value)” (Hennessey, & Amabile, 2010, p. 572). Still, scholars who aim to redefine this phenomenon and look into it thoroughly, continue to conduct various theoretical analyses and studies (Hennessey, & Amabile, 2010). Creativity can be examined also in terms of actions that are conducive to development in the sphere of self-reflection, synthesis of ideas and wisdom. Similar conclusions can be drawn from the opinions of individuals in the age of late adulthood (Flood, 2007).

The potential benefits that elderly people can draw from creativity include mental clarity, increased awareness, the possibility to express spiritual experiences that are normally difficult to define, adaptation, aid in dealing with conflicts, improvement of a person's emotional and physical state (Flood, 2007). This type of activity can also have a good effect on the development of skills that are helpful in dealing with problems, improving the adaptive possibilities and allowing one to adjust to everyday problems (Polenick, & Flora, 2012). As Flood claims, taking into account the numerous benefits of creativity when it is promoted among the elderly, one can easily understand why this matter has so frequently been discussed in different studies and academic projects (Flood, 2007).

What is more, there emerge new studies that examine the positive influence of creativity on a person's health – in psychophysical terms. Creativity can help to handle stress, anxiety, as well as influence the sense of inner control and satisfaction from life. It has positive effects in terms of dealing with depression and hypochondria. The benefits of creative activity can also be seen in the stimulation of elderly people's involvement and even their reaction time (Flood 2007). Changes in the physiology are equally important. Studies have shown that by stimulating environment, there are new neural networks to enhance neurotransmission. There is also an increase in production of acetylcholine, which modulates the intellectual processes and the memory. We should also pay attention to the processes in the parasympathetic system related with stress. During the creative activity the pulse and heart rate and breathing slows; blood pressure decreases, and the body becomes more relaxed. Moreover, engaging in this type of activity can stimulate the release of endorphins, which have a positive effect on the brain and the immune system (Flood, 2007).

According to Jabłońska, the greatest potential of creative activity and the expansivity of the social one is characteristic for late adulthood. Since adult people need their actions to be directed and organised, they act in a certain order and according to chosen goals. Jabłońska claims that "solidification of the creative potential and of the skill to create" are crucial skills that emerge at that age (2012, p. 93). They can have a good impact on a mature person's sense of purpose in life. They are developed in the course of life experiences and constitute a stimulus for undertaking various types of activities. It can be of great importance for individuals at the age of late adulthood to start some type of artistic activity. Performing it, senior citizens can display their skills and abilities. What is more, it makes them more able to adapt to the reality – which they often consider incomprehensible and outdated – more efficiently. Another crucial aspect of the process is that the elderly are given the sense of doing something important for themselves and for others (Jabłońska, 2011).

THE GROUP'S ACTIVITY AND THE STUDY

The handicraft group functions at the UTA of the University of Wrocław. Once a week the members meet in workshops to produce works of plastic arts and handicraft. The items they create are usually somehow related to tradition and local activity: various kinds of embroidery (cross-stitch, straight stitch, Richelieu, the local embroidery of Wrocław and Kashubia), napkins, doilies, cards for different occasions, traditional Christmas decorations, knitted products, jewelry, stuffed toys, decoupage.

Apart from regular meetings, other types of activity are also important – for instance workshops, during which the elderly instruct the participating children on how to create, for instance, Christmas decorations. Another crucial form of the group's activity are the exhibitions organised in places such

as shopping centres and retirement homes. They offer the group members an opportunity to display their craft to a wider audience and even earn some money from it.

The study took the form of a qualitative research – each participant's case was treated as individual and unique (Konarzewski, 2000). The focus group interview was chosen as a method of obtaining information.

Group members were asked the following questions: what does the group's activity consist of? What types of handicraft would the members consider to be in decline and are they still worth promoting? What do they feel when they are participating in intergenerational workshops? What is the role of creating art in their lives? Does it relate to their previous experience somehow?

As the Peräkylä say, often researchers do not use in the analysis of the material pre-defined protocol but "by reading and rereading their empirical materials, they try to pin down their key themes, and thereby, to draw a picture of the presuppositions and meanings that constitute the cultural world of which the textural material is a specimen" (Peräkylä, 2005, p. 870). The author also describes the methods of data analysis such as: semiotic analysis of narrative, discourse analysis, critical discourse analysis, historical discourse analysis and the categorization analysis of belonging.

According to Silverman analysis of the text, which is also a transcription of the interview, can be analyzed in a qualitative way. It consists in creating some sort of key of the category and categories should be as accurate as possible. The purpose of such action is to understand which categories are used by participants in social life and how they operate in specific activities (Silverman, 2008).

Research material formed after interviewing focus groups, was analyzed by creating categories and analyze them.

It seems that certain spheres of life are enriched through participation in the artistic group. Firstly, the members said that it is a leisure time activity for them. The role of changes that occur in an individual's life in the age of late adulthood was also emphasised. These are related to the changing social roles, the end of one's professional activity and, thus, to searching for something that could serve as a substitute (Straś-Romanowska, 2011).

Self-development and the possibility to learn were also a very important field for the members. This can be linked to scholars' conclusions concerning the benefits that lifelong learning offers to senior citizens. The group's members also stated that to learn in a group is to educate one another by passing on the knowledge and skills related to a certain field of artistic activity. This process is conducive to the development of interpersonal relationships, which was confirmed by the subjects. These conclusions are quite similar to the ones that can be found in studies dedicated to artistic activity of the elderly. As Jabłońska suggests, human relationships that emerge as an effect of participating in such organised forms of spending time constitute a crucial part of a person's life. Firstly, the participation itself gives senior citizens the possibility to meet and

spend time with others. Secondly, it becomes a field in which they can learn and practice tolerance, understanding, as well as cooperation in fulfilling a common passion (Jabłońska, 2011).

Positive influence on one's self-esteem, often discussed in various studies, is also linked with the artistic activity (Flood, 2007). The interviewed members emphasized how good it made them feel to be appreciated – *that kind of satisfaction, when you've created something and someone says "oh, how pretty it is"*. This feeling comes as a result of three factors in the group's activity. Firstly, the exhibitions; secondly, the custom of offering the pieces of work to people such as foreigners who visit UTA during various projects; thirdly, the workshops that the elderly organise for children, and which the group members themselves described to be important and valuable: *it is very rewarding for us that those children want to learn something*. They said that it gave them the possibility to pass on certain important values and truths, such as that one does not need to buy something, if they can make it themselves – even though it requires time, imagination and manual skills. The elderly participants clearly enjoy the fact that children are curious, eager to cooperate and enthusiastic about suggestions they are given. Still, it was emphasised that whether the child will engage in further activity of that kind, depends on the family and the child itself.

In relation to what was said, one can refer to Mead's theory here. The fast pace of changes that are happening in the world leads to the emergence of new types of culture: prefigurative and configurative. This happens as a result of the reversed rules of upbringing and socialisation. Due to changes in culture and civilisation, the knowledge of senior citizens quickly becomes outdated, making it necessary that generations learn from each other – and this is what happens in the case of a configurative culture. In a prefigurative one, younger generations teach the older ones (Mead, 2000). If the elderly are given the opportunity to share their knowledge and experience with others, it can help them to cope with the challenges of modern reality more efficiently, as well as offer them a sense of being needed and appreciated in society. As the subjects of the study put it: *the pride of having an opportunity to teach someone something*.

The group's members emphasised the therapeutic role of art – that it can help an individual to deal with stress, release tension, give them the possibility to relax and to cope with other problems that influence one's mood. This topic is also discussed in studies about the positive effect of creative activity – on the psychological aspect and biological (Flood, 2007). It is worth paying attention to issues related to stress and coping with it, and the positive role of creative activity in this. Especially in late adulthood in which seniors have to deal with stress of old age. In this age an episodic stress changes in to chronic. This is due to the difficulties of everyday life, the limitations that cause discomfort, also constant changes, which is difficult to deal with (Brzezińska, 2011). The research shows that creativity can be helpful even for patients in clinical trials. Placing the elements of art in intensive care, helps patients to relax, and also leads to the use of a smaller amounts of painkillers (Flood, 2007)

It is an interesting thing to note that creative activity had no relation to the participants' previous experience – such as their past career. Nevertheless, they could not emphasise it more how important the role of creating art was in their lives at the moment. This was discussed by Talmage and others, where he stressed the role of learning in late adulthood as important in finding the sense and purpose (Talmage, Lacher, Pstross, Knopf, & Burkhart, 2015).

The participants also shared their thoughts on the uniqueness, originality and quality of the pieces of work that they produced. The pieces of art were described as different, original, and as such that *would not be produced by a machine*. It was also important for the group members that handicraft is currently going through a revival and that they personally can benefit from that.

Speaking about the characteristics of the group's activity, one can also notice that it helps to revive the practice of crafts that seem to be dying out, such as knitting, ceramics or embroidery. From this point of view, sustaining traditions and passing on the knowledge becomes a value in itself.

CONCLUSIONS

The reference artistic activity of the elderly to the context of lifelong education, fits this kind of activity in education through art. It can bring many benefits, both in terms of psychological and biological aspects, bringing positive changes in the lives of seniors. Creativity itself is a very favourable type of activity. With regard to the changes in all spheres of life, associated with aging (Straś-Romanowska, 2011), such activities may be particular benefit for seniors. It can help to deal with stress, quietness, as well as in dealing with the problems of everyday life. It can also act as a kind of preventive health care, due to occurring positive changes in the field of physiology.

In relation to the described group there is also a major theme - the tradition, which is continued by seniors, and helping to protect these already endangered crafts. This is another aspect for which artistic activity in old age can be extremely important for the participants.

In summary, the positive effects associated with creative activities are proven in studies, but also felt directly by those taking on creative activities. Accordingly, the maintenance and expansion of offers for senior citizens in this area seems to be very important.

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SENIOR THEATRE AN IMPORTANT PART OF SENIOR CULTURE

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ABSTRACT

The third age is an opportunity and can be used wisely. Going to university, travelling, volunteering or joining a theatre group could be possibilities. The article deals with Cultural Implications, and with senior theatre forging ahead in unexpected and adventurous directions. Last but not least, it deals with the situation of Senior Theatre in Graz, Austria.

Key words: demographic change, lifestyle, post-professional life, resource, mobility, acting, development, society, intergenerational, experiences, participation, volunteers, cultural implication

INTRODUCTION: THE WORLD OF THE SENIORS IS CHANGING

Due to the demographic change many years of retirement may be used in a positive way being open for possibilities of a new culture of ageing. Medical, technical and social progress provide the means that more and more people can be older than 70 years nowadays. This is not only a European but also a global specific. In industrialized western countries a faster development is observable, yet in developing countries a trend towards longevity is recorded too. Elderly of the same life age may differ greatly in terms of their physical, mental and social capacities and resources and social norms and standards play an important role for the individual and the community. This phase of life can be designed and experienced in a positive or more negative attitude. It depends on the individual personality, the life biography, the living conditions and the social conditions (Kurz, 1999).

Social Gerontology sees itself as an integrated science accomplishing an essential contribution for understanding old age. This science deals with the description, explanation and modification of physical, psychological, social, historical and cultural aspects of ageing and age. Being old is not only associated with limitations and deficits. There are positive reserves. Only those who

are evolving and so pursuing specific objectives, may affect the process or compensate for it, or do both. The post-professional life can be a meaningful phase of human life. Ageing is a lifelong process from birth to death. So a continuous development of the personality is possible (Baltes, 1994).

The third age in healthy conditions is a wonderful opportunity for subtle new challenges. It can be used wisely. It is desirable that this life phase is integrated into society. Rigid reversals of ageing should be broken. It should be possible that older people themselves decide whether to continue to work in their professions or to continue their education or just enjoy their free time filling it with things they never did before. This kind of "free time" should be filled by the individual and by offerings of communities. The latter are asked to provide various offers guaranteeing a higher quality of life in old age. Older people are very different. They are not a homogenous group and so accordingly to the current state of affairs society should offer a role diversity for persons in the post-employment phase of life.

Good ageing has its roots in earlier years of life and it depends on the financial, practical, spiritual and emotional resources of the individual. Mobility, friends, a good living place are personal prerequisites for activities outside the home like joining an institution for working as a volunteer or participating in a theatre group or whatever an older person may choose as leisure time activities (Kurz, 1999).

CULTURAL IMPLICATIONS: OLDER GENERATIONS IN MODERN SOCIETIES

"As long as culture is only seen as exceeding the limits of what is necessary or is defined as overcoming barbarism, whole groups of people will be excluded but also large areas of human behaviour will be excluded from cultural research" (Greverus, 1978). So if we think of seniors as having their own, direct contribution in the development of cultural inputs, new promising structures have to be developed so that they may prepare the bases for a new sustainable cultural development for older persons. People who developed skills in different special fields of knowledge in earlier life stages, will have the opportunity to be experts getting older. This expertise is not limited to professional knowledge, but includes also sound bases of practical life requirements. "It is necessary for the older people, that they do not only cherish their dreams of their past life and so get alienated from their everyday world, but that they set out to deal with themselves and their talents" (Hoffmann, 1988). If we give space to a *cultural pluralism* instead of talking about the subculture phenomena, the so-called "popular culture" could be explored in this context. Specific cultural research of the living conditions of older people is a great challenge for our modern society. A society not wanting to humiliate marginalized groups would be wise to create a basis for the integration of so-called "fringe groups",

even if their everyday cultural manifestations do not comply with the standard (Kurz, 1993).

If we talk about different outputs of cultural topics we have to distinguish between an *objective culture* which means the totality of the creative possibilities being offered by the society as a cultural achievement of past generations whereas the *subjective culture* refers to the ability of socialized individuals to acquire the objective culture and by using their creativity enriching it. Individual biographies of older people living in a specific societal context are the basis for the advancement of the society (Hoffmann, 1988).

Simone de Beauvoir thinks that ageing within a stationary world, being anxious of one's development, are further ahead than those who started after it. "The ever-changing world and the understanding of life, plays an important role in the identity work of older people. Things are different in the turbulent world of today and the individual way is part of a social environment but doesn't coincide. This divergence works at the expense of the elderly" (Beauvoir, 1970).

Happiness and well-being might be achieved through cultural creativity by finding a way to get happiness in a changing world. A fulfilling life in older age does not mean perfect adaptation - full life consists of a perpetual struggle between various forces. One of these forces is the ability and the courage to change and look for answers for the contradictions of existence, because older people usually live in a demanding and challenging environment. Ursula Lehr notes that getting older is a continuation starting with the first day of life. Each stage of life requires a conversion to a new life and requires an adjustment and reorientation and in many cases means an abandonment of previous behaviour, responsibilities and rights. New settings must be recruited and such transformation is often experienced as a stress situation (Lehr, 1988).

Nowadays new promising structures have to be developed so that they may prepare the bases for a new sustainable cultural development in which the older generations are included. Cultural identity work is one of the most challenging works of the older individuals to be embedded in modern life. Synonymously the social status is particularly important to be able to have a good choice in post-employment and in the empty nest phase of life. These factors even have a crucial role for getting involved in cultural activities like participating in *Seniors Theatre*. New value orientation and cultural interactions mostly take place in groups with persons of similar educational and interest levels. Cultural identity work in ageing and social status are particularly important factors. These factors have a crucial role in challenging modern Seniors' s theatre.

THE AGE ADVANTAGE

“Senior Theatre is forging ahead in unexpected and adventurous directions as there exists an `Age Advantage for older actors. Acting of older persons starts to be an important factor in societies of the 21st century. That means that more and more people are older than 60 and in good health. The baby boomer generation’s first wave began turning 65 in 2011, and this will continue until 2029. As this generation got during their active life mostly everything they strove for, it is safe to say that they will make the best of their post professional life and bolster society with Culture concerning the big group of persons older than 60 and 65” (Bent, 2014).

AGEING AND HEALTH: OLDER PERSONS ARE USING THE ADVANTAGES OF MODERN MEDICINE

There is a remarkable growth of Senior Theatre in the western hemisphere especially in the USA. Older people nowadays are mostly healthier than previous generations, had a sounder education and a positive outlook on ageing. A Washington Study about connections between health and the arts found that especially acting in older age proved that seniors who participated in theatre work, lead healthier lives. Acting is a stimulus for the brain. This challenge supports the cognitive, emotional and physiological condition of an older person. Researchers proved in a study concerning seniors, that if they are involved in the arts they would have fewer falls, fewer doctor’s visits and they take fewer medicines and their overall health condition would be better than those of the persons without such an engagement in the arts (Cohen et al., 2006).

WORKING WITH SENIORS IS A CHALLENGE

Older persons enjoying every day life not being troubled so much by daily inconveniences are to be found everywhere, where there is something for them to do, to learn, to experience, to be amongst other people, to travel, to play cards or just enjoying their grandchildren. Senior Theatre takes advantage of this attitude. A performer dealing with such an age group must be aware, that finding plays which will suit the actors will be appreciated by the audience and will be just right. Self-made plays by seniors might show low quality, or the existing literature might be not useable. So finding just the right literature and roles for a certain group will be rewarded but not be easy. Seniors are not always easy to deal with as they are used to doing things their own way. A specific difficulty will be to find the right person for a certain character of a play. There is often great jealousy among the older actors. But if the director or directness is able to master all these difficulties success will be theirs.

SENIOR THEATRE AND THE PERFORMERS, THE AUTHORS AND THE SENIOR ACTING GROUPS

The success of a Senior Theatre Group is closely connected with the performers. Senior performers and senior actors range from professional to amateur in both rural and urban settings. The one thing performers must have and show is enthusiasm. Other talents are appreciated too - patience, humour, strength and time, lots of time and humour and patience again and sometimes strictness! Performers might have been in their younger year's performers themselves at public theatres or may never have done theatre performing or acting before and just want to have a new and a special challenge in their post-professional phase of life (e.g., "Senior theatre" n.d).

THERE ARE SOME IMPORTANT ISSUES A PERFORMER HAS TO DEAL WITH

One issue is finding an accepted title for the group. This is hard work and needs a lot of discussions with all persons involved. Words like *older people* or *seniors* will not get high points. Even *Golden* or *Silver* will not be a good suggestion anymore. Authors of plays who deal with the life of older persons will be incomparable! The author has a world of opportunities - because: People who participate in Senior Theatre are pretty unique at the same time scriptwriters, directors and actors say that shows with modern, realistic themes are going to be popular (<http://www.seniortheatre.com/bonnie-l-vorenberg/>).

"Audiences—and, in particular, older theatregoers—want to see older adults in positive roles, whether it's having a new job or being sexually active!" (Abrahms, n.d.). And there is another advantage working with seniors. They have various abilities just waiting to be used by a performer or by the own family. So doing things for the group, for the actors is challenging and worthwhile.

ADVANTAGES FOR THE ACTING SENIORS

As acting might increase the mental possibilities, enhance self-esteem, support the elderly's relationships with those around them, it will be worthwhile to deal with all arising difficulties. Senior theatre provides older adults with an ideal opportunity to display their acting, singing, and dramatic talents. For some, it's an opportunity to revive and reprise their skills from bygone days. For others, it's the chance of a lifetime wish to take centre stage. They meet new people and enjoy the possibility doing something new. The greatest reward will be that older persons being open for new perspectives will be able to learn from other older persons, respect them and will be able to overlook each other's oddities and sometimes strange behaviour (Worthington, n.d.).

MONEY AND SENIORS ACTING

Most of the seniors being interested in acting will find a group they want to work with. It is generally known that nobody gets rich in acting in or with a seniors acting groups as donors for amateurs actors are hard to find. So mutual cooperation is asked for by the actors and by the performer. The performer and the crew must think about arising difficulties and find solutions. The first question will be, where can we perform without paying a lot of money? There is a broad variety of possibilities: small theatres of the community, senior centres, retirement homes, universities, social service organizations etc. Second question will be how will we pay for all additional issues like masks, costumes, stage props, lighting, layouts for flyers and posters and many more things? The answer may be simple as older people have talents in different branches of life and draw from lifelong experiences. Most of the actors may like to be useful. Older male adults are more or less enthusiastic about technical things and will therefore enjoy technics and could master this important branch" (e.g., "Senior theatre" n.d.).

AGE AND THE THEMES OF PLAYS

Senior theatre performers and actors range in age from 50 to 90. The majority will be 60 to 75. In Institutions with the very old persons actors could be older than 90. In Vienna in a nursing home a performer rehearsed the fairy tale *Cinderella*. This performance was very special. 12 actors brought on the stage more than 1000 years. They acted very smoothly and the stepmother had been friendly with Cinderella. The actors knew that if anything got wrong on stage, actors might get in great difficulties. Here you really could feel that the acting group is a family.

"Theatrical literature has mirrored the popular cultural views of how we see older adults: either as pathetic victims trapped in nursing homes or as super grannies surfing huge waves and running marathons" (Kandell, n.d.).

SENIORS ` ACTING MUST BE FUN

Talking with older people about how they manage the status quo, you always hear "I only do things which are fun". Going to university, keeping an animal, playing with grandchildren, dancing, singing, sports or acting – the older persons want to have fun. This attitude might be hard for the performers in finding the right play which is not too long, not too short, a play for older audiences, or for very young people or just adapting a piece of literature – anyhow the play must be challenging. Senior Theatre mostly works successfully, because it doesn't rely on set formulas or procedures. It can be drama or comedy, inexpensive or extravagant, a singing duo or, a play being read by the actors, but whatever a performer decides, it must be fun for the actors.

Plays shouldn't be too difficult because that would require more rehearsals, and people will say: »I'm not doing this, because I have to have time for my duties as a granny for my daughter, so that she could stay in her employment, or I have appointments in the medical scene and so on«. But the plays can't be too easy either, because then actors won't be artistically challenged. Some companies have actors read their scripts on stage; others require them to memorize their lines. Or there is a combination of both (Kandell, n.d.).

BENEFITS - MORE HAPPINESS THROUGH EDUCATION AND CULTURAL ACTIVITIES IN LATER LIFE

Education in any form will add life to years and there is no limitation in what older persons can do. Taking up studies at universities, performing, acting, writing chronicles about their life, their ancestry, about their experiences in specific professional tasks or just writing plays which could be performed by fellow seniors and others (Worthington, n.d.).

CREATIVE ACTIVITY OF SENIORS IN THE FIELD OF SENIOR THEATRE IN THE CITY OF GRAZ, AUSTRIA (Kurz, 1995 to 2007)

GEFAS Steiermark `Steirische Gesellschaft zur Förderung der Alterswissenschaften und des Seniorenstudiums` or Styrian Association for the Promotion of Social Gerontology and Senior Citizens Studies` was founded in 1991 and was managed up to 2007 by Rosemarie Kurz. Between 1994 and 2002 GEFAS had been working hard to establish a Senior Theatre. It was a major effort as older people were not yet ready in Graz for this kind of educational program. GEFAS was only successful by getting public promotion and public attention.

PERFORMANCES WITH OLDER PERSONS, MIGRANTS AND PERSONS WITH SPECIAL NEEDS

Graz got a Senior Theatre Scene with a small group of Companies up to 2016. These Companies outgrew of the efforts of GEFAS Theatre. As long as GEFAS had been the leading organization various names were invented by an ever changing crew. Some of them wanted to do their own thing and new senior groups started. Sometimes these new groups vanished just as quickly as they appeared.

HOW THINGS GOT STARTED IN GRAZ

1993 Rosemarie Kurz attended a Performance of the Dortmund Senior Theatre "Jahrhundert Revue". She really and truly adored what she had experien-

ced. So it was her great wish that there had to be a Senior Acting Group in Graz too. The idea was that an integrative, intergenerational Senior's Theatre modelled after the company „Jahrhundert Revue“ should be founded.

1994 GEFAS informed older people with a proclamation in the magazine “Young and Old” which had an edition of 20.000. “Join the fun of acting in a group! We deal with our experiences, our wisdom and life experiences and want to enjoy changing them into words, phrases and gestures!” There had only been one respondent! GEFAS tried again in 1995 and there was again only one respondent. Grete Kucera, a friend, was again interested. As Kurz had been engaged in managing all managing affairs of the institution, she asked the only one interested in Seniors Acting to get going. So the GEFAS Senior Theatre could get in starting position. One of the main targets was to interest not only older persons but young people and people with special needs as well.

1995 - The *GEFAS - URANIA Theatre Group* was established with 24 active members with different backgrounds and of all ages. The advantage of this cooperation had been that the Urania offered rehearsing rooms.

WHAT HAD BEEN DONE BETWEEN 1994 AND 2006?

An Animation Workshop with the directness Gerda Klimek and Fritz Holzer an actor from the Burgtheater got interested persons so that a permanent group could be established.

The `Mezzanintheater Graz` wanted to encourage the senior actors to work with their own wisdom, life experiences and specific knowledge by transferring them into words, phrases and gestures. This workshop was the last effort for designing a Senior Theatre dealing with life experiences of older persons.

Jakob der Letzte by Peter Rossegger being adapted by Fred Strohmeier and directed by Gerda Klimek. This performance was first very successful performance open for the public.

1996 - A new *Working Group* was established and the members gave themselves a new name. The *Theatre Chaots* were led by Barbara Schrempf. The working group found a consensus and started with two topics. *Honour for men and work for women* and *Love in getting older*.

1996 - *Lysistrata* by Aristophanes, rehearsed as a modern performance under the guidance of director James Karl Vogt, was another great success of the Gefas - Theater Group.

1997/98 Beate Zweydieck of the Mezzanintheater was the directness of *die Königinnen von Frankreich* and *Das lange Weihnachtsmahl* by Thornton Wilder.

2000 - Fritz Holzer offered another Workshop in Urania Graz.

2003-2006 The *GEFAS - URANIA Theatre Group* offered a continuing workshop.

ge-Facetten a new group performed a cabaret with older women at the Graz University for a *Theatre congress*. The directness was Barbara Schnepf.

Die Bremer Stadt Senioren, an adaptation of *Brüder Grimms Fairytales* directed by Barbara Schnepf was a performance in which an older theatre audience could feel, understand and learn something about discrimination of older people.

Starting at 2000 there had been some spin-offs of actors and directors wanting to work according to their own ideas. Some of the actors alternated to the new offers concerning acting.

2000/2001 – Charly Vogt founded the theatre club *Vorhang auf*. This group broke up in 2002

2002 – *Sternstunde* was established with Barbara Schnepf as manager and some Senior Actors left the *GEFAS - URANIA Theatre Group*, who previously began their entertainment engagement with the efforts of GEFAS having up till now the responsibility working to get sponsoring from public institutions.

2007-2009 – The theatre group *grau-meliert* had been established with Barbara Schnepf at the *Urania*, an educational institution for adults.

STERNSTUNDE THE ONLY SENIOR PERFORMING AND ACTING COMPANY IN GRAZ AT THE MOMENT

Ursula Fiedler a retired lawyer is managing the group and she is responsible for the scripts of the plays which are being performed. A small group of theatre enthusiasts wanted to act in its own theatre club and so the theatre club *Sternstunde* was established in January 2002.

URSULA FIEDLER STATES:

“Nearly all of us were oldies and had acted at various amateur theatres in the past. Of course, we didn’t know what it means to establish and lead our own theatre group but we had one thing in common: the wish of making theatre and acting together! So we jumped into the cold water and haven’t regretted it until today. By dealing with theatre activities we have been motivated to activate and reactivate our creativity. These theatre activities gave us more self-confidence and vitality. Besides developing our acting skills at the performances we also focus on the social component. After rehearsals or performances we sit together in a relaxed atmosphere and discuss, listen, chat or simply enjoy being together. People get to know each other better, the acceptance between young and old people will be improved and friendships might arise. We also meet on a monthly basis even if there are no performances or rehearsals.

Moreover, we are proud that we have been quite successful in the past three years. Our performances were well attended and gained recognition so we may say that the development of our theatre group was excellent. In 2002 we started with 8 members. During the last 14 years many theatre enthusiasts

have joined us, so that, at present we are an intergenerational group of about 30 members. Our website <http://members.aon.at/sternstunde/> provides information about our theatre group, its members and information about our current production”.

The Repertoire of Sternstunde between 2002 and 2015

- 2015 – *Der tanz ums geld* nach Ben Josans Volpone
- 2013 – *Durch die finger g'schaut* frei nach der Posse „Der Erbschleicher“ von Johann N. Nestroy
- 2012 – *Zwei ist einer zuviel* frei nach dem Lustspiel *Der Diener zweier Herren* von Carlo Goldoni in einer Bearbeitung von Floris Gerber und Ursula Fiedler
- 2011 – *Die kleinen verwandten* frei nach Ludwig Thoma
- 2010 – *Ein abend mit peter rosegger*, szenische Lesung aus Werken von Peter Rosegger
- 2010 – *Liebe, lügen, scherben* frei nach dem Lustspiel *Der zerbrochene Krug* von Heinrich Kleist in einer Bearbeitung von Ursula Fiedler
- 2009 – *Der habgierige und die liebe* frei nach *Der Geizige* von Molière bearbeitet unter Verwendung des Originaltextes von Ursula Fiedler
- 2009 – *Der vierfache schweinervekäufer* (aus der Abelsberger Chronik von Peter Rosegger) für die Bühne eingerichtet von Sigmunt Wratschgo, bearbeitet von Ursula Fiedler
- 2009 – *Der habgierige und die liebe* frei nach *Der Geizige* von Molière bearbeitet unter Verwendung des Originaltextes von Ursula Fiedler
- 2008 – *Junggesellenglück* frei nach der Posse *Unverhofft* von Johann N. Nestroy
- 2007 – *Openhouse* oder *Das turbulente Wochenende* Komödie von Barbara Schnepf. Der pensionierte Lord Reginald Openhouse hofft, dass seine Frau zu seinem 70. Geburtstag in die Toskana anreisen wir
- 2005 – *Die krankheiten des herrn mimose* Komödie frei nach Molière
- 2005 – *Das liederliche kleeblatt* nach der Zauberposse *Der böse Geist Lumpazivagabundus* von Johann Nepomuk Nestroy in einer Bearbeitung von H. Mayer und U. Fiedler
- 2004 – *Jubel; trubel und intrige* eine Komödie frei nach William Shakespeare in einer Bearbeitung von *tschouk.ent.kraim*
- 2002 – *Ein cocktail voller ueberrasungen* ein Stück der Theaterwerkstatt *tschouk.ent.kraim*.

SANDRA SCHÜDDEKOPF DIRECTNESS AND FREELANCER

Abstract: Sandra Schüddekopf studied Theatre Science and North American Studies at the FU Berlin, while staging her first theatre productions. From 2001-2005 Assistant directress at the Burgtheater Vienna. Since 2007 freelancer directing at different theatres in Austria and Germany. Interested in stretching the boundaries of the Genre. Her work has been including: different gene-

rations, biographical work, storytelling, participation and done projects on the verge of science and theatre. December 2015 one of her productions was played in Wrocław in the Oratorium Marianum "Unteilbar" - a play of the lives of Marie Curie, Lise Meitner and Hedy Lamarr.

THEATRE WORK WITH PEOPLE BEYOND 50

Theatre work with people beyond 50 is a possibility to connect generations and work on a very important subject: the social bond. With changing possibilities of people of no matter what age to participate in society the question of the social bond and the possibility of getting together of different generations apart from meeting in the family can be very enriching for all participants in these projects. It can alter their views of each other. Two projects of a theatre performing group *uniT Graz* (Retzhofer, 2016) were realized by the theatre directress Sandra Schüddekopf who dealt in different very interesting ways with these projects.

Forever young being produced in 2012 by *uniT Graz* was a project dealing with the questions: What is young? What is old? Why is youth so important in our society while there are more and more older people? How do we see these persons? Do we see them at all? What did the concept of ageing change? Is there a concept? What is it about ageing that we are afraid of?

This project was designed by involving people between the ages of 22 to 75. The „play“ itself was developed by the actors using material they found themselves, fragments of fiction, as well as own experiences and biographical material. It was inspired by the production *Kontakthof* by Pina Bausch (http://www.pinabausch.de/pina_bausch/index.php.) with seniors beyond the age of 65 trying to get in contact with the other sex in a dance hall. In the dance hall encounters were not only persons of different sexes but also of different age. 16 individuals had diverse concepts of life.

Every actor / actress of this production dealt with questions concerning fear and ideas of how it is „getting old „or „staying young“. They also dealt with their pictures and fears watching one another. So the involved group of 16 people learned something of the other actors and at the same time they learned from one another. Even though it was sometimes difficult for the directress to deal with these differences and abilities, these differences inspired all of them as well.

They became a kind of family without being in a family relationship. And of course they also discovered similarities. There was a dance rehearsal that took quite long. On the next day, the young ones complained about their muscle pains, the older Actors and Actresses arrived without complaints! But there was pain, of course! Not only their bodies but also their minds were challenged by the work.

Every one of them had their own difficulties regarding the work, no matter what age. Our actors / actresses that were beyond 50 had theatre experience.

But they dreamed about a different way of rehearsing, of being present in the play, not only as a "character". They had to stretch their own boundaries of „the way I want it“ because of the size of the group. At the end they all arrived at worshipping the others and respecting their needs and ties. Therefore this project was not only successful in questioning our pictures of age but also a social project in becoming a group, a very heterogeneous group following the goal to be together on stage relying on each other.

INSTALLATION AS A FORM OF ACTING

while this project focused on stories and pictures we have of youth and age in our society, another project on female stories based on the idea, that Austrian women in a certain age have similar experiences as young refugee women. Their encounter made it possible for both of them to talk about these experiences and transform them into a video installation. It was produced in a senior home with some of the inhabitants. This installation made the audience and the directness sit in front of women of different age and origin, while listening to their stories trying to match picture and story. The presentation mode was an installation, because almost none of the participants had any stage experience and the installation seemed to be a better way to play with the origins of the stories told.

Theatre projects with seniors and younger persons are a way of sharing their experiences and showing their diversity, their reality, and their specific abilities and changing by the same way the picture of people in their mind who are older or younger or just different in some way. They actresses and actors may become role models for living together in our changing societies.

A special present will be that we have the chance of going to be friends, another will be that the directresses might use such an experiment as an inspiration and the actresses and actors as well as the audience might get a voice beyond the storytelling patterns we are used to (Leidlmaier, 2006).

CONCLUSION

Older persons nowadays may live 20 to 30 years after having been retired. This period of life might be a third of the whole life time. It is not just time, it is free time, it is time one has to fill with contents or learn to live without special contents, without a profession you might have loved, and without all the social contacts which made you this certain personality you enjoyed being up to now. So it might be important to create a new personality with new ideas, new perspectives. Doing so an older persons might start to take new interest in their biography, health, talents and start with an empowerment plan implying self-determination, the ability and the freedom to take responsibility for themselves in every aspect of life, to express own ideas, to

initiate decisions and actively participate in modern life and on social politics at all levels.

Life long learning and learning in later life are specific challenges in getting older. Adult education is changing and there are different strands. One principle demands an exchange of political- and social knowledge, an orientation in social issues in order to allow self-reliant, democratic and solidary actions. In relation to the old forms of education we could speak of empowerment and competence. Older persons shouldn't just deal with their past and loose connection to the everyday life. They should stay interested in themselves and the practical outputs of our modern society. Older persons may learn how to be part of it in order to find a role in which he finds himself in this exciting new world. Seniors Theater is one possibility for finding this place.

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LOCAL CULTURES AND SOCIETIES

VIRTUAL INITIATION OF PERSONS IN LATE ADULTHOOD - FROM CLASSROOM/LESSON EDUCATION TO GAMIFICATION

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ABSTRACT

With the development of Information and Communication Technologies one can observe the phenomenon of e-exclusion of certain social groups. Among them there are the persons in late adulthood who for various reasons do not use computers or the internet. The causes of this can be located in the low financial status of this social group. At the same time, the argument is raised that the more important problem is the lack of motivation and the number of obstacles that seniors face in their access to ICT. The paper presents the conclusions from the research conducted with the Avec Association and the Games and Innovation in Education Research Team - Edutainment (Zespół Badawczy Gier i Innowacji w Edukacji - Edutainment). This encompasses, on the one hand, problems pertaining to seniors' motivation, the obstacles that they face, their perception of the virtual world, and on the other, the description of the search for new educational methods that may make it possible to increase the effectiveness of computer skills training courses.

Key words: virtual world, e-exclusion, education of seniors, location-based games, gamification, motivation, obstacles in access to ICT

We are now entering a period unknown in history so far; a period when young people become unique authorities in the pre-figurative understanding unheard of in the past
(Mead, 2000, p. 23).

INTRODUCTION

When Margaret Mead divided cultures into post-figurative, co-figurative, and pre-figurative (Mead, 2000, p. 23) the world entered a new era. The Advanced Research Projects Agency Network (ARPANET) project was successful (Weber, 2009) which resulted in the construction of a worldwide computer web – the Internet, along with it a dynamic development of Information

and Communication Technologies (ICT). These are defined as “a combination of telecommunication, computers, interface programmes, and data systems that support, store, and transfer integrated communication between systems” (Murray, 2011), or, to put it simply, “the technology used to handle information and aid communication” (*Free On-Line Dictionary of Computing*, 2008). ICT has become a substrate of the Information Society (IS). As Tomasz Goban-Klas and Piotr Sienkiewicz point out, “it is a society in which it is not direct contacts (...) but contacts through media that constitute the dominant form of social contacts” (Goban-Klas, & Sienkiewicz, 1999, pp. 42-47). These authors also discuss the prevalent role of ICT in human communication. This definition is compatible with the one presented in a report by the *IBM Community Development Foundation*, according to which information society is characterised by a high level of information intensity in the everyday life of most citizens, in most organisations and workplaces; by the use of common or compatible technology for a wide range of personal, social, educational and business activities; and by the ability to transmit and receive digital data rapidly between places irrespective of distance” (Habib, J., Harris, K., Hellawell, S., Matthews, D., Percy-Smith, J., Taylor, J., & Thompson, B., 1997). This denotes substantial quantitative as well as qualitative changes caused by technological progress. One of the consequences of this progress is the phenomenon of the digital divide (e-exclusion), which means that the lack of ICT skills makes it impossible to fully participate in social life.

As can be concluded from the Social Diagnosis 2013 (Czapiński, & Panek, 2014) non-family single- and multi-person households have the lowest level of access to computers. Dominik Batorski recapitulates: “Access to computers and the Internet in households depends to a major extent on the type of the family. Over 90% of married couples with children have a computer, and an insignificantly lower number of them have Internet access. On the other end of the spectrum there are single-person households in which computers and the Internet are available significantly more rarely – only one in three people living alone have Internet access. [...] Married couples with no children also have a lower than average Internet access – 57%. In the case of both of these groups the lower presence of technology is connected with the fact that most of them are households comprised of seniors” (Batorski, 2014, p. 362). What is more, the access to ICT increases with income per capita in a family.

COMPUTER SKILLS TRAINING FOR SENIORS

Digitalisation and the age of its beneficiaries. According to Batorski: “the fundamental causes of the lack of new technologies in households are motivational and psychological, rather than financial or technological” (Batorski, 2014, p. 364). Furthermore: “the reason for not using the Internet in such a numerous group of people [over 40% - E.J.R.] who have such access is the lack

of the necessity for such use and a lack of the necessary competences. What also ought to be noted is that these people are not “cut off” from the Internet. They do have contact with it to a certain extent and they do use it with the help of other members of the household, when they ask them to find information that they need or to send a message, etc.” (Batorski, 2014, p. 367).

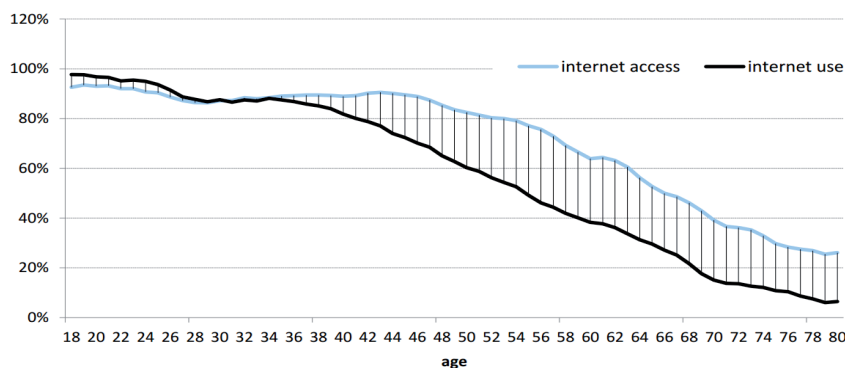


Fig. 1 Access to the Internet and Internet usage by persons of different ages; source (Batorski, 2014, p. 367).

According to the above figure (fig. 1) the access and the usage of the Internet are closely connected with the users' age. After 50 years of age the percentage of the people that have ICT in their home and who use them drops rapidly. What is more, to a large extent seniors fail to make use of Internet access even if they do have it. Statistical analyses have shown that only a small percentage of seniors use the Internet (14% of those aged 65 or more) (Batorski, 2014, p. 368). Furthermore, on the basis of a comparison with the diagnoses from previous years it can be concluded that: “The differences in the use of the Internet related to age are great and there is no indication of a decrease [...] The intergenerational differences in Internet usage are a source of a number of negative social phenomena. The more the Internet becomes the main, or the exclusive, source of information on numerous aspects of life, the more it is difficult for the persons who do not use it to achieve access to this information. This pertains not only to professional activities, but also to participation in social and cultural life. The Internet is not only a means of access to information, but it is also indirectly a means of participation and activity outside the web” (Batorski, 2014, pp. 368-369). When analysing other factors apart from age one may learn that people with lowest income and lowest social and professional status have the greatest difficulties in their access to ICT (Batorski, 2014, p. 370) which “three times points to seniors, who are prone to digital and, as a result, social exclusion. That is why it is necessary to undertake further actions to prevent the phenomenon of digital divide, and to critically analyse the educational methods that have been employed thus far”.

Motivation. The computer skills training for people over the age of 60 conducted by AVEC Association⁶ as part of the *@ctive Senior* project provided the opportunity to carry out research on the motivation and expectations of seniors as to such training courses, the barriers and the difficulties that they face, as well as the methodology of the training course. A diagnostic survey was used.

The research on motivation of seniors to enrol on ICT skills training courses was based on the model of educational motivation proposed by Mary Crowder and Kare Pupynin (1993). The conclusions drawn from the replies to the survey have been summarised in the form of a reconstructed sentence: "I want to communicate and to participate in the virtual world available to others. I want to achieve this by acquiring computer and Internet skills. That is why I am willing to learn by participating in a computer skills training course. Awareness of my own competences and participation in the lives of others will be my reward" (Jurczyk-Romanowska, 2012, p. 83). A detailed adaptation of the model by M. Crowder and K. Pupynin is presented in fig. 2.

On the basis of the presented model of seniors' educational motivation a computer skills training course for seniors was designed. It was based on the classroom/lesson method, in which the didactic aim is explicit, the training sessions are conducted according to previously developed lesson plans, the teacher occupies the central position in the didactic process, and the didactic programme is open and emphasised⁷.

The barriers. Concurrently, research on educational barriers was conducted. The barriers are understood as "various limitations and difficulties in the process of learning and self-education [...], the factors rendering it difficult or impossible to implement the idea of lifelong learning in formal, informal, and non-formal education" (Jurczyk-Romanowska, & Zakowicz, 2015, p. 196). The barriers can be divided into objective and subjective, and the criterion of the division is the level to which they depend on the seniors' attitudes and convictions.

The objective barriers pertain, first and foremost, to the phenomenon of the ageing of the organism (the deteriorating psychological and physical condition, prolonged reaction time), attitudes of the training course instructors (improper approach to seniors, infantile attitude, lack of knowledge of the specificity of educating seniors), conditions of the education process (improper rate of work, inadequate expectations and teaching methods, inadequate learning

6 AVEC Association is a non-governmental organisation founded in 2007 by students and graduates in fields of studies related to pedagogics and psychology. Its main aim is the education of seniors to prevent their digital exclusion.

7 More on the prepared training courses: *The Third Shift. Andragogical Reflections on the @ktywiny Senior Project*, ed. E. Jurczyk-Romanowska, UMWD, Wrocław 2012, chapters: *Computer skills training course for seniors - experience gained from the @ktywiny Senior project* (Jacek Gulanowski), *Advanced stage of the computer skills training course for seniors - introducing the participants to the world of the internet (guidelines for teachers)* (Joanna Golonka), *Computer and internet skills training for seniors* (Joanna Golonka, Jacek Gulanowski, Ewa Jurczyk-Romanowska)

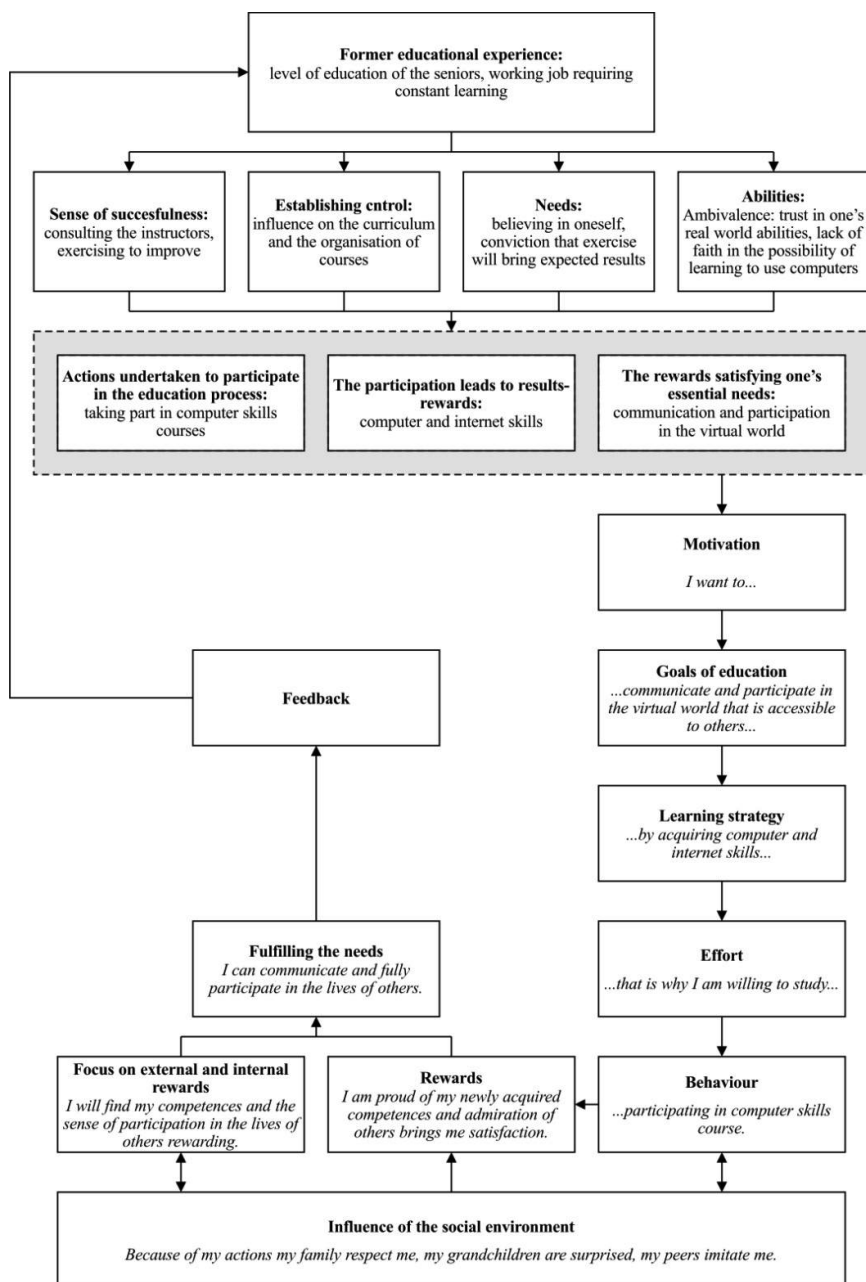


Fig. 2 An outline of the motivation in seniors' computer skills training.
Source: (Jurczyk-Romanowska, 2012, p. 83).

conditions – e.g. chairs, improper selection of teaching materials), and social and cultural changes (the teaching content not adjusted to what the seniors are interested in) (Jurczyk-Romanowska, & Zakowicz, 2015, p. 200). Among the subjective barriers in the education of seniors, which were mentioned by the investigated seniors themselves, the following can be enumerated:

- previous negative educational experience,
- the conviction that education at this late stage in life is not necessary,
- the lack of the need to develop, to gain knowledge, the get new experiences,
- the lack of self-confidence,
- the lack of motivation,
- the lack of dedication,
- the lack of faith in one's abilities,
- the fear of change, neophobia,
- the fear of breaching the sense of security,
- the fear of failure,
- the fear of the teacher's attitude towards seniors,
- the fear of being judged, especially contrasted with others in the group (Jurczyk-Romanowska, & Zakowicz, 2015, pp. 196-197).

In the enumeration provided by the seniors who began participating in the courses conducted with the use of the classroom/lesson method previous educational experiences, a stereotypical perception of the need of development of persons in late adulthood, and a number of fears experienced in the educational process are clearly combined. "Stresses of this kind not only bring back memories in seniors, but they also lead to defensive behaviour. On the one hand, they work as blocks, and on the other, they may be a form of defiance, which may lead to withdrawal, complaining, increased number of mistakes, irritability, conflicts, problems with memory and with the verbalisation of one's thoughts, etc." (Jurczyk-Romanowska, & Zakowicz, 2015, p. 198). Therefore, computer skills training for people in their late adulthood ought to be designed in such a way as to avoid situations "typical of school", which lead to stress and that trigger a number of blocks that make seniors' learning difficult.

The virtual world. In relation to computer skills training yet another problem presents itself: the seniors' perception of the virtual world as "alien, strange environment in which one functions completely differently from reality" (Jurczyk-Romanowska, & Zakowicz, 2015, p. 205). The research on the perception of the virtual world was also conducted during the *@ctive Senior* project before the ICT initiation of the participants of the courses. Such terms as: unreal, not real, "make-believe", utopian, "somewhere out there, something I can't see" were uttered. The seniors, when entering the digital world, had very little knowledge about it, they would mainly focus on the unreality of this alternative space. At the same time, they expressed hope that the strangeness of cyberspace was only passing and that understanding would come with the acquisition of computer and Internet skills. Apart from the mentioned abstrac-

tion figurative associations related to outer space and fairytales were prevalent. The seniors discussed the perceived similarities between cyber and outer space, galaxies, or even some specific phenomena of the universe. Associations with the inside of a computer as well as a network of computers were less frequent (Jurczyk-Romanowska, 2015, pp. 86-88).

THE IDEA OF EDUTAINMENT

Edutainment. When attempting to find a solution alternative to the classroom/lesson method, taking into account the fact that seniors perceive cyberspace as alien, reflections were initiated on the conception of edutainment in the education of persons in their late adulthood. Edutainment combines valuable educational content with elements of entertainment, which makes it one of the most efficient methods of transferring knowledge and forming social attitudes. The successfulness of this method lies to a major extent in the informal character of the educational transfer. It is usually implicit in a form that appears attractive to the recipient. That is why the recipients may not always be aware of the fact that they are expanding their knowledge and developing their skills (Richardson, Jasmine, Hancock, & Tellier, 2014). The research on this subject was conducted by scientists from the Games and Innovation in Education Research Team - Edutainment (Zespół Badawczy Gier i Innowacji w Edukacji - Edutainment)⁸.

The perception of games. Firstly, a diagnosis of the seniors' perception of games was carried out⁹. 50 seniors aged 65+ were asked to fill in a survey of open-ended questions. The seniors belonged to groups related to education (25 students of the University of the Third Age in Wrocław) and 25 that did not (25 declared that they did not belong to any educational groups). The first regularity that was noticed during the explorations was the division into games and computer games. In the seniors' opinion, the latter have negative connotations: they are a threat, a waste of time ("a thief of time"), they are addictive, and they have a negative influence on the personality of the gamer. They are decisively seen as dedicated to young people – that is because, on the one hand, they are unfit for seniors, they require fast reactions, and their high level of details cannot be fully perceived by people in late adulthood. Seniors see computer games as full of aggression and violence. It is interesting that many of the research subjects declared that they enjoyed games such as *Criminal Case* or *Bubble Island* available on Facebook. These are often not seen as "computer" games, but merely as leisure activity. Another issue raised by seniors in rela-

8 Games and Innovation in Education Research Team – Edutainment – was founded in 2013 in the Institute of Pedagogy of the University of Wrocław. The work of the team focuses on designing and researching games dedicated to persons in their late adulthood.

9 The research on the seniors' perception of games was conducted by members of the Games and Innovation in Education Research Team – Edutainment: Ewa Jurczyk-Romanowska, Ilona Zakowicz, and Dominik Figiel.

tion to computer games is the necessity to have advanced computer skills; as the seniors lack these skills, they avoid computer games.

In the second category created by the research subjects there were "other" games, starting with traditional card games such as bridge, various board games, jigsaw puzzles, crosswords, and riddles. Games involving movement were also mentioned. One of the seniors noted: "game has many meanings [...]. It is fun that I only associate with my childhood, playing at home, at the table, often together with my parents – some boards, cards, dice, etc. Is doing crosswords, Sudoku, playing complex solitaire, or jigsaw puzzles games? For me it is not, but I might be wrong. To me a game is entertainment for two or more people¹⁰. Other research participants noted that "non-computer" games are "something interesting, relaxing, good when you are stressed", "intellectual fun, intellectual entertainment, you can get satisfaction from solving problems", "it is a nice way to spend your time which involves emotions (elements of competition), and they are also a "confirmation of your intellectual and physical agility". When asked what game the seniors would like to participate in they mentioned logical and skill games, and games with simple rules, "adventure, action, riddles". At the same time, what was important for seniors was that the games should not only be entertaining, but also have other goals related to the quality of life of the players. Firstly, the socialising role of games was noted, because they allow one to spend time with their peers, or to establish intergenerational contacts within families. Furthermore, games allow seniors to be intellectually agile longer, they are a "workout for the mind". As the seniors wrote: "games make your brain work, your brain doesn't die like when you watch TV series"; "Riddles, intellectual games and skill games practice you thinking, perception, reflexes, they are also relaxing and fun, when you play in a team. They are all good!", "They bring a little emotion (competition, score, further levels), they practice your memory". Games can also have positive influence on health: here team competition in Nordic walking, a sport that currently enjoys great popularity as a form of physical activity that seniors can take part in. Among the disadvantages of games the possibility to become addicted was prevalent. One of the seniors stated: "The risk of addiction. I'm joking, of course, but me myself, I once burned a dinner when the crossword was particularly interesting".

Games dedicated to seniors. As the research subjects mentioned repeatedly, games for seniors ought to be adapted to their age, their abilities. This should be reflected in the size of details and fonts, which need to be larger than in the case of younger people who, as a rule, have better eyesight. What is more, they ought to take into account the slower reactions of seniors. One of the research participants noted: "Maybe this is going to sound wrong, but they should be similar to games for children – cheerful, with slow action with a longer time for reaction and with simple clear rules written for seniors". On the

¹⁰ Anonymous replies of the seniors are cited throughout the paper.

other hand, games dedicated to people in their late adulthood can by no means be infantile. Deteriorating eyesight and physical agility ought to be taken into account, but these can never be identified with lower intellectual capabilities. Games of seniors should be based on “activating memory and leading to broader knowledge, for example, making you use encyclopaedias, the Internet, atlases. You should meet people – team games”.

On the basis of the conducted research the rules for designing games for persons in their late adulthood were developed:

1. Prohibition of infantilization – the games ought to be interesting to an adult.
2. Beauty in simplicity – the graphics ought to be aesthetically pleasing and simple.
3. Respect for experience – the games ought to provide one with a chance to use their previous life experience as well as knowledge and competences.
4. Taking into account seniors’ physical condition – the games ought to be proper for the seniors’ health, the games should include a careful balance between challenge and accessibility.
5. Chance for development – the games need to be a combination of entertainment, education, and socialising.
6. Understandable rules – the games should have clear instructions which, when read, can be understood by persons with poor eyesight.

Location-based games as a didactic method. On the basis of an analysis of the experiences gathered in the course of the implemented educational projects in the form of computer skills training for seniors, as well as research results the members of the Games and Innovation in Education Research Team – Entertainment have attempted to adopt location-based games as an educational method. When defining the term location-based game the following elements need to be noted: (1) the condition of winning, that is, clearly defining when a game is won; (2) aim, that is, defining what the players have to achieve in order to win – typically there are a number of aims in a game to be achieved and victory is based on those; (3) action, that is, clearly defined steps that players need to take throughout the game; (4) obstacles, defined as all the difficulties that players have to face when trying to achieve their goals – this constitutes the essence of the game, because it is the source of enjoyment; (5), rules – limitations that players must respect during the game, and which, at the same time, make the game entertaining (Tkaczyk, 2012, p. 102). Furthermore, the game is played in an outlined area – urban space. This space is treated as a game board.

Adoption of location-based games as a didactic method is based in incorporating didactic aims and activities in games that are nonetheless entertaining. The term “gamification” also needs to be mentioned here. It is “defined as conscious and premeditated use of the mechanism and techniques employed in designing games in order to boost dedication and loyalty and to modify people’s behaviours and habits (...). The rationale behind gamification is directing

the participants towards a certain goal defined by the authors of a project and their motivation to take certain actions, even if these are perceived as boring and routine" (<http://grywalizacja24.pl/definicje/>). Following Paweł Tkaczyk it may be added that gamification is "injection of entertainment into something that was no fun previously" (Tkaczyk, 2011). Therefore, the use of the rules of location-based games and their adoption as a didactic method was aimed to move the training course out of the atmosphere of a school – which, as it is mentioned above, was connected with triggering of certain barriers in computer skills training of seniors – to a game that has been designed according to seniors' expectations. The method needed to be characterised by: competition between groups of participants, a plot developed for the game, hiding the didactic elements while at the same time emphasising the elements of the plot, rules created for the game, premeditated distracters, moving the game into urban space, giving the participants of the game the central role, and giving the educator the role of a facilitator.

Verification of the effectiveness of the location-based game method. The next step was the verification of the effectiveness of the location-based game method which was carried out by means of a pedagogical experiment. The experiment was conducted in the multimedia room in the EMPIK bookstore, in the Renoma department store in Wrocław. 57 seniors, students at Universities of the Third Age in Wrocław, took part in it.



Photographs 1-4. Photographic documentation of the pedagogical experiment in the EMPIK bookstore in Wrocław; November 2013, I. Zakowicz

The main research question set in the described pedagogical experiment was: Is teaching seniors ICT skills with the use of a location-based game more effective than with the use of the classroom/lesson method? The independent variable was the teaching method: in the experimental group the location-based game method was employed, and in the control group the classroom/lesson method was used. The dependent variables and the indicators are presented in the table below.

Table 1. The dependent variables and the indicators in the pedagogical experiment

Dependent variable	Indicator
The tempo of knowledge acquisition	Time needed to complete tasks
Participants' level of independence	Number of questions asked
Evaluation of the course	Scale of marks

In the location-based game method the game *CyberSenior Party*¹¹ was designed. The aim within the plot was to have the seniors prepare an interesting (as interesting as possible) party for their friends. The party was to have holiday photos presentation, showing a film, and preparing a musical background to make the get-together more entertaining. Information on what the aim is, where it is to be achieved (multimedia room of the EMPIK bookstore), what the available tools are (PlayStation 3), as well as tips on how to use the devices were hidden in various locations in the EMPIK bookstore. In case of the classroom/lesson method the multimedia room was organised like a traditional classroom, the lesson was based on a presentation about the PlayStation 3 given by a teacher, and having the seniors take part in a sequence of exercises aimed to help them learn to use the device. In both the groups the time needed to complete the tasks was measured, the number of questions that the seniors asked the educators was counted, and the evaluation card was distributed after the training session.

As a result of the conducted experiment it can be stated that the teaching method has significant influence on the tempo of the acquisition of knowledge (time needed to complete the tasks) and the participants' level of independence (number of questions asked). On this basis the location-based game method was found to be more effective in ICT skills training of persons in their late adulthood than the classroom/lesson method. At the same time, the selection of the teaching method has no bearing on the seniors' evaluation of the training: both the session conducted with the use of the location-based game method, and that run with the use of the classroom/lesson method were evaluated highly. The added value was the fact that seniors who were members of the group that worked with the use of the location-based game method became interested in

11 The main author of the game is Natalia Romanowska, member of the Games and Innovation in Education Research Team - Edutainment.

PlayStation 3 – they stayed longer in the multimedia room to explore the features of the device. (The results of the experiment have been described in detail in: Jurczyk-Romanowska, Gulanowski, Marcinkiewicz, 2014).

It ought to be noted that conducting the training session with the location based game as well as the experiment itself were not free from difficulties at various stages. During the recruitment of the participants it turned out to have been a mistake to even vaguely mention that it was the location-based game group that was being verified, because, as a result, all the seniors would ask to “sign up” for the experimental group. During the course of the experiment the participation was decreased – 3 persons did not show up without prior notification. However, the evaluation of the session presented the greatest problem, because the seniors wanted to “thank” the organisers for their time by giving high marks, and they tried to “consult” the answers among themselves. What is more, two of the research participants had a number of health-related difficulties during the training. That is why it appears necessary to carry out medical qualification for location based games.

CONCLUSIONS

The idea of edutainment can be successfully used in the education of seniors. It is compatible with the educational motivation model developed by M. Crowder and K. Pupynin adapted to computer skills training of seniors. At the same time, using a location-based game makes it possible to avoid a number of barriers that accompany computer skills training courses and which are typical of persons in their late adulthood. Nevertheless, when designing educational games for seniors one ought to take into account the seniors’ expectations and postulates.

The research in the form of pedagogical experiment makes it possible to propose the location-based game method as an alternative way of educating seniors in ICT. The presented results suggest a higher effectiveness of the tested game, which should constitute a motivation to design gamified training courses and to conduct further scientific explorations.

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SUPPORT OF ACTIVE AGEING THROUGH P2P LEARNING

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ABSTRACT

Personal development throughout the course of life is at the core of several important policy documents that have shaped European cooperation in economic, social and educational sciences over the last decade. The paradigm of Lifelong Learning implies learning at any age of life and underlines the importance of achieving continuous knowledge and self-care.

Pedagogy has started taking into account the age of older adults only in recent years.

The European project we are going to illustrate sought to test how well peer to peer learning can be useful to define new training and learning models for older adults.

The HiHtaST (Hand in Hand to a Social Tomorrow) project provides an example of peer to peer learning among older adults.

We provided training for adult learners to teach IT among other older adults as a means for social inclusion in five European countries. Each country had 20 learners / trainers who had other older students in turn.

Multiple choice questionnaires and focus groups were used to collect data.

The project was run in the theoretical framework of active ageing, considering the paradigm of Vygotsky's zone of proximal development and co-construction of knowledge.

The project results show that adults can acquire knowledge in peer to peer group situations with no drop-outs especially when learning real and practical tasks, which suggests that peer to peer learning works better than a frontal class in formal as well as non-formal or informal situations.

Key words: older adults, peer to peer learning, key competences

THE NEUROPHYSIOLOGICAL AND PSYCHOLOGICAL BASIS OF LIFELONG LEARNING

It is believed that once the brain has fully developed it tends to decline and enters a degenerative process which is irreversible. Progress done by neuroscience, however, has shown that substantial changes in cortical areas occur at any age and that learning deeply transforms the structural functions of the brain.

Concepts such as neuroplasticity and neurogenesis have allowed us to understand that learning is possible not only in the younger generations but it can always occur and that it contributes to the increase of the neural regeneration, thus, it slows down the effects of old age (Guglieman, 2004; Luppi, 2008; Baschiera, 2012).

Moreover, the psychology of ageing (Cesa-Bianchi, 1987; Caretta, Petrini, Sandrin, 2002) has shed light on the need to go beyond the idea that ageing represents downfall or loss, and encourages a more positive image of this process.

Research has shown that ageing assumes more positive characteristics in the elderly who are still active, healthy, surrounded by intellectual stimuli, (Maderna, AveniCasucci, Baltes&Castensen, 1996; Borowiak&Kostka, 2004; Trabucchi, 2005; AndreaniDentici, 2006; Cesa Bianchi &Cristini, 2009) and who spend their time in creative and recreational social activities –whether as a job or voluntary work or family activities.

Longitudinal psychological studies on the condition of the elderly (Zahodne, Glymour, Sparks et al., 2011) show that a high level of education and an active social life can be important in reducing cognitive decline (James, Wilson, Barnes et al., 2011).

The interconnection of research in psychology, neuroscience and education seems to offer new opportunities to investigate and experiment on the promotion of continuing education as a prerequisite to encourage personal well-being and social cohesion during the entire course of life.

Education for the elderly can represent a rewarding and efficient experience thanks to the creation of learning environments aimed at developing competences and the construction of knowledge, contexts in which strategies and activities use neuroplasticity principles to improve cognitive functions in the elderly.

LIFELONG EDUCATION AND ACTIVE AGEING POLICIES

According to the Lisbon strategy 2000 and to the strategic program *Education & Training 2010*, the European Member States have started to implement their policies for Lifelong Learning, being aware of the need to increase active participation of the elderly in order to achieve a knowledge- and Lifelong Learning- based economy.

The European Commission's communication of 27th September 2007 presents the Action Plan on Adult learning - *It is always a good time to learn*. Here the advantages deriving from continuing education –such as self-fulfillment and ageing in an improved physical and mental state- are explained in detail. Lifelong learning is recommended and supported also by the World Health Organization and it starts to have a crucial importance at a political level towards active ageing, to such extent that it has been promoted in formal, non-formal and informal contexts.

If the documents starting from 1999 had to be examined, some significant operational strategies dealing with the overcoming of ageing stereotypes could be followed. It is important to implement intergenerational and educational experiences to stimulate cognitive, meta-cognitive, relational, etc. dimensions of an elderly person.

Also during the the Second World Assembly on Ageing (UN, 2002, Resolution), the need to create a society for all ages, in which the elderly could have the right to be included in continuing education and be politically and economically active, was addressed. Active Ageing (WHO, 2002) focuses mainly on the rights of the elderly namely on their integration in the social environment. Along with the opening of the European Year for Active Ageing and Solidarity between Generations (2012), The European Commission points out some indispensable actions to promote Active ageing:

- creating sensible campaigns which value the potential in the elderly to develop their knowledge and their participation in the active society;
- promoting European projects for exchanges between older people who come from different countries, with the initiative to achieve continuing education;
- starting intergenerational educational projects to increase the opportunity of mutual learning and to challenge the danger of social isolation of older people.

There are various learning programmes and projects approved at both European and national level thanks to which older people are allowed more significant participation especially in informal contexts. However, some academics (Findsen & Formosa, 2011) have discovered evidence that a low percentage of elderly people participated in the project in contrast with the younger generation; a very low percentage of foreign elderly people; a significant decline in participation over the age of seventy probably due to lack of information or physical / psychological obstacles.

These are isolated experiences and limited in time (Calza Bini, Lucciarini, 2011) issuing from the organisations and the partners involved.

In most cases, the European actions of Lifelong Learning revolve around a target of people over 50 who still work, purposely to guarantee economic productivity and in order to save retirement pensions. Today's politics seem to insist on it to show the sustainability of the increase of competent older people in the public system.

PEER TO PEER LEARNING: THEORIES AND STRATEGIES

Most educational projects among peers with the aim of promoting active ageing, volunteering, learning in old age, active citizenship and solidarity, seem to give significance to the role of the learner's experience (Dewey, 1947) and to the empathy and the authenticity of relationships (Rogers, 1969). They also gather the models of learner-centered education (Cantor, 1946), discovery learning (Bruner, 1993) and the adult learning theory (Knowles, 1989).

These projects put the concepts of empowerment at the basis of the educational process.

Peer to peer education becomes, thus, as a social process that sustains a lot of different relationships: cooperation, collaboration, mutual interdependence in contexts of formal learning as well as non-formal and informal learning, according to four direct principles (Ripamonti, 2005):

- social skills education
- active citizenship education
- cultural education
- empowerment education.

HiHtaST (Hand in Hand to a Social Tomorrow) is a project that focuses on education as a social form, providing learning occasions with the desire of increasing the quantity and quality of the social relationships of older people in order to contrast the risks of social isolation and marginalization, improving the construction of the methods of communication and of meeting occasions. It is about providing the social context of old people's lives by connecting them through real pedagogical mediation.

With regards to the education of the active citizen, the reference is to the educational paths that develop competences in the making of social and cultural or care services (Risi, 2009). It is important, from an educational point of view, to give priority to those actions that support the development of social competences in a non- self-centered perspective.

The concept of education in terms of culture and update relates to projects that want to fulfill the desire of the elderly to enrich their knowledge and competences, coming closer to a discipline which was not cultivated previously.

The concept of empowerment refers to the implementation of the conditions and the processes allowing people to work to achieve their own goals and to overcome problematic situations by using their knowledge.

The main educational areas in which various projects are taking place are social and useful activities, cultural activities, technology courses.

The most common pedagogical aspect in educational projects among peers is that of *scaffolding*, which is strictly connected to the concept of proximal development zone (Vygotskij, 1980), that is, "*the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving in collaboration with more capable peers*".

Educational experiences of peer mentoring and tutoring can be interpreted as *"a virtual interconnection of proximal development zones in which many possibilities are brought to help, stimulate and orientate the learner in various ways"*, leaving space for autonomy and responsibility, in a climate of sharing and exchange (Calvani, 2000, pp. 80-81).

Spigner-Littles and Anderson (1999) underline that the oldest students learn better when the learning activity is structured in a way that:

- it helps them to develop new competences;
- it challenges their concepts and their point of view;
- it contributes to reconsider the way they look at the world
- it promotes the self-regulation of the learning process

Peer education also occurs through the occasions that learners have of being authors themselves and constructing their own knowledge. Furthermore, it occurs through the control and the monitoring of their own knowledge and the analysis of their experiences and competences.

Taking into consideration the six pillars of adult learning theory (Knowles, 1984):

- the need to know: before being involved in educational actions, adults want to know why they have to learn something;
- the concept of self: adults feel responsible for their decisions and for their lives and develop a deep need of being able of doing things themselves;
- the role of experience: adults enter a formative activity with their own experience;
- the willingness to learn: adults are willing to learn what they need to know in order to face various situations in life;
- the orientation about learning: adults learn from real life;
- motivation: adults are urged to learn from internal pressures;

it is understood that the educational activities among older people need to allow processes of cognitive methods and meta-cognitive criticism.

TOWARDS A FRAMEWORK FOR PEER TO PEER LEARNING

Questions about which kind of peer learning in the same age cohorts can be designed and which pedagogical paths can be structured -while respecting different time and learning method- to encourage the transition to a new culture of learning suiting the needs of older adults are open.

Bearing in mind that older people need to maintain solid social bonds and make new friends and acquaintances, the emotional dimension can be developed with the cognitive one.

Emotional and social factors play an important role in learning at any age in a way that it is important to create an environment which is full of connections when setting up a pedagogical project.

It is therefore fundamental to maintain the centrality of learners and their experience as to educate through a teaching method which is based on the interest of the participants, their expertise and their life experience.

Educating according to constructive models reminds us that learning implies socialisation and the cultural acquisition of the meaning that the subject elaborates autonomously, in the light of the individual self.

Jonassen (1994) confirms that creating a constructive learning environment is much more complex than planning traditional pedagogical interventions, but also suggests some useful recommendations in the practice among peers:

- putting emphasis on the constructions of knowledge instead of its mere repetition;
- offering learning environments deriving from the real world;
- promoting reasoning and thinking;
- favouring the cooperative construction of knowledge through collaboration with others.

This entails an environment where the participants can exchange views and experiences following personal paces, times and styles. Such educational context offers stimuli and personal experiences which are adequate to the participants' personal interests.

Scaffolding is very strong and structured in every project (Calvani, 2000) and the trainer/facilitator seeks to:

- create an atmosphere of dialogue and of mutual acceptance;
- promote positive and constructive interpersonal relationships, so that the participants feel they are part of a community;
- give value to the learners' attendance;
- promote cognitive styles supporting multiple talents;
- construct shared meanings;
- stimulate meta-cognitive and self-reflexive processes.

Problem-solving, simulations, *cooperative learning*, *mutual teaching* are the most used strategies in peer education projects because they allow practical activities.

Such pedagogical approach conceives the construction of knowledge as an interactive process in which people learn from each other and not just from a narrator; it is in the nature of human culture to form a community where learning comes from mutual exchange (Bruner, 1997).

Today's knowledge society requires the individual should be the responsible protagonist of Lifelong learning. Constructive teaching is also applied in collaborative multimedia learning environments offered by information and communication technology.

Discussion forums, chat rooms and learners communities are environments in which older people can share and exchange their opinions and construct significant and motivating learning.

Workshop environments also promote peer to peer learning, as they are spaces in which different generations learn by doing surrounded by everyday things -namely theatre, creative writing, old professions, technology, kitchen, art.

Connection and collaboration workshops to solve problems together, to create shared projects working together using the knowledge and ability developed within the group. These are spaces of reflexive action in which theory, techniques and practice, experience and reflection, emotion and rationality, generativity and creativity are pulled together.

Through the HiHtaST project we have sought to test how well the medium of peer-to-peer learning can spread solidarity as a means to increase the level of human capital for every generation.

“HIHTAST” PROJECT

Today’s elderly also have to face very different and cognitively much more demanding situations and social scenarios than in the past. The proliferation of technology has created a so-called digital divide in which they are always at the disadvantaged end. Together with the development and the entrenchment of cultural models of productivity and efficiency, this has placed them in the unfortunate situation where they are often socially discriminated against, thereby affecting their level of participation in the economic and socio-cultural development. Active citizenship is connected to the ability to access information and those who are not educated in accessing modern media such as the Internet can be excluded from society (Mackay et al, 2001).

HiHtaST LLL project aimed at:

- empowering older adults in IT skills,
- creating a high quality learning environment,
- using IT to keep older people involved in society,
- organizing a peer to peer network for the mutual support of older people,
- adapting pedagogical models and learning material to the needs of the target group,
- establishing online contact among older people from different countries,
- exchanging good practices on IT training of older people,
- engaging older adults to learn new cultures,
- reducing isolation among certain vulnerable groups of people through peer-to-peer learning,
- creating specific lessons for older adults based on what they need in the IT society,
- creating a good climate to study in an informal way but with useful results in daily life,
- avoiding the drop-out of students through the help of classmates,
- sending older adults abroad teaching a foreign language in another European country.

The project is financed by the European Community and it focuses on IT skills for elderly people who want to learn how to use new technologies and how to teach/train their peers in the same field.

The idea is to create a high quality learning environment for senior citizens.

The partners (coming from educational centers based in Belgium, Italy, United Kingdom, Portugal, Turkey), pointing out that learning needs to focus on the interests and motivation of older adults, experiences in education and the barriers faced in accessing education, investigated the needs of older adults who were going to participate in the project, concerning IT skills.

At the beginning of the project, a questionnaire was created to get a clear view on the learning needs of the target group. Their input were of major importance and were used for the development of the pedagogical material.

The partners shared good practices resulting in a pedagogical model, developing a training programme and learning material. They organised training sessions for older adults, established an online platform where they could meet, enabling them to become active online and to use the online technology. The older adults were provided with training which enabled them to operate a PC or a MAC, to use the internet and other relevant communication software such as Skype, Facebook, etc. A peer to peer network was established locally, nationally and internationally amongst older people and this network provided training and support to other elderly who needed it. This was a way for older adults in the EU to participate in social life, share experiences, connect with each other and learn new cultures, increasing collaboration and continuing education programs.

METHOD

During the project their feedback was considered and at the end they were asked to fill in a questionnaire to see if the project addressed their learning needs.

A multi-method approach was used for the analysis with a predominance of qualitative techniques. These sought to verify the achieved goals and the communication competences acquired (through observation, focus groups, self-analysis questionnaires, interviews).

Quantitative techniques were also used when analysing the responses of the evaluation questionnaires.

FINDINGS

The results of this monitoring suggested that:

The elderly strengthened relational competences among people from different countries, discovering new learning opportunities in a context that promoted solidarity.

Using ICT they could meet other European elderly groups, creating a network to learn about other European cultures and establishing new connections.

“What I liked most was the idea of meeting people from different countries who were in different areas and had different experiences. It was lovely chatting with somebody; I learnt quite a lot from their way of life and what they thought about different things.

In this group there was a warm ...friendship ... It was great to learn so much about life from other people and their way of coping with things... I felt at home" (Italian participant).

These older adults found that learning in a group where they were all in the same situation about overcoming the fear of learning a new technology was of huge benefit to them.

A successful participation in educational and learning programmes can reinforce a sense of self-efficacy for older adults (Mehrotra, 2003). HiHtaST members, for example, found that being part of a group could help improve their self-confidence, particularly in using technology: *"Our age are not technology-minded. We didn't see the relevance of computers as easily as younger people, but as we learnt more, we began to see the relevance of computers to us"* (Portuguese participant).

Older adults developed personal skills and competences such as: ability to participate actively in learning activities, to learn together with other people, to understand and accept different points of view, to adapt communication to situation, to express emotions and feelings (See figure 1).

They reported that two important aspects of participating in the HiHtaST project were acquiring new knowledge and trying new activities. Learners reported that keeping up with technological advances was important, especially to keep in touch with family and friends via email.

The need for practical experience was apparent in the course. Participants found that they had problems in remembering what they had learned, and mentioned that they needed constant repetition of material to memorize it.

A part of success of the classes with older adults were the schoolmates (also older adults) who had started ICT just some years earlier. The adult students liked to get help from somebody of almost the same age and that was an example that using ICT was still possible.

The classmates who helped in the class had a key role in the integration of all adults in the class group. Everybody understood that if the atmosphere was right it was a lot easier to learn. Different studies show that the environment where people study has a direct influence on their results and that peer support may be a factor in returning to education (King et al, 2002). This has implications for academic providers, in designing a curriculum that is diverse in teaching methodologies and settings and appropriate for adults of all ages.

One of the issues that is very common for most adults is that they are shy to ask their children and grandchildren basic ICT questions and fear negative reactions.

In this picture, peer learning appeared as an educational purpose and the background to design and structure interventions, activities, and contexts to support autonomous and active ageing and social cohesion.

Tutors noted at the beginning of the computer course that learners got often frustrated by their lack of knowledge or experience with technology, but with time and their scaffolding, this disappeared and they enjoyed the learning experience.

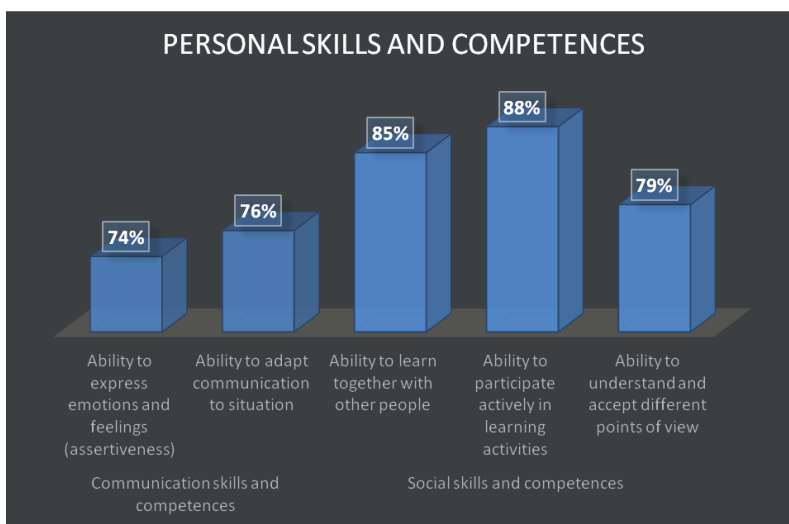


Fig. 1. Personal Skills and Competences Developed by the Elderly.

Source: Own chart.

“At first I felt full of doubts about even understanding the subject. Then I began to realize that I was learning more than I thought (Turkish participant)”.

Some older learners had sensory problems that needed to be accounted for in the learning environment. One participant had problems viewing the screen, another mentioned that she had problems hearing. Both were supported by a facilitator and were happy in a one-to-one class situation while moving towards a certain degree of proficiency.

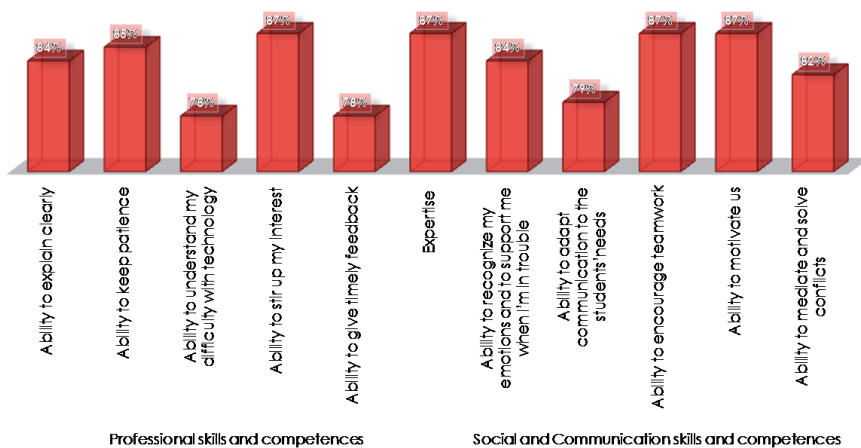


Fig. 2. Personal Skills and Competences Acknowledged by the Elderly.

Source: Own chart.

The elderly acknowledged those skills and competences in their trainers: the ability to increase their interest and expertise, to keep patience, to explain clearly, to understand their problems with technology and to give timely feedback. (See figure 2). They also underlined their social and communication skills and competences: the ability to encourage them, to motivate them, to mediate and solve conflicts, to adapt communication to their needs and empathy.

CONCLUSION

In a paper about this project, De Meyer (2014) underlines how seniors were motivated to follow the lesson in a good atmosphere without any drop-outs. That was because the elderly were supported by their peers in the class. That is a huge difference with normal classes where there are a lot of drop-outs because of lack of support. The teacher cannot help everybody.

The mix of classical teaching and classmates support to the elderly created the best results to keep them in the class. As the classmates were also older, the older adults accepted their help faster because they felt they were “equal” and they were already where all the students wanted to be: being self-reliant on the internet.

The project coordinator provided a platform for older people to share their life experiences and their variety of skills and talents with each other. It was a comfortable and safe environment that encouraged learning at an appropriate pace, using methods suiting the needs of the individuals involved. This is a useful model which could be adopted to suit a wide variety of groups of older people and the types of learning activities they wish to pursue.

This study brings suggestions from older learners themselves about their preferred styles of learning and how facilitators can meet their needs in the classroom. However, this research focused primarily on the facilitation of IT-based learning, without considering any gender issues or cultural issues. Future research on older adult learning should take these issues into account.

The elderly should not pursue simple instrumental learning, yet they should recombine their knowledge and skills in the light of the fickle life situations dealing with the complexity of today’s life (Bauman, 2008).

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