Handbook on Brain Training for Elderly

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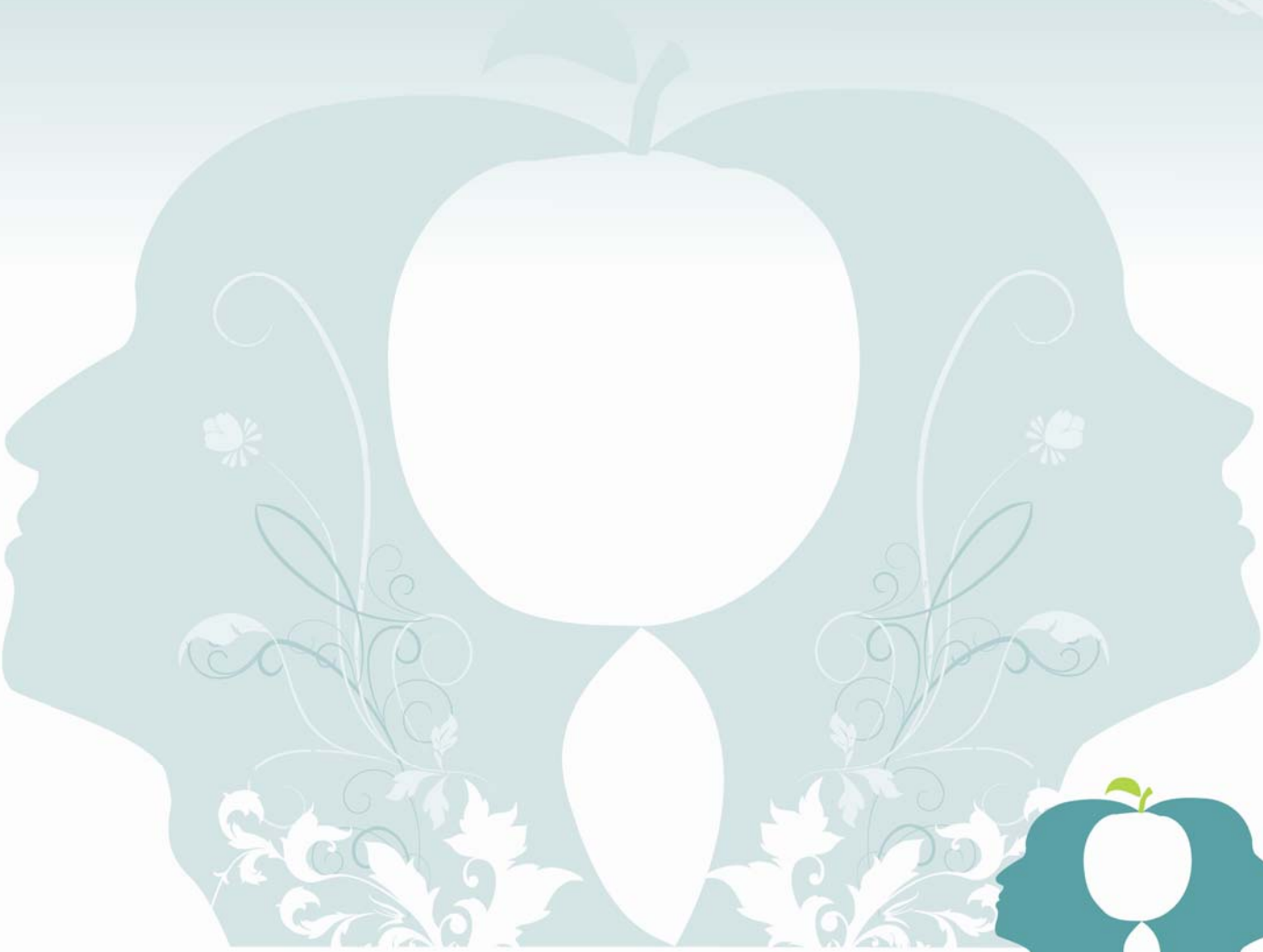
MINDWELLNESS PROJECT: Improvement Learning Capacities and Mental Health of Elder People



mind wellness

Education and Culture DG

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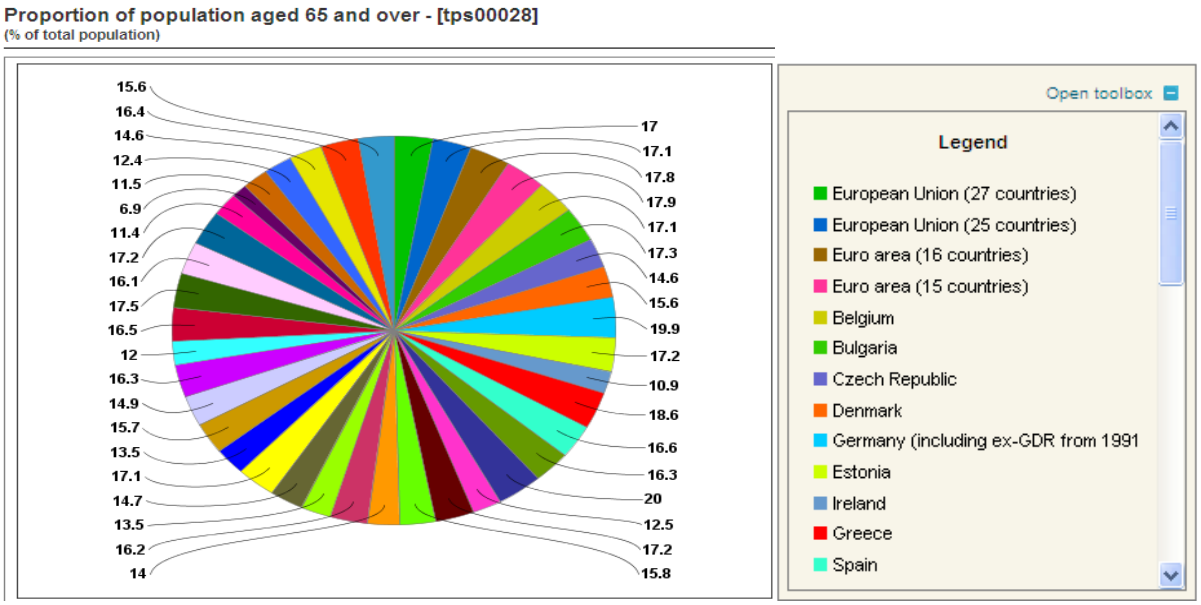
1 INTRODUCTION. GENERAL GERONTOLOGY

Maintaining mental health is essential for the well-being of each human being. In older age in tandem with other physiological changes there is a tendency to experience losses of mental functions. Some of these changes are due to various diseases or irreversible ageing procedures. However, many of these changes can be prevented or slowed down by leading an active life, considering several factors (e.g. healthy diet, social contacts, continuous learning, physical fitness, etc). This present handbook is aimed at giving users an overview of the findings of project Mindwellness, which is a 2-year international project, funded by the European Union's "Grundtvig" programme. There are 11 project partners in 9 countries, including relevant specialists in adult education, pedagogues, medical doctors, university researchers, ICT experts and social researchers. The project has developed training material aimed at older people (working or retired) to help them retain mental flexibility (www.mindwellness.eu - training tool). This handbook is a supplementary material for older people, trainers and experts interested in this field.

Ageing is one of the greatest challenges in modern Europe. Due to improved health services, better nutrition and better social facilities as well as reduction in birth rate, life expectancy has been increasing. According to statistical data of Eurostat the rate of the proportion of population of people aged 65 and over has reached over 16% in most of the Europe27 countries. (Chart 1)



Source: Eurostat

Life and health expectancy

While half a century ago most people died before the age of 50, now the global average life expectancy is estimated about over 65 years (data of the WHO). Life expectancy in Europe

has increased even more in the countries of Europe. As chart 2 demonstrates in most of the European countries life expectancy has significantly increased especially in female population.

Table 4: Main fertility and mortality indicators (national estimates)

REGION/COUNTRY	Total fertility rate (children per woman)			Life expectancy at birth: males			Life expectancy at birth: females		
	2000	2007	2008	2000	2007	2008	2000	2007	2008
EU Member States									
Belgium	1.62	1.81	1.82 p	75.1	77.3	77.5 p	81.4	83.3	83.5 p
Bulgaria	1.27	1.42	1.48	68.2	69.2	69.5	75.3	76.3	76.6
Czech Republic	1.14	1.44	1.50	71.7	73.7	74.0	78.4	79.9	80.1
Denmark	1.77	1.85	1.89	74.3	76.0	:	79.0	80.5	:
Germany	1.38	1.37	1.37 p	:	76.9	77.2 p	:	82.3	82.5 p
Estonia	1.39	1.64	1.66	65.1	67.4	67.6	76.0	78.5	79.2
Ireland	1.90	2.03	:	:	76.7	:	:	81.5	:
Greece	1.27	1.42	1.45 p	75.4	77.0	77.2 p	80.5	82.0	82.2 p
Spain	1.23	1.40	1.46 p	75.6	77.7	79.1 p	82.5	84.1	85.2 p
France	1.89	1.98	2.02 p	75.3	77.5	77.5 p	82.8	84.4	84.3 p
Italy	1.26	1.37	1.41 p	76.5	78.4	78.8 p	82.5	83.8	84.1 p
Cyprus	1.60	1.39	:	76.1	:	:	81.0	:	:
Latvia	1.24	1.41	1.45 p	64.9	65.8	67.2 p	76.0	76.5	77.9 p
Lithuania	1.39	1.35	1.47 p	66.8	64.9	66.3 p	77.5	77.2	77.6 p
Luxembourg	1.78	1.61	1.61	:	77.6	:	:	82.7	:
Hungary	1.33	1.32	1.35 p	67.1	69.2	:	75.6	77.3	:
Malta	1.69	1.37	1.43	:	77.2	76.9	:	81.8	81.9
Netherlands	1.72	1.72	1.77 p	75.5	78.0	78.4 p	80.6	82.3	82.4 p
Austria	1.36	1.38	1.41	75.1	77.3	77.6	81.1	82.9	83.0
Poland	1.37	1.31	1.23	69.7	71.0	71.3	78.0	79.7	80.0
Portugal	1.56	1.34	1.37 p	72.9	75.2	75.5 bp	79.9	81.6	81.7 bp
Romania	1.30	1.29	1.35	67.7	69.2	69.5	74.8	76.1	76.7
Slovenia	1.26	1.38	1.46 p	71.9	75.0	:	79.1	82.3	:
Slovakia	1.29	1.25	1.33	69.1	70.5	70.9	77.2	78.1	78.7
Finland	1.73	1.83	1.85	74.1	75.8	76.3	81.0	82.9	83.0
Sweden	1.55	1.88	1.91	77.4	78.9	79.1	82.0	83.0	83.2
United Kingdom	1.84	1.90	1.94 p	75.4	77.6	:	80.2	81.7	:

Source: Eurostat

It is of the joint responsibility of the states, the society and the individuals themselves to enter into high age in as good health as possible and maintain their physical and mental health. People are more concerned with their health expectancy than with their life expectancy. According to the WHO health expectancy can be defined as „life expectancy in good health, and amounts to the average number of years an individual can expect to live in such a favourable state." (www.who.org).

Biological features of ageing

It is generally stated that ageing and older age shows diversity and generation of the third age should not be considered as the grey mass of people but as a diversity of normal or abnormal ageing processes. It is also to be emphasized that ageing does not happen according to the „calendar", but there are significant variants in the peculiarities of life styles and health of different older individuals. As ageing is dependent on the whole life sequence of the person it can be characterised by the features of the so called Functional Capacity (FC) of one's life. FC is the personal capacity of the physical, mental and social functions. According to researches the physical features of "normal ageing" between ages 30-90 are the following:

- The mass and strength of muscles decreases by 30%.
- Nerve conduction slows down by 15-25%.
- The brain's weight diminishes by about 300 grams.
- The number of taste buds on the tongue is reduced from 240-250 units in juvenile to 40-50 units in older age.
- Amount of blood flowing through the body is reduced by half.
- Vital capacity of the lungs has reduced by half by the age of 75.
- Renal excretory function decreases by more than half.
- Vision and hearing is affected by 70-80%.

The characteristic of these changes as "normal aging processes" is that the individual systemic changes in cell, tissue, organ only narrow the operational capacity over time, but the balance of homeostasis is maintained at all times. Thus, the 'satisfactory' and the relative levels of "sustainable" health can be maintained in later life. Any changes that adversely affect the homeostasis, tilt the balance is considered pathological processes. The early detection of these determines the possibilities for influencing them. The biggest challenge of aging is realising the normal and pathological changes, their rates and professional curing of them. We also have to consider the fact, that these "normal ageing processes" can be influenced by the individual.

According to geriatrics which is the science dealing with physical and health aspects of ageing, defining the quality of life in old age requires to highlight the following aspects:

- Individuals may , increasingly differ in age, there is no so called single aging model
- A rapid deterioration in organ system or function is always some kind of pathological change, rather than the normal consequence of aging.
- Reduced capacity due to aging, however, increases the emergence of risk, so in this context lifestyle and personal adaptation become important.
- The elderly are diseased not because of their age but because of pathological processes.
- A new disease affects the most vulnerable and most sensitive part of the individual's organizational system. Recognising this determines the treatment programs.

In increased aging appears the so-called "5 i"s: immobility, incontinence, instability, intellectual decline and iatrogenia. There are several signs that are considered to be diseases at a younger age, however, in older age; they are just phenomena and consequences of normal complaints of ageing. Besides Geriatrics, which mainly deals with health aspects of ageing from a medical point of view, a new science, Gerontology, has been developed.

Gerontology

Gerontology is a multidisciplinary science which gives a more general overview on ageing and the phenomena of older age. It is "the study of the social, psychological and biological aspects of aging." (Wikipedia) It covers the following fields:

- Studying physical, mental, and social changes in people as they age.

- Investigating the aging process itself.
- Investigating the interface of normal ageing and age-related disease.
- Investigating the effects of the ageing population on society.
- Influencing policy and programmes in relation with ageing and the elderly (Wikipedia)

Gerontology argues that quality of life of an older person is dependent on several phenomena much more complex than the medical health of people. The main factors contributing to the well-being of an older person include:

- Physical activity.
- Social integration.
- Healthy nutrition.
- Mental activity.
- Spiritual links (Ivan,2008)

Researchers in gerontology claim that although many factors of ageing are genetic, the speed of ageing can be influenced by how we adopt healthy and active lifestyle encountering the above mentioned main fields. In the field of physical fitness, for instance, researches have shown that with regular exercises both the cardiovascular capacity and the muscular strength can be maintained or increased and also has an effect to extend lifetime, especially active lifetime. The same process occurs with mental fitness. It has been proven that if we keep our mind active and exercise the brain regularly, cognitive performances are enhanced. This present handbook offers some information on these exercises and you can also find many examples in the online training material of the project. (www.mindwellness.eu –training tool)

Social aspects of ageing

Old age used to be regarded as the source of wisdom and experience. Older people had a respected role in societies, could contribute to the social life of the communities in many levels including family and even politics (just think of the Gerousia (Council of the Elders) in Ancient Greek Times). Today, in welfare states, the shift of focus has changed. Well-being of individuals has gained priority. Succeeding in life has been connected to the achievements on the work market and the value of experience piled up over the ages has diminished. Nowadays older age is usually regarded as a burden to society. People who drop out of work or get retired tend to be seen as economically useless. The financial incomes of people in retirement normally decreases, although there might be some other expenses, like the cost of medicaments, or the increased costs of living alone and so not sharing payments. Poverty (whether objective or subjective) is only one of the hardships for the majority of the elderly. Other factors include isolation (due to loss of friends and relatives, social exclusion) and diseases leading to a gradual loss of independence. These all could lead to depression, which also results in worse cognitive performance.

Therefore it is crucial to combat these processes both at individual and at policy-making levels. We, ourselves can contribute to our social reintegration a lot and can partly or totally vanish isolation. The handbook and the online training material contain hints and exercises to help you do this.

Conclusions

There are many factors influencing cognitive capacity in older age. It is stated that by leading a healthy lifestyle and exercising body and mind old people can slow down the process of mental deterioration. In general we can state that ACTIVITY is a key factor in maintaining the quality of life in older age. As studies indicate (Ivan, 2008) daily duties and tasks rather than temporary ones can affect efficiently mental and physical fitness. Maintaining mental fitness is regarded to be essential in the sustainable quality of life of the elderly. Intellectual capacity (IQ) due to ageing might deteriorate with age in several fields; however, there are certain areas where the performance can be stable even after a certain age. Moreover, experience based intelligence and emotional intelligence can be well-preserved, even increased and these can compensate for certain losses in some cognitive fields.

We hope that our handbook and the corresponding training material can support the people of older age to maintain or even improve their mental well-being.

2 MAINTAINING MENTAL FITNESS. ACTIVE AGEING

2.1 Introduction to learning in higher Age

Memory is one of the three groundworks on which reasonable life is based on. The two rest of the groundworks are perception and thinking. Almost everything that the human being does depends on what kind of information we derive from the surrounding environment and use for arranging our relations with surrounding world. From human's viewpoint, memory is a sign of having acquired useful skills, habits, information and knowledge for maintaining and evolving of our organisms, but also knowledge and experiences of what is hurtful or harmful. For the development and preserving our civilization and culture, it is essential for the human to be aware about the continuous existence of ourselves and our descendants in time, bearing in mind not only our past and present, but also the planning of our future. Memory is not a simple mechanism, but a body of different mental capacities. The existing or lack of one type of memory does not necessarily mean that all other memory types are also existing or lacking at the same time. (Tulving, E. p.25-37.)

We can not separate memory and learning, they are tightly connected with each other. There are several options for describing and classifying memory.

Remembering i.e retaining consists of three stages that cooperate with each other when the brain is functioning normally: memorizing, retaining and recalling.

Accordingly with maintaining and using the acquired knowledge, semantic and procedural memory is differentiated.

Semantic memory designates the human knowledge about surrounding world. It refers to factual knowledge transmitted by symbols. The essence of semantic memory manifests itself rather in knowledge. Semantic memory comprises information about the surrounding world, society and verbal conceptions about the subject matter that is being dealt with. It is possible to describe the conscious i.e declarative subdivisions with words or verbally.

Procedural memory is the process when we know how to do something for achieving our goals. It is more connected with the act itself than the idea, requiring continual rehearsing, and it is possible to execute it automatically without focusing one's attention on it.

There are also activities where semantic memory – which carries information about the theoretical basics of activities – is connected with procedural memory that carries knowledge of how to achieve something necessary.

It is also possible to classify memory on how long is the time period during which people remember. Basing on remembering events, the memory is divided into short term memory, intermediate and long-term memory.

Short term memory – lasts for a second or minute, it is based on the increased activity of neurons where nerve impulses are circulating temporarily in the circle of memory's impression. The second possible explanation to short term memory is the component of presynaptic facilitation or the genesis of halt that absorbs other synapses near the pre-synaptic section of the nerve cell, and that lasts for seconds or minutes. There is also a third possibility: the amplifying of synaptic transmission with accumulation of huge amount of calcium into pre-synaptic structures. If the amount of calcium is higher than the mitochondrions or endoplasmatic reticulum can absorb it to themselves, then with the influence of calcium the time-period of mediator's exiting into synapse's slot is longer. Short term memory acts as a so-called working memory and it holds only a certain amount of information.

Sensoric memory i.e. sensing memory lasts a very short period of time: the sensory experiences of seeing, hearing and feeling remain as special reflections into sense organs for a fraction of a second. The **echoic memory** is also used as a term for this memory. All fresh sensings are collected into sensoric memory for a short time period: we are aware about the time, place and ourselves although we are not thinking about it all the time. If necessary, we can recall it immediately.

Intermediate memory is a type of permanent memory differentiated by some authors that lasts for days or weeks and then turns into permanent memory or fades away. This type of memory is based on structural as well as chemical changes in pre- or postsynaptic structures.

Long-term memory is a memory that can be derived also after a number of years, even during the whole lifetime. Permanent memory is divided accordingly with the type of recorded information into explicit and implicit memory.

Declarative i.e. explicit memory is connected with integrative thinking that helps to remember details about surroundings, time, the causal relations of events, the meaning of experience, and also about something that has been forgotten. In deriving something, declarative memory needs the participation of consciousness (comparison, evaluation etc). Declarative memory deals with knowledge and it is possible to describe it verbally. Inside declarative memory we can distinguish episodic or autobiographic (memory for information and events connected with personal experiences and oneself) and semantic memory. Declarative memory is a part of conscious long-term memory dividing into semantic and episodic memory or information and event memory.

The information is saved into long-term memory for a longer time period – it is possible to recollect it from there. For instance, if we talk about events from the day before, we need long-term memory, i.e. the events from yesterday are saved in memory and it is possible to remind something if necessary. The capacity of long-term memory is considered limitless. It also means that the ability of human being to learn new things and to acquire new skills preserves for the whole life-time. The information saved into long-term memory can be verbal, in pictures or a smell.

Non-declarative memory is a part of unconscious long-term memory that divides into the memorizing of different skills and ways of functioning. The memory for ways of functioning

comprises data that can not be expressed verbally, for instance the acquired skills, adopted behaving manners and strategies, reflexes, sometimes it is also called procedural memory.

There are also descriptions about **working memory.** This is a short-term memory connected with the structures of long-term memory that is used in intellectual activities as long as a certain stage in problem solving has ended. The data in working memory is preserved for some seconds. The working memory is the central part of information processing. A short-time memory can use only a certain amount of memorable material. It processes consciously and actively. It depends from the importance and quality of the data whether it is not memorized or it is sent to long-term memory. A certain cortical section deals with the correction of information units as long as it is used. The new information is integrated with existing memory traces and accordingly with this an action plan is made. In case of disorders of working memory, the person does not remember what was on the left while looking on the right. The working memory enables to collect the serials of facts from short-time and permanent memory, to analyze them together and to solve the problem logically. The working memory is also necessary for coding explicit memory and for recalling.

Memory can be connected with conscious learning, in this case we are talking about **conscious remembering**, or if it may have happened unconsciously – **unconscious remembering**.

During the learning process, the human acquires knowledge about the surrounding world. Having obtained new information, the brain has to analyze whether this data already exists and needs only recalling, or it needs systematizing, coding and saving in a way that it is available and can be used in the right time and place.

Perspective memory i.e. memory channelled to the future helps to think about the future: for instance we remember that on the last weekend in April we must turn the clock one hour ahead; and in this year the spring vacation is at the beginning of April.

Several factors influence on how good and accurately information is saved. Lack of attention, tiredness, consumption of alcohol, feeling sad – all this can bring out disorders in saving information, retaining it or recalling.

Repeating is the basis for preserving the acquired information. At the same time it is important that the repeating process is done with active attention and that it is not only a mechanic activity. Repeating without attention is less active as the activity with deeper concentration.

Coding is an activity during which every event and fact is memorized in a characteristic way depending of the mental activity during memorizing. Coding can be directed with the help of instruction and a directing exercise, it is possible to preserve it and to use it later, i.e. to recall it. Different objects are coded differently and thus the result is different memory traces. One of the important factors is to which limit the coding treats the meaning of material. An already interpreted subject can be learned more easily than the one without meaning. The ability to acquire something depends largely of what the person already knows. People understand better the activities that have been interpreted and the knowledge acquired earlier helps to acquire new material.

Remembering and the important sections of the brain

We are constantly learning and memorizing new information and skills. If we have consciously planned of using the memorized data in the future, we try to forward the data to those sections where it is possible to preserve the acquired data. If we need certain data then we apply those brain functions that search the preserved data and then we can use it.

It is noted that the left prefrontal cortical side is connected with memorizing into episodic memory, the right prefrontal cortical side is more connected with reading data from episodic memory (recalling). This pattern of results is called HERA (Hemispheric Encoding/Retrieval Asymmetry).

The functioning of short- and long-term memory is based on different structures of brain and their mutual cooperation.

The structures of internal temple lobe collect and process incoming information – the data is then transferred to hippocampus. The data makes a round in hippocampus and arrives back to temple lobe, most probably the data is then preserved in long-term memory. The thalamus deep inside the brain has also an important role in remembering, the information is processed there also.

The memory of acquired moving skills is located in basal nuclei. Pons and cerebellum are important in preserving certain reflexes.

Sensoric memory is located in the area of certain sensings in cerebral cortex and temporal lobe, the working memory that is important from the viewpoint of directing activities is located in frontal lobe.

The different areas of working memory activate the different sections of the brain, the most important of them are situated in the frontal part of brain, temporal lobe.

The left part of the brain is important for verbal working memory.

Memorizing evolves when nerve cells have grown motor tracts and created complicated networks. As a result, the aforementioned network of nerve cells is created in brain with motor tracts (brain traces) where the knowledge and skills acquired during lifetime is preserved. Brain traces emerge in numerous amounts, experience is formed from the archive of permanent brain traces. That is why an older brain is more efficient than a young brain.

An electric- i.e. nerve impulse is needed for the data to move on. The contacting areas of nerve cells provide the transmitting of information from one nerve cell to another – synapses that function due to chemical mediator substances. The most important mediator substance of brain activity is acetyl choline. The material memorized in memory is preserved in cerebral cortex.

The brain's frontal area is more important from the viewpoint of directing the activities, specially the frontal lobe and its cooperation with other brain areas. The directing of activities indicates to the coping of human and thus is vitally important as the whole human activity presumes directing.

Disremembering

The other important side of remembering is disremembering that belongs to memory as a whole. Disremembering is faster in the beginning when starting the recalling process and slows down later. Disremembering is done in two different ways: the memory fragments are dimming and then disappear completely in a way they cannot be found or recalled. Another explanation is based on theory that new data is added to already memorized data that makes recalling very difficult.

Final word. Today we know quite a lot about learning, memory and the factors that help to support the functions of memory. We know that feeling good, purposeful activities, avoiding brain traumas, healthy nutrition and necessary physical activities and also brain training help to keep our brain in god functioning, guaranteeing the cooperation of necessary brain sections, the memorizing of acquired knowledge and finding it if necessary.

2.2 A theoretical background of the effect of mental fitness

Coping in a changing world is connected with the human ability and skill to learn. Memory has an important role in learning. Learning is one of the most stressful types of mental activity as it requires attention, makes us to set objectives, to plan our time and activities and to make efforts for understanding the information we hear or read.

Memory is an ability to preserve new information thanks to different functions, and to recall it when necessary.

During learning, the human being acquires knowledge about our surrounding world. Having acquired the new information, the brain has to analyze whether we already have this data and it needs only recalling, or it is necessary to systematize, code and preserve it in a way that it can be recalled if necessary and to use it in right time and place. Together with normal aging, changes take place also in brain functioning, being very individual and occur most evidently in memorizing and recalling. But aging does not affect the coping with every-day life – the ability to learn is persisted and the brain is functioning.

In learning, the most important are motivation and hard work. We can achieve the enhancing of our memory by learning how to learn or by using some certain strategy. Memory consists of many specialized mental processes that all are connected with the collecting and using of certain type of knowledge.

Memorizing evolves when nerve cells have grown motor tracts and created complicated networks. As a result, the aforementioned network of nerve cells is created in brain with motor tracts i.e. brain traces where the knowledge and skills acquired during lifetime are preserved. Brain traces emerge in numerous amounts, experience is formed from the archive of permanent brain traces. This is why an older brain is more efficient than a young brain. The training of brain's all components helps to enhance brain.

Attention, concentration skills and directing our activities are important during learning i.e. memorizing. Concentration skills are associated with devotion on the main issue, patience, finishing what has been started, correctness, and with the skills to eliminate external stress factors.

Distant- or long-term memory comprises our acquired knowledge and skills, i.e. facts and skills. In the stage of recalling, the necessary data is searched from long-term memory and forwarded to working memory where it can be checked and used. Repeating influences recalling and through this also learning. If we do not repeat what we have learned earlier, it fades away from our memory. The ability to learn something new and to memorize it in memory is preserved for the whole life-time.

For preserving, it is recommended to connect the new data with older one, to think about the differences and similarities, to find new associations, to connect all this with an emotional experience. It is useful to know that all memorized information preserves in the same amount and all the knowledge and skills learned earlier are preserved; although with age the recalling needs more effort, the ability to recall is preserved thanks to creating

associations and identifying, and the ability to learn is also remaining. Understanding new material is important. In the process of understanding, the ability to see something familiar in all new helps to understand. The more a person has learned, the less there is something completely new. In new information there are some fragments from older knowledge and thus it is helping to memorize the new information.

Through years, memorizing is getting slower and the ability to preserve data is getting weaker. But all the information memorized earlier is preserved in memory very well, as in earlier years. If brain activity slows down, the memorizing process also becomes harder. Brain functioning slows down in activities needing initiative and efforts. The influence of several factors like stress and fatigue increases – fatigue and rapid living tempo influence the memory functions of elderly people more than the younger. Focusing on two or more activities parallely does not work in a way as it used to in the youth and thus it is needed to concentrate fully when learning something. A healthy elderly person controls one's brain and acknowledges the smallest problems.

Brain research indicates that the volume of frontal lobe decreases faster than other brain sections. Changes in brain function, their location and range influence the coping very individually. Changes are caused also by general health condition, decreased activity, factors influencing metabolism and other genetic factors. The ability to learn is influenced by general diseases, unhealthy ways of living and alcohol, low physical activity, depression and lack of social networks.

Keeping brain in good function and coping in life is supported by education. The constant use of brain is important in learning for educating oneself and also participating in hobbies requiring mental alertness like crosswords, quiz shows, sudokus etc that often provide a possibility for a functioning social network.

To enhance our brain function, it is possible to achieve a lot by ourselves if we know how brain works and to feel our necessities and manners, our weak and strong sides. It is claimed that one type of people, so-called visual people, notice and remember what they have seen, the other type – auditive people- remember better what they have heard, and the third type - kinaesthetic people remember the data for reception of which they experienced feelings connected with the movement of their muscles (Kidron, A. p. 131).

Pedagogic scientist A. Kidron stresses that learning is not only the acquiring of new knowledge and skills – it is also the tackling of oneself and the practice of overcoming our natural laziness. Learning skills are based on principles and tactics that change the acquiring of knowledge and skills easier, more efficient and also interesting. Learning is a process starting from the setting of learning objectives, planning time, and with the skills for concentration.

An important aid is self-stimulation and blocking negative thinking that accompanies older age. It is nice to remember that "through difficulties we must make our way towards the stars" and "repeating is the mother of wisdom" – these sayings work in older age as well as in younger. The wish of acquiring new knowledge is the indication of good mental health and thus worth of effort.

It is easier to learn if the information is interesting to yourself and necessary in the future. Thus it is useful to clarify oneself where are you going to use the information and to remind oneself of this.

If you have learned something, try to apply it. It fixes what has already been learned. It would be nice if one can teach the information what has been learned. By teaching something to others is the best way of learning it completely.

With growing age, people have a package of knowledge and experiences that enables them to continue active participation in society's activities, to experience everything new, to give one's contribution to it and to get older with dignity and happiness.

2.3. Mental Fitness is not only brain training

Physical wellbeing, Sports

"There is more than enough evidence that physical exercise is good for the brain, bringing benefits like lower cholesterol and blood pressure, but here's more: it can increase the size of your hippocampus, the structure responsible for the formation and storage of new memories as well as for spatial navigation--finding your way around. In a paper to be published in the journal Hippocampus, scientists report that elderly people who are physically fit generally have a larger hippocampus and better spatial memory than peers who are less fit." BEGLEY S. (2009)

http://blog.newsweek.com/blogs/labnotes/archive/2009/02/25/old-age-old-brain-maybe-not.aspxç

More over human beings are born with the natural ability to move. Even as babies we can move a hand or a leg unconsciously. Movement is an innate human feature. Physical activity makes the body stronger, while lack of exercise can cause health problems. As we grow and develop, we acquire awareness of the movements we make. It becomes our decision whether to start and continue physical activity.

These days, more and more hours are spent at work, often sitting in front of a computer. Sitting in front of a computer or at your work place for a hours at a time, can lead to muscle stiffness, pelvic & lumbar pain and, in the long term, spine degeneration. Human beings are made to move, not to sit at a desk for ten or more hours a day. Sooner or later, hours spent in a sedentary state can have serious consequences for health.

The benefits of physical activity are undeniable. Physical activity has an advantageous effect on both body and mind; our physical and psychological sides of life complement one another. Moreover, physical activity affects systems within the body (cardiovascular, respiratory, nervous, muscles, bones, joints, ligaments and immune system) in a positive way, to work together. Lack of exercise by contrast, is a risk factor for chronic diseases.

Take into consideration that physical activity is neither expensive nor time-consuming. You do not need expensive equipment and special clothes, as physical activity can be done nearly anywhere with almost no equipment. But a general recommendation is to perform at least 30 minutes of moderate activity five days a week.

While looking at different forms of physical activity and sport we would recommend Kinesiotherapy, Nordic Walking, Yoga or Tai Chi Chuan.

Kinesiotherapy (2009, http://en.wikipedia.org/wiki/Kinesiotherapy) is the application of scientifically based exercise principles adapted to enhance the strength, endurance, and mobility of individuals with functional limitations or those requiring extended physical conditioning. Movement is treated as the key factor in each and every treatment programme. Thus, if you want to stay healthy, you should exercise regularly.

For MindWellness project 15 exercises were chosen to show alternative methods of physical activity, such as exercises that can be performed in front of a computer. This way you can find time to fit physical activity into a busy work day and overcome the common excuse that 'there is no time to exercise'. You can do stretching, strengthening and relaxation techniques while sitting in front of a computer (Fig.1). While doing the propose exercise you need a stable chair without wheels, correct posture, motivation, and your favourite song. Correct posture is important: Sit upright on the chair, put your feet on the ground, and keep your back straight and your head facing forward during the exercises. Use proper breathing techniques: breathe in through your nose and out through your mouth.

Exercise 11 (Mindwellness Training Modules)	
	Sit upright on a stable chair with your feet flat on the floor. Keep your back straight and face forward while doing this exercise. Put your hands together in front of you, palms together, and point the fingers downwards, as shown. Press your hands together. Hold this position for 8 seconds and then release. While doing this exercise, inhale through your nose and exhale through your mouth.

Fig.1. Kinesiotheraphy – one example exercise

Nordic Walking (2009, http://en.wikipedia.org/wiki/Nordic_walking) is defined as fitness walking with specially designed poles. It evolved from an off-season ski-training activity known as 'ski-walking', 'hill-bounding' or 'ski-striding' to become a way of exercising all year-round. Ski-walking and hill-bounding with poles have been practiced for decades as dry land training for competitive cross-country skiing. Ski coaches saw the success of world-class cross-country skiers who used ski poles in the summer for ski-walking and hill-bounding and it became an established off-season training for Nordic skiing. Hikers with knee pain discovered they could walk more powerfully with a pair of trekking poles, often reducing or eliminating hip, knee, and foot pain, and backpackers found relief from painful backs when using poles.

Yoga (2009, http://en.wikipedia.org/wiki/Yoga) has been studied and practised in the East for thousands of years. The West, coping with the stressful demands of modern life, has only recently discovered the restorative and peaceful benefits of this ancient art. While Yoga releases strain and tiredness from the body, it also clears the mind and restores energy levels. It has the capacity to increase concentration and deepen our levels of awareness and contentment. While doing yoga exercises please be gentle and accommodating with yourself. A daily routine will encourage your

body and mind to respond to these movements. Most of all have fun! Enjoy reaching for your full potential.

Tai Chi Chuan (2009, http://en.wikipedia.org/wiki/Tai_Chi_Chuan) can be also proposed in order to keep the brain in a good condition. Tai Chi Chuan is the art, the art which came as a result of the observation of nature, and order of world - practised in China for improvement and nurturing the health as well as self-defence. Tai Chi is the result of thousand years Chinese searches for prescription on longevity and the lifting the quality of life. This is the thoroughly well-chosen set of practices, enabling practising in every age, gender, and in every physical and health condition.
Aims and directions in Tai Chi Chuan training are as follows:

- Bringing to harmony - body and mind.
- Tai Chi make, that overworked persons and stressed out, find internal equilibrium. They in result become calmer, more concentrated and resistant on stress
- Support health and heal disease. Tai Chi helps to heal following diseases: arterial hypertension, disease ulcerous stomach and duodenum, arthritis, asthma, heart disease, stoma chic ailments and neuroses.
- Rejuvenating and assuring longevity.

Fig.2. Tai Chi Chuan – one example exercise

2.4. MindWellness Project and Active Ageing

As we have seen in the previous analysis, nowadays, the European Union is characterized by the progressive ageing of population in all each member countries.

Considering this situation and the scientific proof that intellectual stimulation helps to maintain mental fitness, as well as the fact that cognitive training programs have lasting effects for the intellectual performance of adults, MindWellness Project aims at elaborating a training tool that will promote intellectual stimulation of people over 50, both retired and people who are still active, making education for adults something "fun" and more attractive, which will contribute to the motivation of trainees.

However, MindWellness project does not forget that mind well-being is not only brain training, sondern the mind wellness requires and is influenced by the general welfare in all fields of life. The project shares this point of view with the World Health Organization, who in 2002 presented the Active Ageing proposal as a guideline for the assurance of the high quality of life of our older citizens.

The World Health Organisation (WHO) defines Active Ageing as "the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age. It applies to both individuals and population groups. Active ageing allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society, while providing them with adequate protection, security and care when they need."1

Older people even if they retire, or become ill, can still provide a rich contribution to their societies, communities and families, as they can continue participating actively in many ways, including socially and spiritually. Active Ageing concept is focused to empower elderly people in this sense of active remaining.

One of the key goals of the WHO policy framework for Active Ageing is to promote life expectancy and quality of life for older people, through this active participation that contributes to strengthen physical, mental and social well-being.

This project is committed with this holistic concept of Active Ageing and Mind well-being, and intends and intends to address this goal at three different levels:

First of all, through the inclusion of active older people, who are still working, within the target users of the training material, which is an added value to the project. Due to the lack of specific training programs for active people over 50 years, MindWellness will be pioneering in this area.

Secondly, the elaboration of such the MindWellness training tool and this Handbook are the result of different activities carried out by the partners during the first year of the project life. MindWellness Project counted for this analysis stages with the collaboration of the

1 World Health Organization (2002) Active Ageing: A policy Framework. WHO. Geneva

target users of the product. Through the dissemination of the project, each partner has developed a network of contacts including people over 50 years and experts in elderly training. These experts are assisting the consortium as advisers during the process of the elaboration of the training materials.
The active participation of the elderly in the project is an added value that permits the consortium to strengthen their commitment to the concept of active ageing, which will be the basis from which the training materials will be developed.

And finally and mainly, through the inclusion of this view in the design of the training tool and the Handbook. The training material includes not only brain training, but also other activities and recommendations that could reinforce this active ageing concept. (Sport, nutrition, communication, art, free time activities, volunteering, ICTs…) and the Handbook, in its practical part, introduces Active Ageing Case Studies, that could serve as examples for professionals working with elderly and also for people over 50 years, willing to find activities and proposals to remain active.

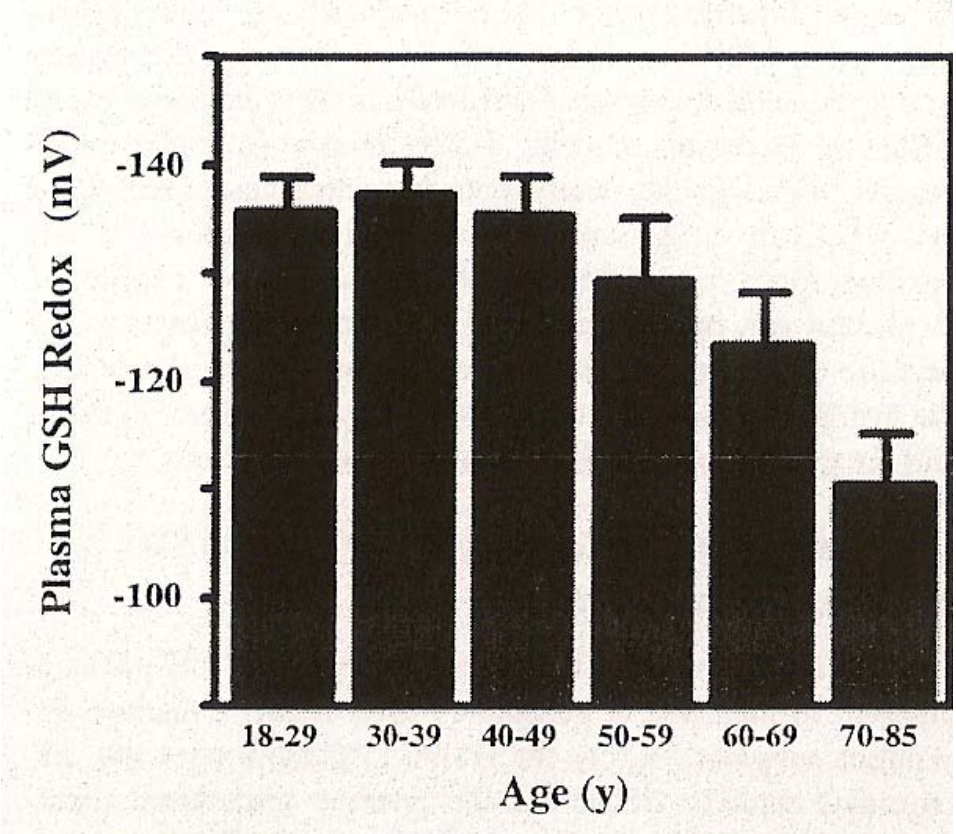
The MindWellness Training Tool focuses in three main cognitive abilities for the development of its brain training program: Memory, Speed of Processing and Inductive Reasoning. And with the purpose of including the Active Ageing concept in its content, the training tool includes modules as:

- PC and Internet, which intends to introduce to people over 50 the usefulness of ICTs and the possibilities of Internet.
- Senses and Art, focused in the importance of senses in perception in older age and in the fun through art.
- Travelling and learning languages in higher age, which leit motif is learn to travel, travel to learn.
- MindWellness and social networks, which explains the importance of having social contacts and introduces advises on this regard.
- Healthy Nutrition for people over 50, focused on the importance of nutrition to improve our health and well-being.
- Physical fitness, this module stresses that a healthy body is equal to a healthy mind.

3 METHODS OF BRAIN RESEARCH: AN INTRODUCTION TO THE TEST OF THE UNIVERSITY OF PÉCS

The scientific background of the Mindwellness program

By aging, decomposition processes become more and more obvious which holds a serious problem, both for the person and for the society. The first signs of aging of the body, date to the fifth decade. At that time decrease of the redox potential is also obvious. Decrease of the redox potential is accompanied by several changes and illnesses, called oxidative stress, which is considered as a common background of numerous illnesses. Changes, resulting to the decreased redox potential are involved in impaired cell-function and cell-death, ultimately lead to decreased tissue cell-density.



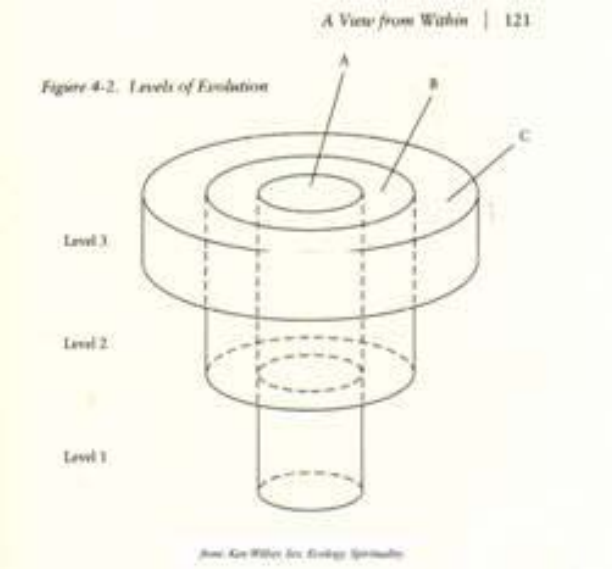
What are the characteristic changes regarding aging?

- Decreased conduction of electric potential in the nerve fibers.
- Alterations of the basal metabolism and various metabolic processes.
- Loss of muscle functions (including the vascular smooth muscles).

These phenomena lead to various symptoms, as they play a crucial rule in the diminishment of mental function around 50.

The first symptom is the loss of memory. Memory depends on intelligence, education and personality. The ayurveda describes three main groups of personality, which are naturally differing from each other, including the short- and long-term memory. The “Western-type” medicine considers biological conditions, deviating from the normal, as an illness, however in some cases these biological deviations are only features of a character.

Picture: How does our brain operate?



The brain is studied from different aspects, since the attempt to examine a system with a similarly complicated system is an interesting topic from the point of epistemology. The development of the brain shows three different levels, built on each other. The first level is the ancient reptile level, responsible for the basic life functions; the second is the ancient mammel level, while the third level is responsible for cognitive functions, for the human being.

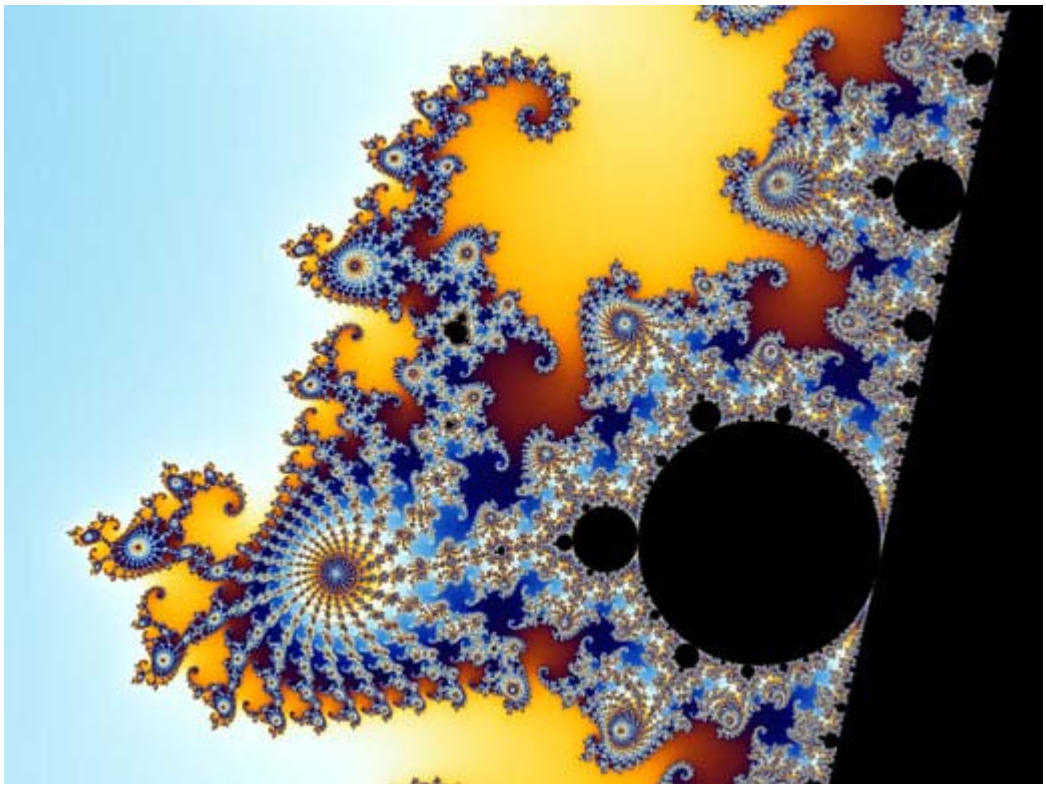
The structural division of the brain is well-known. The part responsible for cognitive functions is the grey matter and other dynamically changing areas inside. These areas are widely investigated, the localization of different functions have been described properly. Earlier, neurons were considered not to be able to proliferate, hence we explained the loss of cognitive functions observed through aging, as the result of the reduction of neuronal number. Nowadays there is growing evidence that neurons are cabable to proliferate, mostly in the hippocampus that is responsible for the memory. The impaired cognitive function is rather due to the loss of the neuronal dendrites. Under optimal conditions, old neurons can also grow new dendrites. Aging brain can adapt to new conditions and can change the synaptic pattern as well. The amount of neutrofin, which is a special substance produced by the cells, correlates with the neuronal stress. The substance itself permits the cells to adapt optimally to the functional stress.

Extended areas are activated of the neuronal network through studying, thinking and improving the memory. Neurons are not able to function alone but in well-coordinated networks. Through activation, these cells have an effect on each other in various patterns, thus after brain injury the different areas can replace each other, furthermore regularly

used areas can also extand (improvement of the map-memory among taxi drivers in London). The organization of the brain is only partly hierarchic, but also parallel, matrix-like, thus it can adapt to variating stress. The brain functions similarly to a computer, as it uses a work-memory area in the frontal lobe. Routine-like processes require less activated cortical areas, independently from the complexity of the process itself, which explains the fact, why routine-like processes are not involved in the development of the brain.

Neurons that take part in cognitive functions become temporarily more active, which leads to newly formed cellular connections, since the activated cells become overloaded after a few time. Different stimuli, affecting the neurons, are transformed into electic potential, which finally leads to the excretion of different chemical substances by the cell, known as neuronal transmitters. These chemical substances themselves represent the information stream between the neurons. The velocity of the electric stimulus is higher than the velocity of the chemical substance, thus the cell forms new chemical ports (synapsis) to connect other cells. The network-system itself works as a connection between different stimuli.

Discovery of the fractal-model was a significant step in the exploration of the function of the brain. The model says that in a small part of a unit, the unit itself is repeated. The brain is composed of several fractal systems, where on different levels, different decisions are repeated.



Connections between the cells (synapsis) are responsible for dynamic processes is the brain. In the unused areas cell-death can be observed, also among young or old people, independently from age, but aging increase the risk of it. This does not mean that the information is lost, but it is stored in other cellular connections. Through thinking, brain also changes and develops; this is the base of whole-life learning. The brain provides us sufficient signals and patterns (cognitive patterns) in order to trigger the constant

improvement and renewal. By remembering, the information of the cognitive brain function transforms due to the permanent feedback to the dynamic processes. That is how information is revised and modified. Due to the network structure and fractal construction, thinking is not localized in one point of the brain. Since these continuously working networks reach new areas, the outer and inner information affect the function of these networks. Insightful experience and traumas, especially in the right parietal lobe, with their particular energetic structure, trigger the brain to continuous answer that is what we call interior monologue.

The brain consumes a lot of energy. The organ which represents only 3% of the body mass, demands 20% of the energy metabolism. Thus the appropriate perfusion and oxygenization is indispensable.

Emotions represent a special field of cognitive processes. As we saw before, emotional signs can join into the functional networks that are how sounds and fragrances can hold sentimental content. Thus cognitive functions cannot be evaluated independently from psychical and emotional conditions. This fact supports the notion that utilization of emotions in the treatment of dementia can be a promising idea. Not only memorization of different words and numbers, but also the development of patience and the adequate reflection to situations, is considered an important role in the preservation of cognitive functions.

The memory

The memory itself can be localized in the hippocampus, where new formation of synaptic connections and also the proliferation of neurons can be observed, due to memory trainings.

The memory is selecting continuously from the information, thus only the important events (firmed by emotional charge) will be retained. The positive rule of the emotions is obvious, since in case of older people, suffering from loss of memory, depressive symptoms and also the lack of self-appreciating mechanisms can be observed as a subconscious, self-destroying pattern.

As we mentioned before, memory processes work as a network, which can be localized at different parts of the brain. For example, 20 different loci have been found to be activated through mathematical operations, while basic mathematic is built only on adding. Due to this multi-centered localization, there is a good chance for the different stimuli to affect each other. Accordingly, using all the six senses is the best way to improve the memory. Majority of the people are visual type, less are auditory type. These senses are completed and intensified by smelling, tasting and the emotions. A useful way to ameliorate the memory is to connect different types of sensations: colors, voices, flavors, fragrances, emotions with memory fragments.

To ease the way we are thinking, we make patterns, we retain memories easier which fit in the patterns, while we forget images that do not.

There is increasing evidence that people who do exercises regularly, lose their memory more slowly than the others. This can be due to increased intracerebral circulation and oxygenization and also as a consequence of the network systems in the brain.

We can divide memory according to different aspects:

A.

1. "fluent" memory, is used for learning new information. This is the most vulnerable sort of memory through aging

2. "crystal" memory or storing memory, where old memories are stored, this is farley preserved through aging

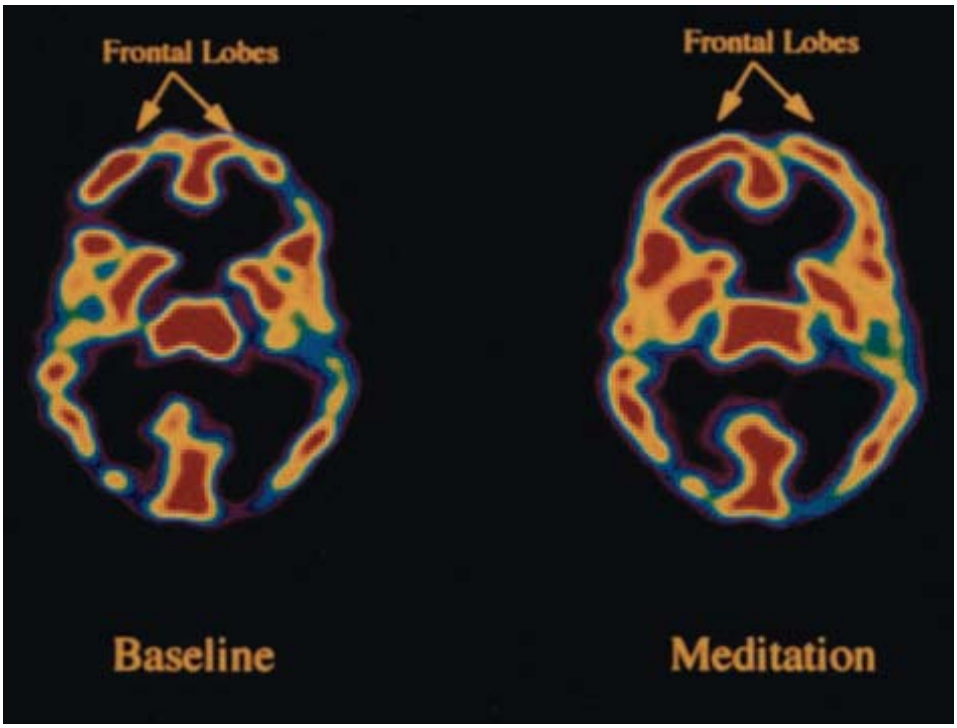
B.

1. Short-term memory. It has quite a small capacity. Some authors have reported that this part is not able to retain more than 7 units of information at once (a telephone number). This "work-memory" is localized on the border of the frontal and parietal lobes, near the loci of attention and consciousness, thus there are several junctions between them. In the "work-memory", memories are also stored and prepared. The information that enters the "short-term" memory either expires or if the information was confirmed, it enters the "long-term" memory. Mental maps and orientation are attached to the hippocampus.
2. Long-term memory. Ancient memories are stored here; this is the reason why old people remember to remote events, while they forget the new information. Long-term memory is considered as a chemical memory. It is composed of:
    a) Episodic memory, which retains the events of our life, our personal experiences in time and space.
    b) Semantic memory conserves the general knowledge from the world and our circumstances.
    c) Metamemory, which retains cognition that we know.
    d) Prospective memory, consist of our future plans.

Methods, in order to preserve our memory:

- In case of someone is absent-minded, he should make a list of tasks to do. This affects the memory in two ways:
    1. Continuous thinking of a problem helps the stabilization of the memory-cycles.
    2. The task (group of information), through becoming a routine, moves to deeper parts of the brain, this way the working-memory can deal with new information.
- The method of Alain S. Brown: building up the memory and preserving the memory consists of units. These are: attention, repeat, association and preserve. One has to pay attention to the task that should be memorized, it should be associated to some information that is already kept, this should be repeated sometimes then it should be refreshed from time to time. Passive repeat does not help preservation while active evocation is more effective.

- Neurobic: A modern method to keep the memory fresh. It is based on the network structure of the memory. The method confirms the connections between different loci by using variable impulses via variable sensations. It uses the possibility to improve the connections between the cortex, the limbic system and the hippocampus. Combination of varied and odd information, free association (brainstorming) fairly develops the neuronal junctions, while passive activities (watching TV, routine exercises) don't help at all.
- Meditation. It seem to be a passive activity, meanwhile the brain is occupied with the processing of interior information and also with the reception with information under threshold limit. Under meditation, brain works on a low wave frequency, which is called alpha wave. Three different types can be differentiated:
    1. Oriental meditation is characterized by passive depletion-reception.
    2. Autogenic training, one tries to concentrate on changing the interior organ function and on the regulation of the vegetative nervous system.
    3. Mind control. We use the alpha waves to achieve different aims by using our brain.



Through research of meditation it turned out that regular practice increases age and stimulates brain function. It can be seen on the MRI images, that through meditation the activity of the parietal and frontal lobes is increased.

An introduction to the test

The Mindwellness online test is a especially composed test, whose main goal is not to measure organic dementation, but to assess the actual status of the ageing brain, and to objectively measure the dynamic improvement achieved during 4-6 week long training and thereby proving the effectiveness of the training. The MWQ3 examination is a completely objective, instrumental measurement, which is especially able to measure the number of connections between nerve cells, and detecting the operational speed of the brain.

This technology is useful to measure the degree of dementia due to organic disorders, atherosclerosis or infectious diseases, and to detect some early improvements.

Dementia is an organic disease, which affects the central nervous system, especially the brain. Its origin can be degenerative, atherosclerotic and infectious. Before the test, severe cases of organic dementia have to be ruled out, because in these cases there is no hope for improvement, and therefore they would negatively affect the efficacy and results of the test.

According to international literature, 10 % of people over 60-65 are suffering from irreversible mental decline. 20 % of 85 year old people are affected from dementia, as is every third person over the age of 90. If there is a suspicion for this condition, the MMMS+C 100 point test has to be made with the help of a clinical psychologist, which gives more information regarding the current state of the patient. The result should be converted to the MMSE test. These persons are excluded from the scope of the Mindwellness project, they need special neuropsychiatric treatment.

According to the schedule of the training, patients with organic dementia have to be excluded by pre-screening. Afterwards the first test has to be done. Those who need it, should get practice time, because not all elderly people are used to PCs. After the online test, the members of the training group have to be chosen. Groups should be composed of at least 10 maximally 15 persons, optimally 12. Duration of one training is usually 4-6 weeks. The basic concept is to have in the first part 2-4, in the second 2-3 and in the third 2 occasions per week. If it's feasible, at the beginning 4 occasions per week are also fine. One occasion should last at least for 1, 5-2 hours. In the first portion the participants reveals themselves, their past and their desires. Every occasion has to include games, either previously chosen ones or by choice of the group. Inside the group subgroups of 4-5 persons have to be formed, which improves cohesion, and the spirit of competition drives to improved brain activity, and the new tasks quickly help the reproduction of new dendrites, the connections between nerve cells. The social tasks, the sense of success helps the participants to regain self confidence lost due to the decline in brain capacity. After the 6 week training, the online test has to be done again, where in case of a successful training the improvements will manifest themselves in the time the test takes as well as the higher scores.

Where it's possible, the contact between participants should be upheld, for example by creating a designated chat channel where future cooperation is possible. The training should be provided for NGO's who are working with the retired population, as well as for managers of pensioner homes, pensioner clubs. The method and it's practical use has to be taught during special trainings for every representative of every mentioned organization in each country.

The goal of group therapeutic possibilities in the prevention of dementia as well as the improvement of the current state:

- Developing the feeling of being a part of the community.
- Developing group activities (games etc.), to give an opportunity for sense of mental success inside a community.
- The opportunity for common experiences.
- To create human contacts.

Measurement and examination of the success of group therapy

The effectively of individual- and group therapy can be assessed using verbal- and nonverbal intelligence tests, personality questionnaires and projective tests:

Intelligence tests:

- **MMSE test:** used at the beginning of therapy, assessment of the current state.
- **Modified MINI MENTAL STATE:** used at the beginning of therapy, assessment of the current state **.**
- **RAVEN test:** a nonverbal test, which measures logical, essence finding and perceptual skills. The test can be repeated every week and the results can be related to the effectively of treatment.
- **MAWI (Wechsler intelligence test)** especially the tasks designed to measure the PQ (practical intelligence quotient).
- **OTIS I., II. test:** the questionnaire assesses the status of learned, verbal knowledge and logical skills.

In case of intelligence tests the verbal and nonverbal parts should be assessed every week in an alternating order.

Personality examinations

MMPI questionnaire: at the beginning and end of therapy. The questionnaire gives a comprehensive status of the patient undergoing psychotherapy.

The test developed by us is based in part on MAWI questions regarding short term memory – as an age related variable – and partly on tasks of the modified Mini Mental State test which examine the function of the frontal lobe.

This test is an online test, which is filled out by the group therapy participants on a computer file who then can check the test results and their current mental status.

The online test – and group therapy as well - can mainly be applied by people who are not yet suffering from age related dementia but would like the prevent it, by paying attention to possible warning signs.

The test can be repeated every week – two weeks and the result a related to the effectiveness of group therapy.

PRACTICAL PART OF THE HANDBOOK

4 CASE STUDIES OF ACTIVE AGEING

4.1. Introduction to the practical part of the Handbook

In order to integrate the Active Ageing concept in the MindWellness results, the partnership has researched practices and activities that support this concept in any way at regional, national or European level.

This practical part of the Handbook intends to introduce a selection of these activities, which have inspired the partners of the project for the design of the training tool and the development of the project. Professionals working with elderly people as trainers and/or facilitators could use these examples as a guideline to complement and support the courses or programs that they are developing for their elderly trainees.

Among the case studies introduced, the following could be found:

First of all, we would like to introduce European projects such as MindWellness that work on the issue of Active Ageing throughout Europe. Most of these projects are financed by the European Commission or other public administrations. These proposals are pioneers in Active Ageing and all of them could be taken as best practices in integrating Active Ageing concept in activities such as: education, migration, volunteering, participation processes, etc.

Secondly, we introduce case studies and examples of Active Ageing activities at physical, social and education level. Most of these practices are integrated in the MindWellness training tool as recommendations to complement the brain training activities included in the program.

Finally, apart from the examples and case studies presented, and in order to further complement the MindWellness training tool, the Handbook includes a list of National Organizations supporting Active Ageing working at national level in each country participating in the project. These organizations are available for people over 50 years, who intend to age actively.

4.2. European Projects on the issue of Active Ageing

SAGE - Promoting participation of the elderly

"Sage – **S**eniors citizens p**a**rticipate in creatin**g** their liv**e**s" was a 2-year project (2006-2008), funded by the Leonardo da Vinci II programme. It aimed to create specific training material for people (mainly 50+) working with or for senior citizens in different service sectors, to enable them to develop and implement participation projects with senior citizens.
The project understands "participation" to mean that people affected by particular measures actually take part in the political and social planning and decision-making processes around these measures, aiming at a broad involvement of the public and the people concerned.
By undertaking the role of facilitators, they try on the one hand to provide structures and opportunities that enable senior citizens to participate in planning and decision processes of services for the elderly, and on the other hand to mediate between different groups of interests.
Participation involves active citizenship and consultation, leading to empowerment of individuals. It promotes a climate in which change is representative to the wishes of people and strenghtens social and economic cohesion.

More information on this project can be found on http://www.sage-eu.com/

Active Ageing of Migrant Elders across Europe (AAMEE)

The AAMEE project (2007-2009) focused on the promotion of active ageing and social, cultural and economic integration of migrant and minority ethnic elders, emphasising volunteer activities and the emergence of new culturally sensitive products and services in the fields of, for instance, housing, care, education, leisure, culture and marketing. This was done on the basis of a mixture of practical and scientific activities and a variety of approaches

The "Active Ageing of Migrant Elders Across Europe" project was promoted by the Ministry of Intergenerational Affairs, Family, Women and Integration of the State of North Rhine-Westphalia, Germany, and the Directorate General for Employment, Social Affairs and Equal Opportunities.

More information on this project can be found on http://www.aamee.eu/index.php

Project ELLA

ELLA (2005-2008) developed a concept for educating volunteers into "education mediators" for working with seniors in in-patient clinics. The concept basis was an intellectual term, which doesn't define "earning for the elderly" as an increase of knowledge and competence, but as "further training" for the elderly and the volunteers when they were meeting.
The concept includes a modularly built curriculum and practice oriented guidelines. These products focus on organizations that qualify volunteers, place them on assignment in resting homes and support them in their work.
The concept is completed through a certificate, which is designed for a European-wide transparency and comparability of training contents and acquired qualifications.
The developed products were tested by the project partners and published in around twenty member states of the EU. The project was funded by the EU through Sokrates funds and ran from 2005 to 2008.

More information on this project can be found on http://www.projekt-ella.eu/cms

From Isolation to Inclusion

The i2i-project work focused on the identification and improvement of measures that enable groups at a multi-dimensional risk of social exclusion to fully participate in community life. A major focus was on strengthening initiatives by older people for older people and on establishing the supporting networks for these initiatives.
As one of the main products of the i2i-project work all partner regions involved have developed Regional Action Plans.
To assist people and communities working on or interested in Regional Action Plans, the project's partners have written "Guidelines for Action". Based on the experience gained within the project the handbook, that can be downloaded on the website and aims to provide an insight into how such an Action Plan may be developed within a specific regional setting.

More information on this project can be found on http://www.i2i-project.net/

LARA - Learning - a response to ageing

The LARA project (a follow-up of projects called LISA and LENA which were about creating and sustaining effective learning for older adults) makes use of the experience of previous projects to promote a view of learning as a key part of active ageing. The LARA teams are creating a training programme for adult educators that will demonstrate the relationships between learning and ageing and give practical solutions to addressing these in group learning contexts.

The project seeks to support adult educators in developing responsive teaching and learning. By providing time for reflection, consideration of good practice from within Europe, review of the attitudes to and the realities of ageing, opportunities to self-audit existing professional skills and action plan for new ones the project will make a contribution to the competence of adult educators within partner countries and within Europe. The project started in December 2008 and will last until November 2010.

More information on this project can be found on http://www.laraproject.net/

SLIC - Sustainable learning in the community
SLIC - Sustainable Learning in the Community was a European Commission funded project under the GRUNDTVIG programme carried out from December 2007 to January 2010. The SLIC project also addressed the issue of increasingly ageing societies and the promotion of active ageing. The aims were to develop new, practical ways to help older adults review their past experience and personal skills and to explore new and potential opportunities for learning and community engagement. This was achieved through developing an innovative workshop model which is set out in a handbook. SLIC was coordinated by the Austrian Red Cross. Nine organisations from six European countries – Austria, Finland, Germany, Hungary, Italy, and the United Kingdom – participated in the SLIC-project.

More Information on the project can be found on http://slic-project.eu/.

4.3. Examples of Active Ageing Activities

Physical Activities

<table>
<tr><th colspan="6">e-senior.eu w akcji (eng. e-senior.eu in action) (Poland)</th></tr>
<tr><td colspan="2">Category:
Social Relations, Physical Wellbeing, Language and Travelling</td><td colspan="4">Stimulation or Training of:
Memory, Inductive Reasoning, Processing, Language, Physical Fitness</td></tr>
<tr><td colspan="2">Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td colspan="2">PC Literacy Required:
Recommended basic PC skills</td><td colspan="4">Other preparation required: (Reading, writing / or physical fitness…)
reading and understanding texts, writing messages, good physical fitness, ability to cooperate with others</td></tr>
<tr><td colspan="6">Description of the Activity
The project „e-senior.eu in action” has an aim to integrate and activate the members of Senior’s Club at Gdansk University of Technology. Computers’ workshops with elements of e-learning are offered. Seniors are invited to open-air meetings, where their knowledge and skills gained during e-courses are verified.
The following e-courses are available: ABC PC, Nordic Walking Club, Fitness Club, Photo Club, English Club, e-cards workshop.
The practical effect of the training is proved by the participation of seniors in the Socrates Grundtvig Partnership projects’ meetings. During the international meetings, experiences and skills gained in the “e-senior.eu in action” project are presented by seniors.</td></tr>
<tr><td colspan="6">Benefits for daily life:
Enabling and developing Internet based communication skills, practising communication in English and keeping fit by offering physical activities (Kinesiotheraphy, Nordic Walking).</td></tr>
<tr><td colspan="6">Some references for more information: (Websites, books,)
http://e-senior.eu/
http://utw.moodle.pl/</td></tr>
</table>

<table>
<tr><th colspan="6">Program for the prevention of dependance- LA CAIXA (Spain)</th></tr>
<tr><td>Category: (Social Relations,…)
Mental, physical and sensory activities</td><td colspan="5">Stimulation or Training of:
Senses, Memory, language and body</td></tr>
<tr><td>Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td>PC Literacy Required: Not necessary, although to follow the activities from home some DVDs are provided</td><td colspan="5">Other preparation required: (Reading, writing / or physical fitness…)
The flexibility and agility exercises do not require a particular physical level</td></tr>
<tr><td colspan="6">Description of the Activity
It is an iniciative framed in the Social Work of the Spanish savings bank La Caixa, in cooperation with several public administrations. This dependence prevention program is addressed to people over 50 willing to prevent dependence situations through the participation in workshops.
These workshops take place in several Spanish cities and concretely in socio-cultural centres. In these workshops different activities are organized in order to maintain mobility, perception, memory; and also in order to improve these skills. Workshops are led by a social facilitator specialized in health issues, who programs the exercises and solves possible doubts that could arise.
Once the workshop is finished, the participants can continue the work from home through a free guide and DVD.</td></tr>
<tr><td colspan="6">Benefits for daily life:
Maintenance and improvement of the physical and mental abilities, also personal autonomy and social relations through the work in groups.</td></tr>
<tr><td colspan="6">Some references for more information: (Websites, books,…)
http://obrasocial.lacaixa.es/personasdependientes/prevenciondependencia_es.html</td></tr>
</table>

<table>
<tr><th colspan="6">Trekking Routes in Castile La Mancha (Spain)</th></tr>
<tr><td colspan="2">Category: (Social Relations, Physical Wellbeing…)
Physical activity in group</td><td colspan="4">Stimulation or Training of:
Mobility, physical activity and social relations</td></tr>
<tr><td colspan="2">Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td colspan="2">PC Literacy Required: Not required</td><td colspan="4">Other preparation required: (Reading, writing / or physical fitness…)
Practice trekking normally and have a medium physical condition.</td></tr>
<tr><td colspan="6">Description of the Activity
This activity is led by a consortium among the Health and Welfare Counselling of the Government of the Region of Castile La Mancha and the Foundation for Culture and Sports, which allows elderly people to get to know the natural areas near to their areas of origin through the sports associations of each region.
It is included in the program for the attention of the elderly of this region.
The routes are approximately 8 Km. long and walking mainly, without great slopes and the length of the activity includes the necessary stops for eating, drinking and resting, and other technical pauses that the monitors consider necessary for the development of complementary social and cultural activities.</td></tr>
<tr><td colspan="6">Benefits for daily life:
Maintenance and empowerment of the physical condition of older people
Strengthening of social and cultural abilities</td></tr>
<tr><td colspan="6">Some references for more information: (Websites, books,…)
http://pagina.jccm.es/social/forma/index3.html</td></tr>
</table>

Social Activities

<table>
<tr><th colspan="6">Program for Elderly Holiday and Leisure Activities - Imserso (Spain)</th></tr>
<tr><td>Category: (Social Relations, Physical Wellbeing…)
Active Leisure, social relations and physical well-being</td><td colspan="5">Stimulation or Training of:
Body (walking, excursions) and mind (cultural trips and social relations)</td></tr>
<tr><td>Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td>PC Literacy Required: Not required</td><td colspan="5">Other preparation required: (Reading, writing / or physical fitness…)
For the tourism routes basic physical condition is required</td></tr>
<tr><td colspan="6">Description of the Activity
This initiative is a holiday program for retired people older than 65 (in some cases they include activities for people over 55), who have autonomy, included in the Agenda of Active Ageing from IMSERSO (Institute for elderly and Social Services) from the Government of Spain.
Even being already well known among the Spanish society, it is still an example of Active Ageing Activities in Europe, both for benefiting a high number of citizens with the affordable rates in comparison with the private offer available, and also for contributing to maintaining of the tourism sector in the country, given that most of the activities are programed during the low season (From October to June)
In this sense, the prevision of the government is that more than 1.200.000 people will benefit from this program during the season 2009 - 2010 (20% more than in season 2008 – 2009). the government will finance 126 million Euros.
Further, the applicants for the activities, may enjoy this holidays with their partners even if they do not meet the age and retirement requirements, and also if their sons and daughters are disabled.
There are four types of activities:
• Stays in coast areas for rest
• Cultural travels to get to know the history and art of Spain
• Nature Tourism, including routes in picturesque landscapes
• Facilitate exchanges with other countries' elderly
The holiday activity includes the travel, full board accommodation, group insurance, medical service and entertainment program.
Given that it is a social program, applicants' income is considered in order to decide if the candidate is eligible.</td></tr>
<tr><td colspan="6">Benefits for daily life:
The participation of elderly in this program, and the tourism activities in which they participate, specially in warm climate areas, collaborate to an improvement of the quality of life of this</td></tr>
</table>

citizens.

The concrete benefits are physical well-being, physical mobility and training, mental stimulation, participation and social interaction with people of their age and also the staff working in this program (who are younger), and also with the population living in the areas they visit.

Some references for more information: (Websites, books,…)

http://www.imserso.es/imserso_01/envejecimiento_activo/vacaciones/index.htm

Volunteering – SECOT (Spain)					
Category: (Social Relations, Physical Wellbeing…) Mental welfare and Social Relations	Stimulation or Training of: Mind and Social abilities				
Level of Stimulation:	Low	2	3	**4**	High
PC Literacy Required: Depending on the concrete task, possible to develop tasks that require high Pc literacy to others that requires only basic skills.	Other preparation required: (Reading, writing / or physical fitness…) Writing, reading, oral communication and social abilities.				

Description of the Activity

This is a business volunteer initiative led by a non-profit association established in 1989, and declared of public interest in 1995: SECOT. This association was funded by the Circle of Entrepreneurs, the Business Social Action and the Spanish Chambers of Commerce.

The volunteers are seniors qualified professionals retired, pre-retired or working, who with an altruistic spirit are willing to offer their experience and knowledge in business management to anyone who is interested and needs their counselling.

The seniors advise confidentially analysing, offering their diagnosis and proposing different actions for the business development.

This work allows retired and pre-retired to offering their experience and knowledge in business management, helping to create employment, advising SMEs, and collaborating with public and private entities.

Concretely, the actions developed by the volunteers are:

- Help and advise young entrepreneurs, people in risk of exclusion or social difficulties, small companies, non-profit organizations, countries in process of development...
- Advise government agencies and financial institutions.
- Promote training activities and professional-technical training.
- Cooperate in programs for international cooperation for development.
- Conduct studies and publications on topics related to volunteer work, elderly and active ageing.

SECOT counts with more than 1.100 members, among them 900 volunteer seniors, who work in 39 delegations and offices all around Spain. They hold numerous agreements with national and local institutions and associations. SECOT celebrates an annual meeting, and they develop part of their advising work on-line.
Benefits for daily life: Mainly two: • Maintenance and improvement of their mental abilities and skills. • Social abilities: Communication, training, group work.
Some references for more information: (Websites, books,…) http://www.secot.org/

Education Activities

"RIPE FOR THE INTERNET-SENIOR EDUCATION AND LEARNING IN A CROSS-GENERATIONAL CONTEXT"					
Category: Social Relations	Stimulation or Training of: Memory, Communication Skills				
Level of Stimulation:	Low	2	3	4	**High**
PC Literacy Required: no, will be acquired in the training	Other preparation required: own computer at home				
Description of the Activity A learning environment has been developed within an European Socrates Project (Ripe for the internet) that brings together young people and Seniors to learn from each other. Seniors acquire basic competences for working with the computer in order to deal with activities they are interested in (photos, internet banking, travelling, medical issues…). Young people acquire social competence when organising and implementing the course (the project includes a specific training for these tasks). The activity has been very successfully implemented several times and – due to the international approach from the project – also in different European Countries (BG, FI, DE, ES).					
Benefits for daily life: Cross-Generational contact for communication, mutual understanding and support. Acquisition of important skills in order to use the internet und the computer for activities, seniors are particularly interested in. Several regions for brain fitness are address in a motivating way.					
Some references for more information: (Websites, books,…) www.meetgen.org					

<table>
<tr><th colspan="6">Foreign language learning</th></tr>
<tr><td colspan="2">Category: Social Relations</td><td colspan="4">Stimulation or Training of: Memory, Communication Skills</td></tr>
<tr><td colspan="2">Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td colspan="2">PC Literacy Required: not obligatory but helpful</td><td colspan="4">Other preparation required: no</td></tr>
<tr><td colspan="6">Description of the Activity

The Senior Academy and also the Adult Education Centre offer foreign language training for seniors. Particular motivating is that the training prepares for a common journey. Content is related to fundamental communication skills required while dealing with hotel, asking for the way, giving and asking for personal information etc. The offer also includes cultural information for preparation. Links to websites with additional language training exercises as well for specific cultural information are provided to the participants. Senior participants prepare information (from the websites) and provide this to their fellow students.</td></tr>
<tr><td colspan="6">Benefits for daily life:

Learning and speaking foreign languages promotes the following processes:
➢ General Learning capacity
➢ Creativity
➢ mental flexibility

People, who speak more languages, improve interpersonal and communication competences and are better protected against dementia. Communication with people worldwide, for reading foreign websites and magazines, for understanding texts from your favorite singer's CD-textbook, for traveling mentally or physically abroad…</td></tr>
<tr><td colspan="6">Some references for more information: (Websites, books,…)

http://www.language-learning-advisor.com/learning-a-language-for-travel.html links you to many useful hints and further information and you can even find links and offers for the specific language you want to learn – from Bengali over English up to Vietnamese! (http://www.language-learning-advisor.com/other-languages.html)

http://www.bbc.co.uk/worldservice/learningenglish/index.shtml
The BBC (British Broadcasting Corporation) offers very attractive and a large scale of learning subjects and exercises to improve your English skills

http://people.freenet.de/mvhs-english This website contains many useful links for learning offers. Run by German Volkshochschule, more appropriate for German users but the links will be helpful also for learners from other countries.

http://www.esl-lab.com/index.htm This website offers a great variety of listening exercises.</td></tr>
</table>

<table>
<tr><th colspan="6">Click on Granny, (Hungary)</th></tr>
<tr><td>Category: ICT</td><td colspan="5">Stimulation or Training of: ICT SKILLS</td></tr>
<tr><td>Level of Stimulation:</td><td>Low</td><td>2</td><td>3</td><td>4</td><td>High</td></tr>
<tr><td>PC Literacy Required: to be developed</td><td colspan="5">Other preparation required: not required</td></tr>
<tr><td colspan="6">Description of the Activity:
The Click on Granny programme started in 2002 and has been carried on repeatedly with great success. The objective of this initiative is to help elderly citizens to keep abreast with the modern techniques in order to know how to use the internet and what is it good for. As the participants had never been in touch with computers, the course starts from the very basics (like how to switch on and off the computer, how to use the mouse etc.) and the only aim is to teach the participants the use of the internet and e-mail. The course covers 25 hours of training twice a week within three weeks.

The program started as a local initiative, but after some years and finding support it grew and several courses are organised in different locations at Budapest and other Hungarian cities and villages out of Budapest, and thanks to the European Union, 2 Grundtvig projects are organised with Slovakia and Romania, too, in Komarno and Csíkszereda the training is also available. So now the program is implemented transnationally. The method that is used are developed by the Budapest Community Center. The essence of it is to advance very slowly and practice a lot with a lot of revision.

As a follow up, there is the opportunity for interested people to attend a club, where there are regularly trainings on interesting topics (e.g. how to use the netbank, how to download pictures from the camera etc. These trainings are free when held by volunteers or against a symbolic fee (about 1 EURO) when held by a teacher.</td></tr>
<tr><td colspan="6">Benefits for daily life:

Learning basic ICT skills such as using a computer, searching the web, writing e-mails. Making social contacts either via internet, or within classes with fellow-students</td></tr>
<tr><td colspan="6">Some references for more information: Budapest Cultural Centre www.bmknet.hu</td></tr>
</table>

4.4. National Organizations supporting Active Ageing

AUSTRIA

Organization	More Info	Brief description
VHS	http://www.vhs.or.at/ http://www.vhsstmk.at/	Volkshochschulen (VHS) adult education centres or folk high schools exist in all Austrian Federal States. They play a leading role in non-formal adult education including learning skills or learning for personal development. – widest range of educational offers
ÖBV-GT	http://www.gedaechtnistraining-oebv.at/	Österreichischer Bundesverband für Gedächtnistraining (Austrian Association for Memory Training) A professional address on national level for memory training, particularly for certified trainers
BMASK	http://www.bmsk.gv.at/	Bundesministerium für Arbeit, Soziales und Konsumentenschutz (Federal Ministry of Labour, Social affairs and Consumer protection) The ministry promotes Active Ageing and refers in its strategies on the guidelines of the WHO.
Seniorenbüros (Senior's offices)	Graz: http://www.graz.at/ Wien: http://www.senior-in-wien.at/	Seniorenbüro der Stadt Graz (Senior's office of Graz) In all regional capital cities there are so called senior's offices that are linked to the municipalities. Senior's "agents" are representing the interests of the older population, organising lots of events and promoting different activities for elderly people (like volunteer work)
Seniorenstudium (seniors at university)	http://www.seniorenstudium.at/ http://www.uni-klu.ac.at/senior/inhalt/1.htm	Website with helpful hints for senior citizens who would like to start studying at the university. There is even one specific course of studies only for senior citizens that consists of different branches of studies..
Senior's organisations	http://www.seniorenbund.at http://www.pvoe.at/	There are different senior's organisation (according to the political parties) representing the interests of Austrian senior citizens. These organisations are not only involved in politics but also offer a wide range of activities, events and facilities for elderly people. In all federal states of Austria there are regional committees.

Organization	More Info	Brief description
GEFAS	http://www.generationen.at	GEFAS Akademie für Generationen ("Academy for generations") Steiermark: an organisation consisting of active and volunteer members dealing with the intergenerational topics and ageing, promoting and implementing different projects in the field of lifelong learning, offering seminars, events (lectures etc.)
BIA	http://www.bia-net.org/	Bildung im Alter Netzwerk (Association Bia.net, Learning in senior age). The association promotes the topic learning in senior age, the exchange of experiences in this field, the further development of networks on national/European level, participates in EU-projects and offers trainings ("summer academy")
ÖRK	http://www.roteskreuz.at/	Österreichisches Rotes Kreuz (Austrian Red Cross). Beside different social and health services the Austrian Red Cross is involved in different projects on national and European level dealing with the topic of ageing (e.g. exchange of senior volunteers)

DENMARK

Organization	More Info	Brief description
Danske Pensionister (Danish pensioners)	www.pensionistforeninger.dk	"Danish pensioners" (Danske pensionister) is the oldest senior association in Denmark, founded in 1926. The society is an umbrelle organisation and has more than 200 member associations with a total of scarcely 45,000 members. The organisation works for good conditions for seniors based on the following objectives: A speaking tube is needed to point out needs of improvements and failures within senior care. The weakest seniors need someone to fight for them. A speaking tube is also needed to bring forward and support the large voluntary work done by the senior organisations in order for early retirement pensioners and pensioners to have the offer of a wide range of activities to ensure physical, mental and social activity. Without this voluntary work, society would be badly off.
Pensionisternes Samvirke (Pensioners' collaboration)	www.pensionisternessamvirke.dk	"Pensioners' collaboration" (Pensionisternes samvirke) is a national wide organization. It was founded in 1965 and has more than 65,000 members today. It is a national community of individuals, clubs, senior- and user councils, activity houses and centres, projects and folk high schools active within the senior area. The organisation is independent of party-politics, and is democratically managed. It has its basis in local voluntary work. Without the extensive voluntary efforts, "Pensioners' collaboration" would not exist. Its purpose is to improve the conditions of seniors, partially by initiating activities, and partially by affecting the public.

Organization	More Info	Brief description
Ældresagen (DaneAge Association)	www.aeldresagen.dk	"DaneAge Association" (Ældresagen) is a national membership organisation founded in 1986. The association now has approximately 525,000 members organised in 219 local chapters/committees. DaneAge is a direct membership organization, founded in 1986. DaneAge has a membership of 550.000 (the Danish population is 5.4 million people and there are about 1 million people over the age of 60 in Denmark.) 27 % of all Danes aged 50+ are members of DaneAge. DaneAge is a not-for-profit NGO. DaneAge is independent and neutral in regard to party politics, religion, and ethnic origins. DaneAge has 10,000 volunteers working in the local chapters, doing voluntary social work, carrying out local membership activities, doing local lobbying, etc.

Organization	More Info	Brief description
Ensomme Gamles Værn, (EGV) (Society for the care of lonely old people)	www.egv.dk	"Society for the care of lonely old people (Ensomme Gamles Værn = EGV) is a research oriented, humanitarian fund founded in 1910.Through research and development work, and by providing direct economic and social help to individuals, EGV contributes to the improving of the conditions of disadvantaged seniors who do not receive the needed help and support from the surrounding society. This could be because they belong to marginalized groups in society such as the homeless or refugees. It could also be caused by old people being socially isolated, maybe lonely, and or if they, due to physical or psychic weakness, are unable of drawing attention to their needs themselves, and they do not have anyone to do it for them. A smaller group of seniors is poor seen with current eyes. EGV puts focus on these seniors and thir need of help and support from the surroundings. EGV has the purpose of improving the terms for disadvantaged seniors in Denmark. The main activities of EGV are: To support research concerning loneliness and social communities To support social purposes and development work for the improvement of conditions of disadvantaged seniors To provide direct support for holidays and folk high school courses as well as distributing smaller grants for economically disadvantaged seniors. The activities of EGV are funded by the capital return of the organisation as well as inheritance, donations and gifts from people who want to do something good for socially and economically disadvantaged seniors in Denmark.
OK-klubberne (The OK Clubs)	www.okdanmark.mono.net	"The OK Clubs" (OK-klubberne) have existed since 1967. It is a national senior organization, which conduct a large number of activities and travels and holidays for the benefit of the senior part of the population in particular. The purpose of the OK Clubs is to support and conduct work within the senior group on a non political basis, for example based on voluntary social work and enterprising to supplement this work with the aim of improving the conditions and quality of life of seniors. The OK clubs in Denmark is a self –governing institution, non-political and independent from of professional interests.

Organization	More Info	Brief description
LO Faglige Seniorer (LO professional seniors)	www.losenior.dk	"LO professional seniors" (LO faglige seniorer) originates from the trade union "LO", and with its 25 years it is a relatively young senior organization. It is the national organization of senior work in the senior clubsclubs in the collective LO trade unions as well as for local cross-interdisciplinary clubs around the country. Activities for the participants take place in 531 different local professional and interdisciplinary senior clubs around Denmark. Furthermore, the sections carry out various interdisciplinary activities: There is a wide range of activities: From cozy club days, excursions, debates, bingo, political meetings, and meetings wher the personal circumstances of seniors are on the agenda.

Organization	More Info	Brief description
INSPIRUM	www.inspirum.dk	"Inspirum" is a new and network-based organization for seniors. The purpose of the activities of Inspirum is: To be initiators of a new way of understanding and experiencing the idea of being a senior in the present and future society. To show that the person is more important than the age. That retiring from the labour market is not retiring from life. Inspirim will create a space of opportunities in which the members can use their experiences, competences and lust for life, and not least the opportunity to have fun and create new networks. Only imagination sets the limits for which activities Inspirum can develop through the members. Inspirum is independent on private and public enterprises as well as political interests.
Ældremobiliseringen. (The Danish Association of Senior Citizens)	www.aeldremobiliseringen.dk	"The Danish Association of Senior Citizens" (Ældremobiliseringen) is an association of five senior citizens' organisations with a total membership of 450,000. The organisation was founded in 1992, but several of its member organisations date back to 1929 when the first act on social assistance was passed in Denmark. Today, the Danish Association of Senior Citizens is a modern organisation with the objective of safeguarding its members' interests vis-ˆ-vis the public authorities, etc. in all matters concerning elderly people, centrally as well as locally. The organisation is built around 1040 local associations, 15 county committees with attached consultants, a presidency and a secretariat. The organisations provide consultancy, training, advisory and information services and arrange trips and cultural events. Membership fees and public subsidies as well as project funds and profit-earning activities finance the organisations.

ESTONIA

Organization	More Info	Brief description
EURAG	http://eurageurope.org/eurag/et/intro/	EURAG – Bund der Alteren Generation Europa – European Federation of elderly. Non Governmental Organisation with 148 member states. Organisation for cooperation between member countries, organisations and members for project work, cooperation, discussions and self help.
EURAG Estonia	http://eurageurope.org/eurag/et/nationall-offices/ Contact: Heino Hankewitz EURAG English, Vanurite Eneseabi- ja Nõustamisühing, Jaan Poska 15 EE-10126, Tallinn, Estonia eurag@hot.ee	Organisation for cooperation between member countries, organisations and members for project work, cooperation, discussions and self help.
In Pensionäride Liit	Contact: Enn Kallikorm In Pensionäride Liit Paldiski mnt 36 EE – 10612 Tallinn, Estonia epl@hot.ee	Organisation for cooperation between member countries, organisations and members for project work, cooperation, discussions and self help.
Eesti Pensionäride Ühenduste Liit	http://www.eakad.ee/index.php?id=1 Paldiski mnt 36 a EE – 101412, Tallinn, Estonia	Eesti Pensionäride Ühenduste Liit (Estonian Association of Pensioners` Societies). Roof organisation for non governmental organizations dealing with the problems and free time activities of elderly. There are different small elderly organisations in every county.

Organization	More Info	Brief description
ANDRAS	http://andras.ee	ANDRAS – Eesti Täiskasvanute Koolitajate Assotsiatsioon (Association of Estonian Adult Educators Andras). The ideology of the organisation is: participation of the development of education policy, taking active part in promotion adult education and the concept of lifelong learning, organising campaigns and events highlighting the value of education such as the Adult learners Week and Adult Education Forum, consulting member organisations and engaging them in the EU projects advancing the development of adult education.
Eesti Alzheimeri Tõve Ühing	http.//www.hinnang.ee/Company/eesti-alzheimeri-tove-uhing/117626/	Help and information for people who suffer from Alzeimer deasease.
EGGA		EGGA – Eesti Gerontoloogia ja Geriaatria Assotsiatsioon (Estonian Association of Gerontology and Geriatrics). EGGA is a voluntary union of people wishing to improve the life and health of the elderly. EGGA members include people working with the elderly (medical doctors, nurses, social workers, rehabilitation specialists, nurse helpers, care workers, managers of care institutions), representatives of pensioners. The main goal of EGGA is to update the knowledge of people working with the elderly and the whole society concerning normal ageing, possibilities of improving the life quality of the elderly needing help.

GERMANY

Organization	More Info	Brief description
DIE	http://www.die-bonn.de	Deutsches Institut für Erwachsenenbildung/DIE – Practice related research on adult education subjects
VHS	http://www.vhs-verband-mv.de/ (for the federal state)	Volkshochschulen (VHS) adult education centres or folk high schools exist in all German Federal States. They play a leading role in non-formal adult education including learning skills or learning for personal development. – widest range of educational offers
BVGT	http://www.bvgt.de http://www.bv-gedaechtnistraining.de	Bundesverband Gedächtnistraining e.V. (Federal Association Memory Training, registered Association) A professional address on national level for memory training, particularly for certified trainers
EZUS	http://www.zig-owl.de/ccms/content.php?content=74&nav=6	Europäischen Zentrum für universitäre Studien der Senioren Ostwestfalen-Lippe (EZUS) This centre in Bielefeld on university level provides studies in: Studium Generals, Management in civic engagement and Senior consultant
GfG	http://www.gfg-online.de	Gesellschaft für Gehirntraining e.V. (Association for Mental Training, registered association) exists since 1989 and describes itself as the largest forum for mental fitness in Germany.
MemoryXL	http://www.memoryxl.de	MemoryXL Europäische Gesellschaft zur Förderung des Gedächtnisses e. V. (European Association for Memory Promotion, registered association) MemoryXL is a non-profit association dedicated to memory training, memory sports e mnemo-techniques. It offers a memory trainer for free download (view 26 February 2009).
Älter werden in MV	http://www.regierung-mv.de/cms2/Regierungsportal_prod/Regierungsportal/de/sm/Themen/Soziales/Das_Landesprogramm_Aelter_werden_in_Mecklenburg-Vorpommern/index.jsp	"Älter werden in Mecklenburg-Vorpommern" (getting older in Mecklenburg-Western Pomerania). This programme is the basic for activities and measures of the Country's Government Seniors policy until 2012.

Organization	More Info	Brief description
Seniorenbildung in the Federal State (Senior Academies and Adult Education Centres	www.mecklenburg-vorpommern.eu/cms2/Landesportal_prod/Landesportal/content/de/ Familie_und_Gesundheit/Senioren/Seniorenbildung/index.jsp	Specialized on training and education offers for seniors is Seniorenakademie (senior academy)

Organization	More Info	Brief description
Szenior 2003 Szabadidő Szervező és Szolgáltató Kft	www.szenior.hu	Organization with a website for people over 50. Publications, reports, forums in the field of ageing.
MAGYAR NYUGDÍJASOK EGYESÜLETEINEK ORSZÁGOS SZÖVETSÉGE (NYOSZ)	nyosz@citynet.hu 1081 Budapest, Köztársaság tér 26.	Founded in 1989 it is the main information pole and umbrella organization of the pensioners throughout Hungary. Main aims include enhancing social integration of the elderly and helping and maintaining their well-being. Its main periodical is: *Nyugdíjasok Lapja* (the paper of the pensioners) issued in 15000 copies monthly.
Nyugdíjasok Országos Képviselete (NYOK)	Címe: 1107 Budapest, Mázsa tér 2-6. II. em. 204. E-mail címe: nyugd.orsz.kepviselete@axelero.hu Tel. / Fax: 261-8629 Elnök: Mihalovits Ervin	Founded in 1990 NYOK is one of the biggest organizations representing senior citizens in Hungary. Its main activities are: representing senior citizens especially in the fields of culture, social affairs, health care, consumer rights, and freetime activities. The initiator of "Walk for the health of seniors" national programme. Publication: *Joining the EU for seniors*
"Életet az Éveknek" Országos Szövetség	Címe: 1126 Budapest, Szoboszlai u. 2-4. Telefon: 3555-990, Fax: 3551-139 Elnök:Dr Hegyesiné Orsós Éva	Founded in 1989 with uniting 139 senior clubs the organization has been representing Hungarian pensioners with special focus on health aspects and preserving folk traditions.
Batthyány-Strattmann László Idősek Akadémiája	1125 Budapest, Kútvölgyi út 4. VI. em. 637.	Organizing lectures and conferences in the theme of health care for the elderly.
Egészséges Öregedésért Tudományos Egyesület (EÖTE)	1026 Budapest, Gábor Áron u. 55. E-mail: eote@eote.hu Web: www.eote.hu	The Scientific Association for Healthy Ageing is presenting ageing processes, in order to help people slow it down, improve their quality of life and prevent diseases.
FIATALOK ÉS AZ IDŐSEK KÖZLEKEDÉSBIZTONSÁGÁÉRT EGYESÜLET	6723 Szeged, Tabán utca 40. IV/12.	Improvement of transportation safety for children and elderly people by achieving widespread activity programs.

Organization	More Info	Brief description
Pedagógusok Szakszervezete Nyugdíjas Választmánya	1068 Budapest, Városligeti fasor 10. http://www.pedagogusok.hu/hirek.php	The pedagogue union is the largest union in Hungary, which has been formed in 1918. The pensioners' committee is taking part in the advocacy work. Its activity is mostly engaging in negotiations and attends different forums.
Vasutas Nyugdíjas Klubok Országos Szövetsége	http://www.vnykosz.eoldal.hu/ 1087 Budapest, Kerepesi u. 14. E-mail: vnykosz@citromail.hu	The Alliance of Pensioners' Clubs of Former Railway Employees has been formed in 1995. It performs social, health promoting and cultural activities. 120 000 pensioners and their family members are entitled to this service.
Magyar Gerontológiai és Geriátriai Társaság	1032 Budapest, III.ker., Bécsi út 132. http://www.geronto.hu/index.php/hu/cimlap	The Hungarian Association of Gerontology and Geriatry has been founded in 1967. The biological changes in ageing, as well as it's clinical, medical and social problems are addressed at the scientific meetings of the Association.

Organization	More Info	Brief description
The University of the Third Age	http://www.unitre.net/	Association providing important instruments (courses, activities, study visits) for the provision of learning among adults, especially for the over 65s.
3ndyclub	http://www.3ndyclub.it/	Club 3ndy is a cultural aggregation club born by the University of 3th age, and other local organisations, promote activities for adult people (mental activities – courses, social activities etc… -, physical activities – bicycle tours, sailing boat courses and travels, etc -).
TEKNOTRE – Istituto di Cultura	www.teknotre.org	No profit institution acting as local branch of UNI3 that provides training and education to its members through formal classes and practical workshops on different topics.
CEMEA – Centri di esercitazione ai metodi di educazione attiva	http://www.cemea.it/	CEMEA is a movement of educators, doctors and social workers with the aim of promoting principles and methods of active education. the main strategy for this purpose is training of educators in relation to educational practice. CEMEA aims at giving elders living in hospices the opportunity to experience new activities and relations to prevent isolation.
Auser nazionale	http://www.auser.it/index.htm	Auser is a volunteer association for the social promotion. It works on the promotion of active ageing of elder people with the growing up of their role in the society
People's Universities	http://www.cnupi.it/index.html	People's universities are cultural institutions which are open to everyone without any distinction as to age, gender, religious persuasion or ethnic background.

POLAND

Organization	More Info	Brief description
Universities of the Third Age	http://www.senior.pl/uniwersytety/ http://www.utw.pl/	In Poland there are three types of Universities of the Third Age: 1. operating within the structure or under the patronage of a regular university, most often managed by the plenipotentiary of the given school's rector, 2. founded by associations disseminating scientific knowledge, 3. other, active at cultural centres, libraries, daytime accommodation homes, social welfare units, etc. UTAs' activities are usually based on lectures performed 1-2 times a week (mostly in medicine, history, literature, arts, geography, followed by philosophy, sociology, and environment). In addition, theme cycles are prepared, for example in history of architecture, culture, universal history, musicology, astronomy, theology, etc. Very important are seminars and sections or groups of interests: literary sections (within which memories, biographies, chronicles are sometimes, written), arts and music sections, cultural sections (organising occasional meetings), • tourist sections (organising domestic and foreign travels, vacations, camps and strolls), friendly assistance sections (providing help to the ill and lonely in forms of visits, shopping, informal contacts), active recreation, for example gymnastics (often rehabilitating, tailored to students', individual needs), swimming, dance, yoga, other – photography, herbalism, allotment holders, bridge players, or filmgoers. Courses of foreign languages are highly popular as well.

Organization	More Info	Brief description
Service Senior.pl	http://senior.pl/	Senior.pl is a portal dedicated to people over 40 years. Publishes news and the educational articles about all domains of life, that seniors may be interested in. The mission of the portal is to counteract excluding of elder people in any domain of life and showing them the possibility of professional success. Moreover Senior.pl is willing to restore proper respect for aged people that currently vanishing in our country. The above mentioned aims are implemented by cooperation with other portals, institutions, organizations and companies acting for seniors. Additionally the seniors are invited to cooperation in building the portal.
UPC Poland	UPC Poland is Polish leading provider of triple service: cable television, broadband Internet and telephone services to individual and business customers. UPC e-senior Academy http://www.upclive.pl/Akademia_e_Seniora/	The objective of e-senior Academy is popularization of Internet access and IT skills. The Academy carries out the trainings for seniors. Huge popularity of such a trainings negates the stereotype that old people do not want to use or even are afraid of the modern technologies. The special educational programme for elder people has been developed. During 3 weeks long training the attendees will learn how to browse Internet pages, send e-mail, use instant messenger or use multimedia. Furthermore, especially for seniors, additional lecturers duties ore organised - for 1 month after completion of the training the attendees can get support from the specialists. the training's watchword is "Internet connects generations". During those trainings the role of Internet as a perfect tool for intergenerational communication is accented.
Towarzystwo Inicjatyw Twórczych „ę” & Polish-American Freedom Foundation	http://www.seniorzywakcji.pl/	“Seniorzy w akcji” (eng. "Seniors in Action") is a national competition for grants partly financed by Polish-American Freedom Foundation. Towarzystwo Inicjatyw Twórczych „ę” (ang. the Company of Creative Initiatives "ę") is responsible for grants sharing and the project management .

Organization	More Info	Brief description
PRO-MED sp. z o.o. & Seniors Club at Gdansk University of Technology	http://e-senior.eu/	The project „e-senior.eu in action" has an aim to integrate and activate the members of Senior's Club at Gdansk University of Technology by organising computers' workshops with elements of e-learning, inviting seniors to open-air meetings, where their knowledge and skills gained during e-courses are verified (e.g. Nordic Walking) and taking part in Socrates Grundtvig Partnership projects meetings in Poland and abroad.

Organization	More Info...	Brief description
IMSERSO	www.imserso.es	Institute for Seniors and Social Services. Organization of Leisure activities and trips
Confederación Española de organizaciones de mayores	www.ceoma.org/index.php	Association of Senir Institutes working in areas such as health, participation, economic performance and fights against the discrimination of seniors.
Confederación estatal de mayores activos	www.confemac.net	Senior Institution that works for the promotion of activeness after retirement through volunteering, conferences, activities, forums, meetings and courses.
Unión Democrática de pensionistas y jubilados	www.mayoresudp.org/index.php	Organisation that hosts Senior Institutes from all over Spain in order to defend the interests of pensioners in the institutional and associational forums at national and international level.
Unión estatal de Jubilados y Pensionistas de UGT	www.ugt.es/ejecutivas/federaciones/ceujp.htm	Organisation from the Trade Union General Union of Workers (UGT), which groups seniors to perform their proposals, activities, workshops and studies.
Federación de Pensionistas y Jubilados de CCOO	www.pensionistas.ccoo.es/webpensionistas/	Association from the Trade Union Workers Comission, which defends and promotes the economical and social rights of elderly
Grupo Júbilo	www.jubilo.es	Online platform of communication media, which intends to serve the information, cultural and recreation needs of elderly
Asociación Estatal de Programas Universitarios para personas mayores	www.aepumayores.org	Entity aimed to structure and promote university education programs contributing to the training and cultural development of older people
Confederación española de aulas de la tercera edad	www.ceate.es	Entity grouping the “Third Age Classrooms” and other federation, associations that work in favour of seniors from culture and lifelong learning.
Universidad Nacional de las Aulas de la Tercera Edad	www.unate.org/inicio.htm	Organisation that empowers training and culture among the seniors, and also physical and mental health

Organization	More Info...	Brief description
Nagusilan-RSVP	http://comunidades.kzgunea.net/nagusilanrsvp/es/default.htm	Basque association of senior volunteering, who devote part of their free time helping other seniors lacking of leisure activities.
Fundación Mejora	www.fmejora.com/index.asp	Social work of the savings bank Caja Vital, that organises training activities, entertainment, participation in the province of Álava (Basque Country)
Fundación Bizitzen	www.bizitzen.org	Foundation of the Basque Country that promotes physical and mental welfare of elderly through courses, workshops and activities
Hartu Emanak	www.hartuemanak.org	Group for Lifelong learning and social participation of older (Basque Country)
Nagusiak Martxan	http://nagusiakmartxan.com/cas/site/default.asp	Association that promotes education on health and wellness, participation, associations and volunteering of elderly people (Basque Country)
Oferta Cultural de Universitarios Mayores	www.ofecum.com	Social and Cultural volunteering association for the promotion of participation of elderly in the city of Granada
FATEC	www.gentgran.org	Catalan organisation grouping the seniors associations, which promotes active participation and volunteering
Vive y Convive	http://obrasocial.caixacatalunya.es/osocial/main.html?idioma=2	Social work of the savings bank Caja Cataluña that leads programs such as the hosting of university students in elderly homes, trekking or leisure clubs (Cataluña)
Obra social para mayores de La Caixa	http://obrasocial.lacaixa.es/personasmayores/personasmayores_es.html	Social Work of the Catalan savings bank La Caixa that leads initiatives such as ICT training, audiovisual language, volunteering programs, virtual memory programs, conferences and leisure centres
Aula de Educación Permanente Universidad Carlos III	http://fundacion.uc3m.es/extension/index.htm	This university Carlos III develops a program for the inclusion of the elderly in university studies (Madrid)
Fundación UPDEA	www.updea.ord	Entity that develops activities related with education, culture and leisure for people over 50 years old

Organization	More Info...	Brief description
Universidad de Mayores – Universidad Complutense de Madrid	www.ucm.es/info/umayores	The Complutense University fosters this initiative for the empowerment of elderly to study at the university (Madrid)
Universidad de Mayores – Universidad Pontificia de Comillas	http://upcomillas.es/webcorporativo/servicios/universidad_mayores/	This University (University Pontificia de Comillas) supports this initiative in order to encourage the elderly to study university degrees (Madrid)
Universidad de Mayores. Experiencia Recíproca (UMER)	www.umer.es	This University (UMER) supports this initiative in order to encourage the elderly to study university degrees (Madrid)
Universidad para los mayores – Universidad de Alcalá de Henares	http://www2.auh.es/universidad_paralosmayores/	This University (University of Alcalá de Henares) supports this initiative in order to encourage the elderly to study university degrees (Madrid)

UNITED KINGDOM

Organization	More Info	Brief description
University of the Third Age	http://www.u3a.org.uk/about-u3a.html	Self-help organisation for people no longer in full time employment providing educational, creative and leisure opportunities in a friendly environment. It consists of local U3As all over the UK, which are charities in their own right and are run entirely by volunteers. Between them U3As offer the chance to study over 300 different subjects in such fields as art, languages, music, history, life sciences, philosophy, computing, crafts, photography and walking.
Age UK	http://www.helptheaged.org.uk/en-gb/WhatWeDo/AboutUs/AgeConcernandHelptheAged.htm	Age UK is the new force combining Age Concern and Help the Aged helping people enjoy a better later life – by providing life-enhancing services and vital support.
Age Concern	http://www.ageconcern.org.uk/AgeConcern/activage.asp	Organisation encouraging older people to be actively engaged and involved in opportunities for learning, leisure and volunteering in their communities. Includes 'Fit as a Fiddle' programme (physical exercise) 'Ageing Well' and 'Technology for Older People'.
Exercise for the Elderly	http://www.exercisefortheelderly.co.uk/?gclid=CI3lpLq6oaACFSGElAodtyCaaA	Private business selling DVDs of gentle physical exercise designed for older people.
Safe Exercise for the Elderly	http://www.safesport.co.uk/SafeExerciseForTheElderly.html	Private organisation providing advice on safe sport for all with a section for older people
Friends of the Elderly	http://www.fote.org.uk/	Friends of the Elderly provide direct services including residential care homes, nursing homes and dementia care homes. Our day clubs, home support, home visiting, telephone befriending and grant-giving services help older people live independently at home.

5 BEST PRACTICES ON BRAIN TRAINING

5.1. Memory

Method of Loci

This memory method dates back to the time of Ancient Greek and is based on location and imagination / using associations. It helps making powerful links between and organizes each of the items to be remembered, so that the order is remembered, too. It makes use of the fact, that our spatial memory (memory for where things are) is usually much better that any other. For example if we are asked how many espresso cups we posses, we normally scan through our kitchen cupboard (our own visual route). This method of loci takes advantage of this natural tendency. By the way, it is used by most memory champions to achieve seemingly miraculous feats of memory.

This is how this quick-win memory techniques works:
First one chooses a well known route, then in our imagination we link the objects we want to remember to places along the route (they do not have to fit there!). The places one want to select might be on our route to work or in our home: the entrance, the hallway, the kitchen … or the pavement outside, the street corner, the grocer's shop etc.

The advantage of using this route is that one can select as many points and spots along the way as things one want to memorize.

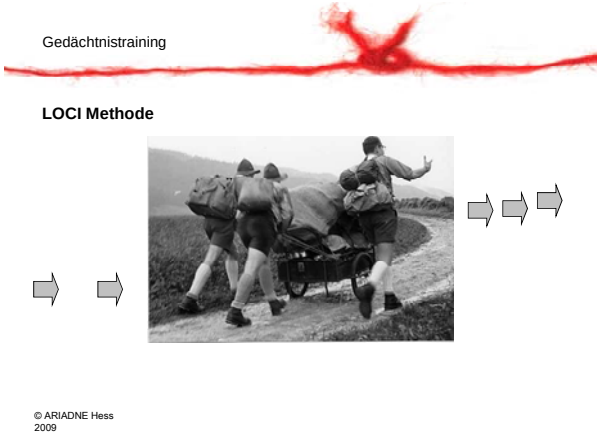
Secondly, we now link the items to remember to the places on our route with as clear an image as we possibly can.

Let's imagine one has to remember things to do for the grandson's birthday: write a speech, buy flowers, bake a cake, … for writing this speech he or she could imagine herself / himself sitting on the floor in the entrance door with a piece of paper and a pencil in the hand. For buying the flowers, he or she can imagine the stairs, - they then would be nicely decorated all over and it would smell just wonderfully! … And so on. Once one has these images, one makes sure to fix them firmly in the head by going through the journey, checking the items in their places on the way. When he or she wishes to use these location tags, they have to make sure they associated the item or object that need memorizing as vividly as possible. They should get all of their senses on board, since the more alive the image is, the easier it will be to cement it in their memory.

The clue here is that the series of locations in the mind are used as memory tags. Once one is familiar with the location tags, they are to be used as much as possible (practice to get familiar with the technique, regular training – it soon becomes second nature).
We can start the exercise with 10 items (according to the ability of the group) and slowly raise the number to 16 or 20 even more …. To introduce this technique of loci the trainer could also start with a tour by taking the participants on a real walk. Here I sometimes take a few pictures with me (for example memory cards, postcards etc) and post them in different places on our route.

Let's make an example and start on the trainer's desk. Here we all associate the little monkey; then we go to the door and post the Baobab tree … Important!: at each spot on a first training session we would talk about how we could associate the item to remember with the location, then after some practice, we walk and post but would only use our imagination silently – each participant by his or her own. Then prolonging our tour and posting the various pictures / or items, we go back to the room and I ask the group to write down what items they can still remember. In order to successfully handle this task, everybody ought to go back to the starting point (in our example it was the trainer's desk) in their imagination … ideally they should then remember the little monkey, and so on…
Without the tag system, most people will struggle to remember more than 7 to 10. With the help of amplification and this memory technique however, they should not only be able to remember all quite easily but also memorize extra information like the color of the monkey, the shape of the Baobab tree, its background etc.

Did you – in connection with your collection work – get any **new** ideas for material - not yet existing but to be developed? Would be interesting to create something for blended learning I created some slides for my power point presentation / memory training which I copy here:



Primary Stimulation	Type	Mental function	Physical motor functions	Psychological functions
Memory	Game training			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
Depending on the method (blended or e-learning?)	Depending on the method (blended or e-learning?)			

Level of stimulation	Any new ideas related to this	Conclusions
		My experience is, that the participants are always quite surprised how well they perform using this memory tags (boots their self-esteem as well and their feeling of control – also good for their overall mind wellness, of course!)

Remembering names and faces: Photos

In the first place one has to make sure that he or she gets the name of the person they are being introduced to properly. So if they do not hear the name clearly they should learn to ask to repeat it and then say it back to the person to help it stick to their memory. After this introducing the person should use the name in conversation as often as they feel comfortable.

Secondly, they then could create vivid mental images and make a strong enough association. So as they listen to the name, they should try to find a visual link between the person's face and his or her name. So if for instance the woman's name is White and her face color is rather pale, the link is obvious. But if there is no obvious link, they need to use their imagination and creativity to make one. Of course it does not have to be right or logical or even flattering, because the more absurd, and therefore memorable, the better. For example one can create a quick cartoon image of the person he or she has just been introduced to and exaggerate distinctive features (big mouth, long neck, small eyes etc.). Then one should try to find a link between the feature and name. We simply combine the face and name into a memorable image.

With practice this technique becomes second nature and one can find useful links in a second.

This is how we can practice the method:
This technique can easily be trained: just cut different pictures of faces from a magazine and give each participants one picture (or one for a couple). Stick a "post-it" on the picture and ask the participants to find a name for his or her picture (they could also add a profession or a hobby to it.). Then they should memorize it and hand their picture with the name tag to his or her neighbor (clockwise) –and so on. Until everybody has memorized any face and name on the pictures.

The trainer then collects the pictures and takes the post-it with the names from the front to the back of the picture (so the group cannot see it). Finally we all imagine working at the reception in a big hotel and our guests (the persons on the pictures) arrive. Of course, by now, everybody can greet them with their name!

Did you – in connection with your collection work – get any new ideas for material - not yet existing but to be developed?

Would be interesting to create something for blended learning …

I created some slides for my power point presentation / memory training which I copy here:

MH1

Gedächtnistraining

Gedächtnistraining

Personengedächtnis

So merke ich mir Namen und Gesichter …

- Wahrnehmung – Begrüssung – Aufmerksamkeit
- auffallendes Merkmal suchen
- Namen verbildern
- verbinden

Frau Keiko Fuji

In my courses I usually start practicing this method with the group member's names – in a blended session participants could post their photo online in a special forum and everybody could learn each other's name by using this method.

To help explaining this method we could well be using our own names and pictures (the one of the MindWellness partners which makes it more difficult as they are foreign names.).

Conclusion / Comments

From my experience most participants have a huge motivation to learn this technique.

Primary Stimulation	Level of stimulation	Type	Mental function	Physical motor functions	Psychological functions
Memory	Game Training Exercise		They accept all people without discrimination	They accept all people without discrimination	They accept all people without discrimination

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
Depending on the method (blended or e-learning?)	(Reading complex texts, writing) - Depending on the method (blended or e-learning?)	No	NO BUT IT IS STIMULATED	

5.2. Inductive Reasoning

The Towers of Hanoi

Game Description

Before you try to figure out how the Egyptians built the pyramids, try out your problem-solving skills with this game. In this game, you must configure coloured rings on a series of pegs in order to match a target. You can move the top-most ring on each peg to another peg, but you can only move one ring at a time and you can never put a larger ring on top of a smaller ring. From time to time, a given peg may not hold any rings: you may move any available ring you like on to an open space.

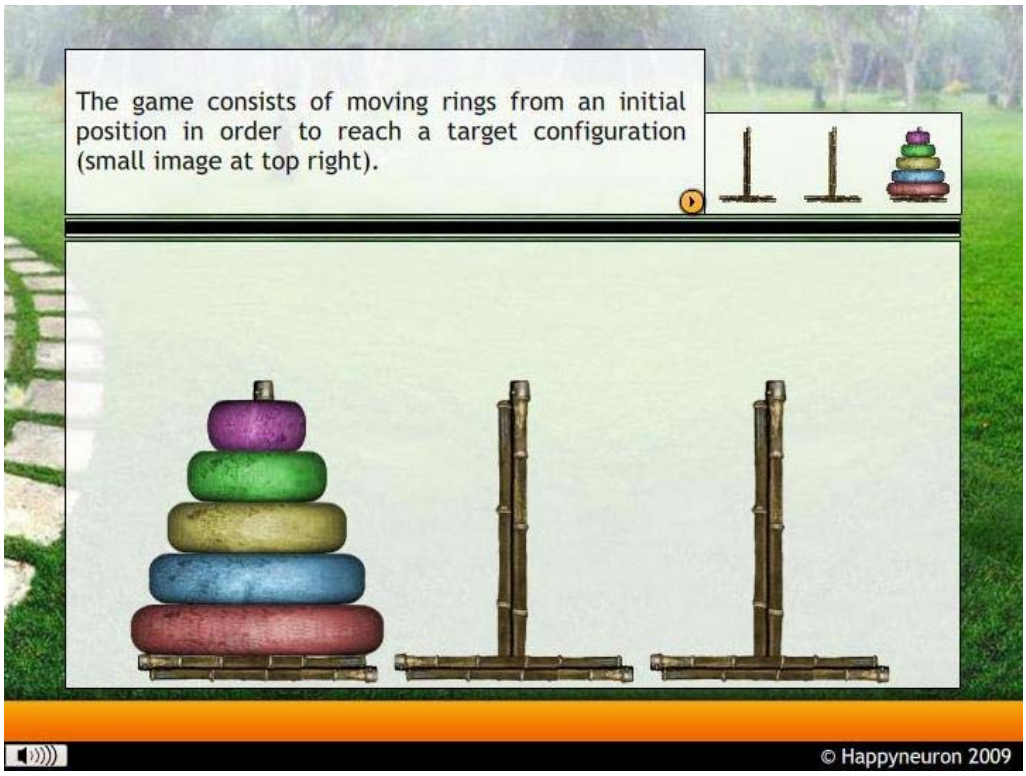
Cognitive Function Exercised

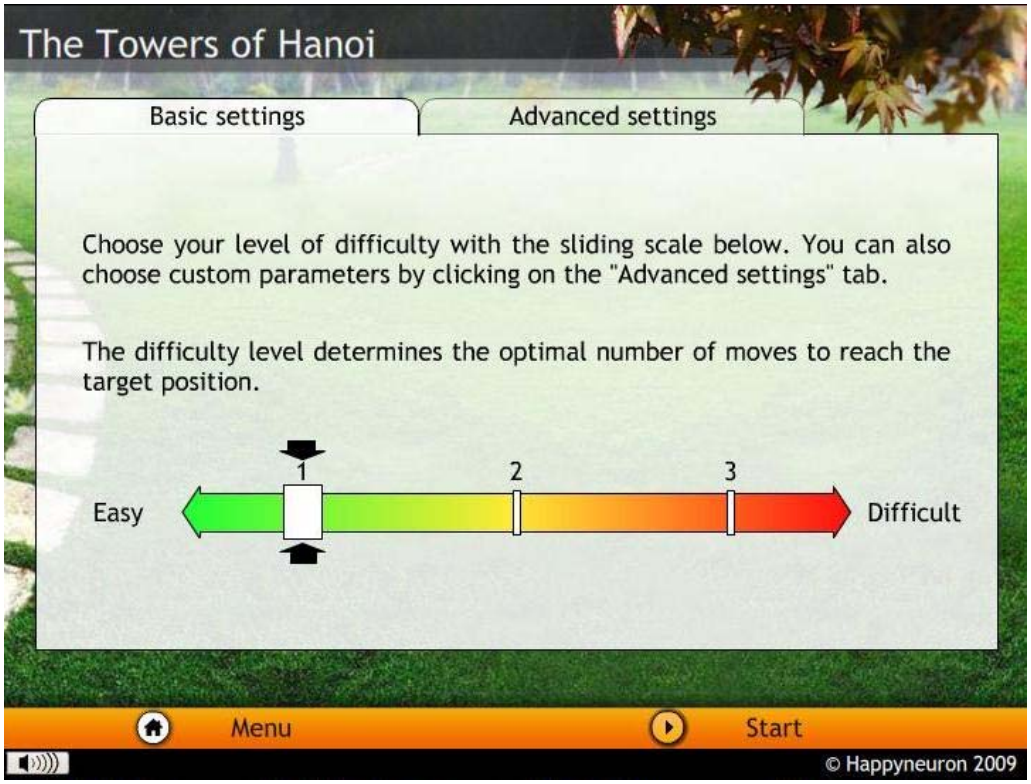
This game requires problem-solving skills that call on the brain's executive functions. You must define a strategy to reach a desired outcome, calculate the right moves to reach the solution in the shortest possible time, and remember the rules of the exercise. Training in this kind of thinking is helpful as a guide to use in other problem-solving situations. The area of the brain at play is the pre-frontal cortex, the anterior portion of the frontal lobe important for the "higher cognitive functions" and the determination of personality.

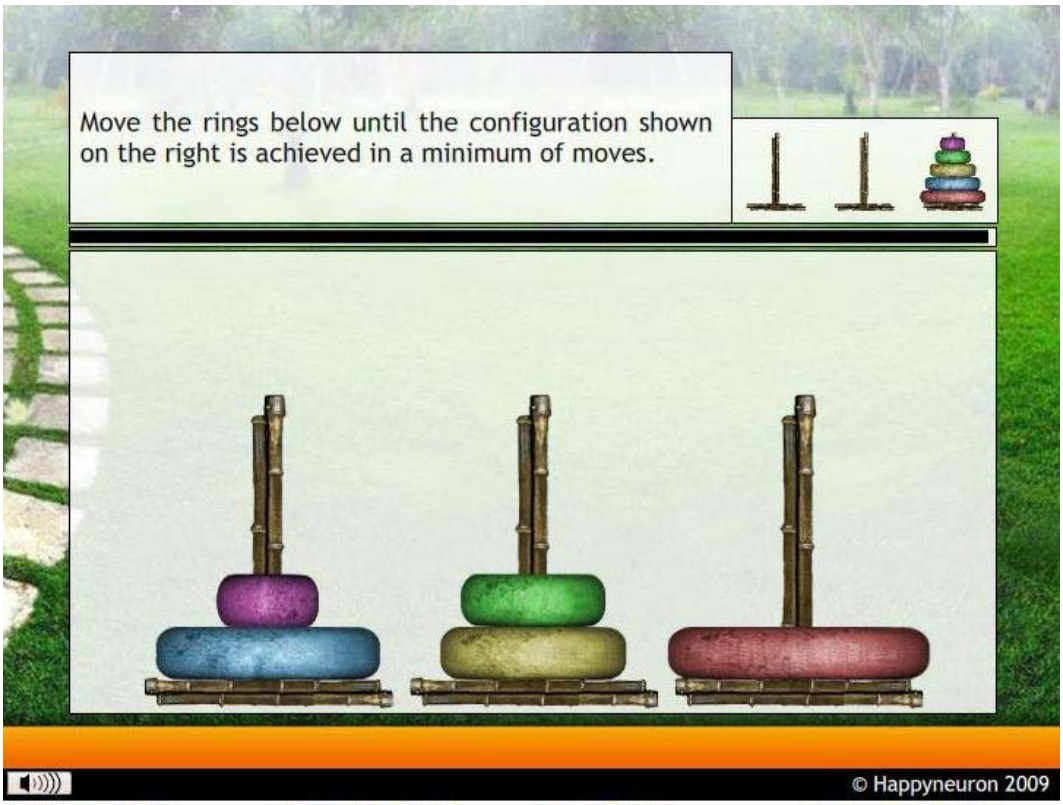
Benefits to Daily Life

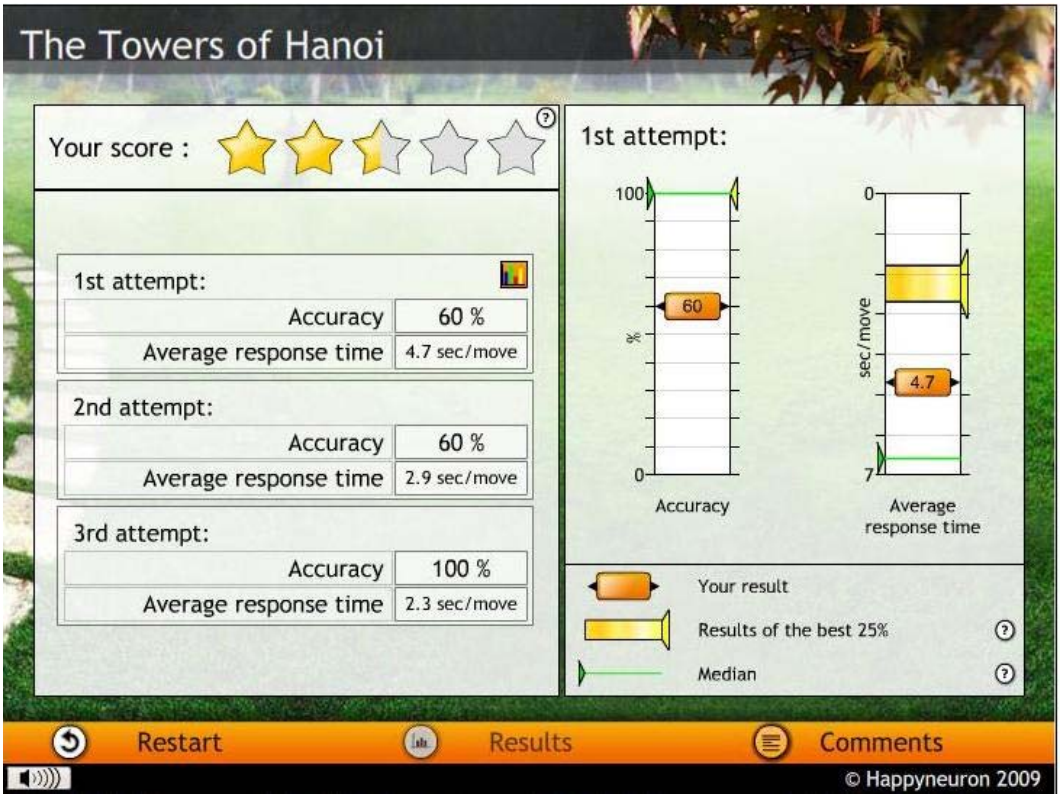
You use your executive functions when managing your time, planning a presentation or a pairing menu, outlining a report or even taking care of several children simultaneously. In every day activities, we must often develop a strategy to solve a problem. Developing the strategy involves analysis of the goal to be reached, analysis of the action steps needed, as well as any constraints that may block attainment of the goal. Along the way, we must evaluate obstacles, choose among methods for evaluating various decision paths, and compare the effects and trade-offs of each possible move. Sometimes, solutions to problems are readily available but we have to figure out a winning strategy and specific action steps ourselves.


The Towers of Hanoi
In this game, you must configure colored rings to match a target.
This game requires problem-solving skills, by defining a strategy to reach the desired outcome, calculating the right moves to reach the optimal solution in the shortest possible time, and remembering the rules of the exercise.
Brain Function Trained
Memory
Attention
Language
Executive functions
Visual-spatial
Brain Areas Trained
Left
L R
Right
Know more
Example
Start
© Happyneuron 2009


The game consists of moving rings from an initial position in order to reach a target configuration (small image at top right).
© Happyneuron 2009


The Towers of Hanoi
Basic settings
Advanced settings
Choose your level of difficulty with the sliding scale below. You can also choose custom parameters by clicking on the "Advanced settings" tab.
The difficulty level determines the optimal number of moves to reach the target position.
1
2
3
Easy
Difficult
Menu
Start
© Happyneuron 2009


Move the rings below until the configuration shown on the right is achieved in a minimum of moves.
© Happyneuron 2009



Source
Happyneuron 2009

Creative Thinking Puzzles

Creativity. What does it bring to mind? Just answering that question requires you to be creative on some level. Whenever we are set a challenge and are required to come up with an answer, our creativity is challenged.

Creativity is not just the domain of whacky artists, even if you will never stretch your creativity to the realm of shoving a sheep in formaldehyde and getting rich as a result, there is a lot to be said for improving your creativity.

Just like many things in life, becoming more creative requires practice at being creative, and what better way to do that than with some puzzles to get your mental juices flowing?

One simple puzzle is to look at the room you are in, and to imagine that there is a deep, dark secret hidden behind a particular object you fix your mind on. What is that secret, and more to the point what is it? Once you have your answer, pat yourself on the back (or get an imaginary friend you created to do it for you), as you've just been creative!

Now here's another creative thinking puzzle for you, which requires a little bit of drawing, but you don't need to be an artist for this to work! Get a plain white piece of paper, and draw a square on it. Next, draw a picture of a stick man in the bottom middle of the empty square. Now ask yourself what will happen to the stick man if he were to jump in the air.

You will probably come up with solution straight away, but there is at least one other possible option - see how many you can find. Once you've come up with all the ideas that you can, or you get stuck - read onto the next paragraph! This puzzle was all about showing one of the main barriers to creativity - that is, assumptions! You see most people assume that the man is in our natural and familiar environment, on the earth, and therefore assume that when the man jumps he will fall back to earth due to gravity.

However, he is in a blank square, and there is nothing around him at all. Unless he's in a plain and padded cell, it could be he is actually floating in space and so he can't jump, or he's on the edge of a space station or surface of the moon and so if he jumps he will go much higher and come back slowly, or indeed if in space will simply keep on floating! The point is our brains often fill in details about surroundings and make assumptions, but in order to be really creative sometimes we just have to release and let go of all our assumptions.

Primary stimulation	Type	Mental function	Physical motor functions	Psychological functions
Inductive reasoning Processing	Game Exercise	Spatial, imaginative, social and emotional	Low	High

Pc. literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
NO	Variable.	Variable.	optional	

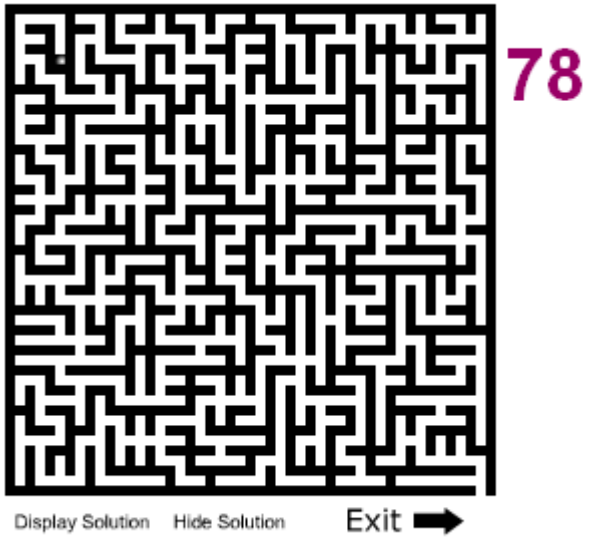
Level of stimulation	Any new ideas related to this	Conclusions
High, such games are really useful at breaking people of their routines of thought.	Really essential, as it is so different from the closed, logical nature of most puzzles.	The added social dimension of this means that people can gain great stimulation by sharing their creativity.

Source
http://www.braintrainingpuzzle.co.uk/word-recognition.php

5.3. SPEED OF PROCESING

Labyrinth

You have to reach exit within a set time (the time is measured at the side in a form of a countdown)



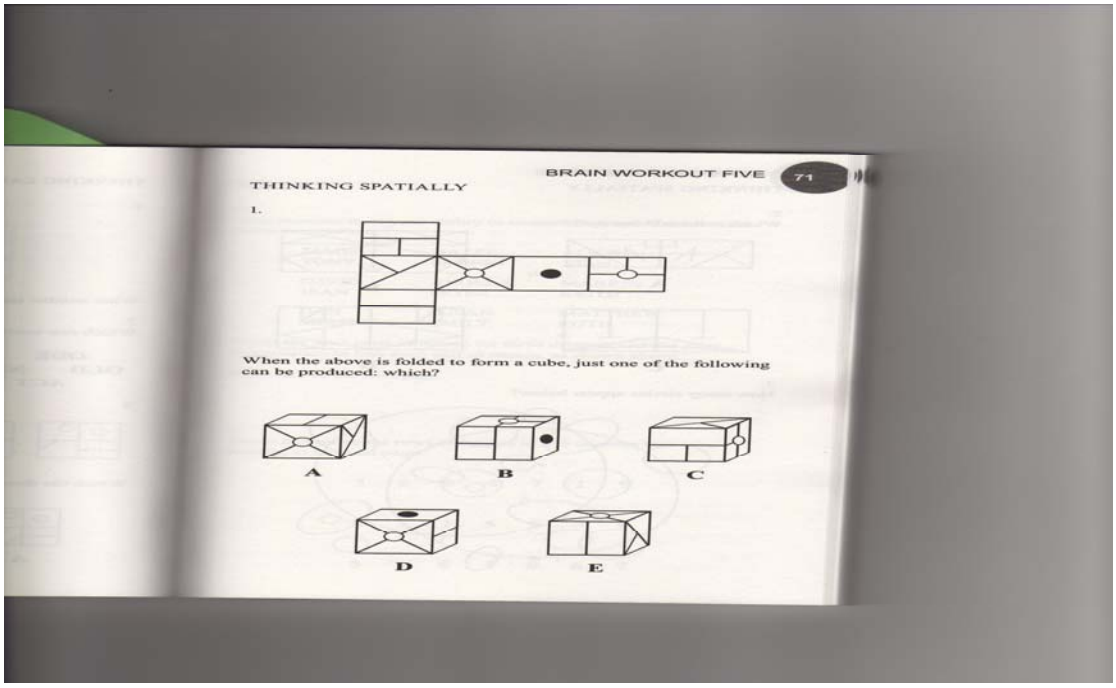
Primary stimulation	Type	Mental function	Physical motor functions	Psychological functions
processing	exercise	Problem solution	high	none

Pc. literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
Can be online or on paper	none	none	none	

Level of stimulation	Any new ideas related to this	Conclusions
high	a very basic exercise, can serve as an appetizer	highly used in the Hungarian memory clubs

Source
http://tttweb.hu/agytorna.php?meret=400x300&rovat=feladvanyok&nev=labirintus

Spatial Box Folding



Primary stimulation	Level of stimulation	Type	Mental function	Physical motor functions	Psychological functions
Processing		Game	3D Spatial awareness	low	Low

Pc. literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
Optional (can be online or on paper)	low	low	none	none

Level of stimulation	Any new ideas related to this	Conclusions
Moderate	Any box shape can be made like this. Or even other shapes like Pyramids	Good spatial training

Source
All you need to boost your brainpower by Phillip J. Carter. 2009 Random House Books, London

5.4. OTHER PRACTICES

Painting Workshops

This project is the result of previous activities which showed the importance of artistic expression for the elderly. In particular the activity is centred on painting and manipulation of plastic material. The value of a creative activity lies in the possibility to establish new relations with the surrounding context, objects and space (Franz Marc said that"*painting means emerging in another place"*) and to create a "reaction" in the painter and the viewers. For the elderly, just as for any other target group, painting means trying new means of representation that underline the different levels of motor-perceptive development, personal style, emotions.

Painting means also trying different techniques, elaborating images and using different materials and tools.

During workshops beneficiaries can choose to work individually, in pairs or in small groups, exchanging experiences and discussing, choosing their own subjects and inspirations.

The activity facilitates important outcomes in terms of cultural offer: organizing art exhibitions, involving professional painters (CEMEA has been cooperating for ten years with Promotrice delle Belle Arti of Turin) for exchange of ideas and techniques and discussion meetings empowering the beneficiaries and valuing their work.Workshops are also developed in relaion to Art Therapy activities according to the different needs of beneficiaries.

For each example please take into consideration, categorize and make remarks about the following:

Primary Stimulation	Type	Mental function	Physical motor functions	Psychological functions
Processing Emotional	painting workshops	average	average	average

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
no	no	no	average	

Picture Puzzles

Exercises dealing with the sensory perception

Our memory is strongly linked to our sensory perception. Our perceptions are imprinted on our memory and leave engrams in the different brain sections which mean that we have an auditory memory, a visual memory and memory associated with taste, smell and touch.

All these senses and correspondent types of memory help us to perceive and realise the world around us.

The following types of exercises deal with the recognition of prior experienced perceptions or a feeling associated with this perception. In our everyday life we mostly perceive by using more than one sense at one time. When we eat something, not only our taste, but also our olfaction and our visual sense are affected.

In exercises like the following[2] only one sense is activated and you'll see that you can't always rely on this separated perception. Nevertheless by exercising your senses you'll learn to distinguish, to experience differences, you formerly hadn't noticed.

Activity Description

These are exercises for the visual memory and address various fields of knowledge and experience.

VISION

When we recognise and name something our visual sense is linked to our linguistic memory. Sequences of situations, specific incidents, can be remembered by means of our visual memory. In the following picture puzzles recognition, reflection, word finding and reproduction are mostly affected. If you repeat the exercises especially retentivity and learning ability are essential.
Visual impressions that touch our emotions and emphasize experimental aspects and coherences are remembered more easily.

Example

Where do the people walk?
Why was it built?
When was it built?
How long is it?

2 The following exercises are more suitable for group work, e.g. within a group training, than for single training.

How do you call these Russian dolls of wood that can be plugged into each other?

Primary Stimultion	Type	Mental function	Physical motor functions	Psychological functions
Perception & Senses	Exercise - Game			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
No	No	No	No	

Level of stimulation	Any new ideas related to this	Conclusions
Variable difficulty. Different questions (difficulty, subjects, etc.)		It's adequate for individuals but also for group work (maybe more fun for groups)

Source
Stengl, F. & S. Ladner-Merz (2008), pp. 160

Auditory Exercise

Examples for auditory exercises

For the auditory exercises described below you'll need somebody to prepare the recordings, songs and musical compositions.

Guessing songs
Listen to well-known songs and try to remember the title and the first few lines of the lyrics?

Guessing musical instruments
Listen to a classic composition, what kind of musical instruments can you hear?
Which melody is played?

Guessing noises
Listen to recordings of different noises and try to guess what can be heard..

HEARING

Recognising melodies and noises

The auditory memory for melodies is as exhaustless as for words. Even if you couldn't have replicated them, you can memorise and recognise them. It's not necessary to be musical, even unmusical people can recognise melodies without text.
Auditory perception and sensation are located in a specific section of the brain that's not identical with the speech area. Besides, the auditory memory shows a certain dependence regarding the depth of storing memories.
So with playing musical games and games dealing with noises you are working on a brain section that's normally little occupied.

Primary Stimultion	Type	Mental function	Physical motor functions	Psychological functions
Perception & Senses and Concentration	Exercise - Game			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
No	No	No	No	

Level of stimulation	Any new ideas related to this	Conclusions
Variable difficulty. Different questions (difficulty, subjects, etc.)		It's adequate for individuals but also for group work (maybe more fun for groups)

Source
Stengl, F. & S. Ladner-Merz (2008), pp. 180

Touch Exercise

Activity Description

Here you need some support from another person, who puts some small objects into a non-transparent bag. These objects shall be touched and guessed (form, size, weight, material). For this exercise you shouldn't use sharp or fragile objects that could cause any injury.

SENSE OF TOUCH

The sense of touch is a very complex phenomenon: muscle and depth sensation, balance, pain and the sense of temperature, all these senses interact within the sense of touch. The spatial extension is perceived in connection with the inner ear.
The sense of touch can be practised rather easily, actually it can nearly compensate for missing eyesight.

As touch objects you can use small spoons, keys, balls, feathers, rubbers, rings, glasses, coins, small chains, pipes and so on.

Primary Stimultion	Type	Mental function	Physical motor functions	Psychological functions
Perception & Senses, Concentration and Motor Activity	Exercise - Game			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
No	No	No	No	Use of different objects Small objects, a non-transparent bag

Level of stimulation	Any new ideas related to this	Conclusions
Variable difficulty		Pair or group work (maybe more fun for groups)

Source
Stengl, F. & S. Ladner-Merz (2008), pp. 183

Smell Exercise

Activity Description

For this exercise you'll need some support. Somebody prepares three aroma samples for you, e.g. in little glass jars. Three are enough as our sense of smell quickly gets fatigue and then easily renders a misjudgement.

How does the sample smell?
What's your first thought, your first association in connection with the sample?
What is it?

It's important to use samples that can't be identified from the outside, so oils and essences are most suitable for smell exercises.

SENSE OF SMELL

The sense of smell is hardly ever practised. Mostly you perceive scent in connection with taste, vision and even with the sense of touch on your tongue.
A single molecule can stimulate an olfactory cell and turn this physico-chemical stimulation into a perception and even into an emotional experience.
For scent samples you can use vinegar, essence of roses, of vanilla, clove oil, rum, acetone and many more. Of course also solid objects can be guessed like skin cream, soap, spices etc. Sometimes you'll have mixtures (e.g. perfumes) that make an identification of components quite difficult.

Primary Stimultion	Type	Mental function	Physical motor functions	Psychological functions
Perception & Senses, Concentration and Motor Activity	Exercise - Game			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
No	No	No	No	Use of different samples. Aroma samples, stickers, pen

Level of stimulation	Any new ideas related to this	Conclusions
Variable difficulty.		Pair or group work (maybe more fun for groups)

Source
Stengl, F. & S. Ladner-Merz (2008), pp. 185

Taste Exercise

Activity Description

For this exercise you'll need some support, as somebody has to prepare the taste samples.

For this game it's important that the food can't be identified visually or by touching it. So it would be best to do the exercises blindfolded. You can use for example small pieces of apples or peas without paring, potatoes, mustard, small pieces of celery or cheese, bread and fruits. As liquids peppermint tea, milk, mineral water, juices etc. can be used.

Make sure that the samples are numbered or marked by the person who prepares the samples.

The testing person first tastes the sample, tries to describe the it's flavour and consistency and to identify what's in the sample.

SENSE OF TASTE

People have very different sensations of taste. Everybody can distinguish the qualities sweet, sour, bitter and salty but some people may perceive something as very bitter and others may say it's not bitter at all.

So when you're doing the following exercise there'll be different taste findings according to the participants. But the exercise doesn't center only the differentiation and rating of flavours but rather the identification of taste samples.

Primary Stimultion	Type	Mental function	Physical motor functions	Psychological functions
Perception & Senses, Concentration and Motor Activity	Exercise - Game			

PC literacy	Level of literacy	Level of English or other foreign language	Ability to co-operate	Other
No	No	No	No	Use of different samples. Samples, stickers, pen

Level of stimulation	Any new ideas related to this	Conclusions
Variable difficulty.		Pair or group work (maybe more fun for groups)

Source
Stengl, F. & S. Ladner-Merz (2008), pp. 186

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